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Capacity

Building

in Economics Education
and Research

François Bourguignon
Yehuda Elkana
Boris Pleskovic
Editors



THE WORLD BANK

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and Boris Pleskovic

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THE WORLD BANK
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Foreword

THIS VOLUME IS A VALUABLE CONTRIBUTION TO OUR UNDERSTANDING OF BUILDING local capacity in economics education and research in developing and transition countries. Over the past 20 years, the World Bank and its committed partners have supported developing and transition countries in building viable educational and research institutions that can help to effectively transform these countries' stagnant economies into more dynamic and forward-looking economies.

The conference which gave rise to this volume was a joint effort between the World Bank and its partners. On behalf of the World Bank, I thank our partners—the Open Society Institute and Soros Foundation, the Carnegie Corporation of New York, the Citigroup Foundation, the Eurasia Foundation, the Ford Foundation, the John D. and Catherine T. MacArthur Foundation, the Starr Foundation, the U.S. Agency for International Development, and the Finnish, Swedish, and Norwegian governments—for their steadfast support in improving economics education and research in developing and transition countries.

Over an extended period the World Bank has provided substantial support for capacity-building in economic research through the Research Support Budget as well as through the Development Grant Facility and the Global Development Network. The main focus of this work has been on Africa and Europe and Central Asia, most recently the Caucasus. Today we have several “centers of excellence” in economics education and research in a variety of developing and transitional countries. These institutions include the African Economic Research Consortium in Nairobi, the Central European University (CEU) in Budapest, the China Center for Economic Research in Beijing, the Center for Economic Research and Graduate Education in Prague, the Economics Education and Research Consortium's M.A. program in Moscow and at the Mohyla Academy in Kyiv, the New Economic School in Moscow, as well as many others.

These “centers of excellence” in economics are recognized as leaders in education and research in their respective country or region, because they offer high quality education and produce policy relevant research as well as skilled economists via their masters and doctorate programs. Considering the difficulty of capacity building in general, these efforts are seen as being remarkable achievements, and some are seen as models for capacity-building efforts in other disciplines.

The conference was held in Budapest in June 2005. It was cosponsored by the CEU and the World Bank. Its first objective was to learn from experiences to date—both successes and challenges—about developing local or regional centers of excellence in economics education and research in developing and transition countries. In order to learn what has worked and what has not worked well, we need to understand the demand for highly skilled economists trained “at home” rather than abroad, how best to measure “success,” and how to identify the main determinants of success. In reflecting upon the creation of new or the expansion of existing centers of excellence, it is also important to have some idea about the magnitude of the gaps of economics education and research capacity in the underserved countries of East Asia and the Pacific, South Asia, Sub-Saharan Africa, Latin America and the Caribbean, the Middle East, and Central Asia. This was the second goal of the conference.

The contributors and discussants in the volume provide many insights on these issues. In particular, they offer a deep reflection on the need for capacity building in economics education and research in each region. Many questions still remain regarding the way in which such efforts should be conceived and structured: whether to build separate institutions or to mainstream them into country systems, the balance between pure and applied research, funding strategies over the shorter and longer terms, and how to evaluate the actual impact of these particular capacity building programs.

François Bourguignon
Senior Vice President and Chief Economist
The World Bank

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THE PLANNING AND ORGANIZATION OF THE CAPACITY BUILDING CONFERENCE (“Scaling Up Capacity Building in Economics Education and Research: Lessons Learned and Future Directions,” June 14–15, 2005) was a joint effort on the part of the Central European University (CEU), Budapest, Hungary, and the World Bank. We extend our special thanks for the support of Yehuda Elkana, President and Rector of CEU, and Idiko Morani, Vice President External Relations, CEU. We would like to thank François Bourguignon, Senior Vice President and Chief Economist, Development Economics, World Bank for his overall guidance and support. We are grateful to Robert Campbell, Alan Gelb, Aehyung Kim, and Gur Ofer for their advice and suggestions. Thanks to conference coordinators Theresa Bampoe and Anna Reich, whose excellent organizational skills kept the Conference on track. Finally, we thank the editorial staff, especially Stuart Tucker and Mark Ingebretsen from the World Bank’s Office of the Publisher, for all of their hard work on this volume.

Introduction

Aehyung Kim and Boris Pleskovic

FOR THE LAST 15 YEARS, THE WORLD BANK AND ITS PARTNERS—PRIVATE FOUNDATIONS and governments—have supported the “centers of excellence” for building capacity in modern economics education and research in developing and transition countries. To strengthen these efforts, the Central European University (CEU) and the World Bank jointly organized a conference entitled “Scaling Up Capacity Building in Economics Education and Research: Lessons Learned and Future Directions,” which took place at the CEU campus in Budapest, Hungary, on June 14–15, 2005.

The joint conference brought together representatives of the following regional centers of excellence: the African Economic Research Consortium (AERC) in Nairobi; the Economics Department of Central European University (CEU) in Budapest; the Economics Education and Research Consortium (EERC) in Kyiv and Moscow; the New Economic School (NES) in Moscow; the Center for Economic Research and Graduate Education (CERGE) in Prague; the China Center for Economic Research (CCER) in Beijing; and the Global Development Network (GDN) in New Delhi.

Opening Remarks and Keynote Address

Yehuda Elkana presents his thoughts about poverty alleviation and economic research. He emphasizes that research institutes and the World Bank should begin to consider seriously noneconomic aspects of development that contribute to better understanding of world poverty. Elkana expresses a desire to see a theoretical balance between different kinds of reasoning, including some understanding of social sciences and philosophy of science, which need to be taken into account.

An earlier version of this article was published as “Conference Reports/Scaling Up the Success of Capacity Building in Economics Education and Research” in *Acta Oeconomica* 56 (1): 103–17.

Alan Gelb notes three aspects of capacity building. First, a choice must be made between professional or academic disciplines. Second, capacity building has been successful, but assessments should be carried out in a measurable way to build continued support. Third, the question of scaling up is critical. These initiatives have produced a few thousand trained people, but that is a drop in the bucket compared with what is needed to revitalize the economics professions in developing and transition countries.

János Kornai, in a keynote address, discusses current themes in interdisciplinary research, suggesting five approaches. The first approach comprises the theory of rational choice, created by economists, which is now used for studying family issues, criminality, or political life. The second is game theory. Although economists are the most frequent users of this theory, it could be used by other social and natural scientists. The third is a multivariate analysis of long time series of national statistics. This started with simple problems for explaining growth and was then expanded to look at many other explanatory variables. However, without a theory, it is mere guessing. The fourth is an interdisciplinary approach that uses soft data. The tradition of our economics profession asks that we use so-called hard data (for example, figures of production or employment). Kornai believes that period is over; we are now interested in beliefs, norms, values, and the subjective evaluation of events. The fifth is a system approach advocated in many works, including Kornai's own book, *The Socialist System*. This approach looks at the social order as a system comprising various spheres including political structure, social norms, and property rights. Kornai argues that we cannot look at an issue such as stabilization as a simple macroeconomic problem, because it has so many political, cultural, ideological, and social implications. He proposes three directions in building up institutions of education and research: economists must (1) get a minimum knowledge concerning the other social science disciplines, (2) encourage interdisciplinary work with the cooperation of two or more professionals, and (3) establish a journal covering social sciences.

Session I: Lessons of Experience and Future Directions

In Session I, *William Newton-Smith* reflects on the Open Society Institute's experience in building new "centers of excellence" and emphasizes the importance of sustainability. Experience shows that capacity building requires a charismatic, driven individual and a market for the product. If there is a market, tuition should be charged and loan schemes should be developed to ensure sustainability. As it becomes harder to raise funds, another way to ensure the sustainability is to modify and enhance existing local institutions; this requires changes in education budgets and teaching methods. Future strategy should focus on slower and less expensive approaches, such as a mentoring model by working with local institutions. This should include modular doctorates in economics to provide advanced-level training.

Gur Ofer presents his first-hand experience in creating the New Economic School (NES) in Moscow and discusses future challenges. In September 1992, NES opened as a Western-style graduate school of economics. Thirteen years later, by July

2005, it had produced 429 graduates. It has an indigenous faculty of 15—most of whom have Western PhDs, and many of whom are graduates of NES—while establishing its own research center as well as helping create a high-level think tank, the Center for Economic and Financial Research (CEFIR). Recently the governance of NES was transferred to a Russian board. The immediate challenges facing NES are to finish building the faculty and to improve the integration of its activities into the Russian economic milieu and financial sustainability. So far NES's financial needs have been mostly met through financial support from Western foundations and the World Bank. NES has introduced tuition and student loan schemes—which tilted the balance of financing more than 59 percent to Russian sources—and is examining options to move their grant-based financial support to an endowment basis.

Justin Yifu Lin presents his experience with the China Center for Economic Research (CCER). In particular, he discusses CCER's initiatives in establishing long-term financing mechanisms by offering business degrees at the center to subsidize economics education, and the center's exceptional success in repatriating Chinese PhD graduates from abroad. He also outlines the factors contributing to capacity building: shared common goals, seeking resources instead of waiting for resources, policy research relevant to the local economy, continuous innovation, and outreach and networking activities. For future development, Lin recommends strengthening collaborative resources with other international and domestic institutions, developing exchange programs for PhD students in other countries, building up a research organization, and networking with similar institutions in developing and transition countries.

László Csaba describes structural characteristics of changes in higher education in Eastern Europe in terms of content, time, space, and organizational structure. The major finding is that approximation to the (not very high and by no means user friendly) practices of the European Union has been accomplished. There is a replication of the Western European experience in terms of inadequate research and relatively little success in meeting labor market demand. Csaba also discusses a normative analysis of the status quo and of perspectives. He makes several suggestions for remedying the situation, especially for avoiding the mismatch with the labor market and the degradation of universities' research capabilities. Csaba advocates the promotion of centers of excellence as well as a continuous review of the performance and quality of faculty.

Ramona Angelescu and *Lyn Squire* present the Global Development Network (GDN)'s five broad principles. First, the proposed mission and structure were tested—before the network was officially set up—with a thorough analysis of both the existing demand and the existing supply of the kinds of services GDN might offer. Second, GDN's organizational structure is designed to allow as much experimentation and learning as possible. Third, it provides a menu of services, such as mentoring; cross-fertilization; and providing training and resources for writing, presenting, and publishing research. Fourth, further assistance has been given to fill gaps in the understanding of capacity building and policy impact. Finally, ongoing monitoring and evaluation of both the capacity-building process and the outcomes have been given considerable weight.

William Lyakurwa relates the story of the African Economic Research Consortium's (AERC) very successful role in serving as the Africa Region's hub for education, research, and policy making, along with indigenizing economics education and research as a result of retaining trained economists in the region. AERC has two major programs: (1) the Collaborative Master's Programme (CMAP), established in 1993 for anglophone Africa, which runs in 21 universities from 17 countries; and (2) the Collaborative PhD Programme (CPP), which opened in 2002. More than 1,000 MAs have graduated from CMAP, with the enrollment of 140 students in 2004. In 2005, 70 students participated in CPP. In addition, AERC has supported about 450 thematic research projects spanning 21 anglophone, francophone, and lusophone countries. Future challenges include securing long-term financing, meeting demands for CPP, and upgrading research and teaching quality, as well as effectively conveying the results of research to policy making.

Robert Campbell provides a rich history of building capacity building in Ukraine. The goal of the MA program in the Economics Education and Research Consortium (EERC) in Kiev was to create a new generation of economists. Over its first eight years EERC produced over 300 graduates. Of these about 40 percent have gone abroad to obtain PhDs at top-quality institutions in North America and Western Europe. But now EERC is seeking to move toward longer-range goals: (1) to entice the new PhDs to return and to enlist them in teaching at EERC and (2) to disseminate modern concepts of economics and its teaching to other institutions in Ukraine. EERC has begun the indigenization by transferring its operations to Ukraine. Development banks can play a catalytic role to ensure partnerships for long-term commitment of donors. For that reason, the Asian Development Bank should be encouraged to join in this effort in addition to the World Bank's continued support for the long-term sustainability of EERC and other institutions.

Session II: Regional Perspectives

In Session II, *Shantayanan Devarajan*, *Manuela Ferro*, *Shekhar Shah*, and *Priya Shyam-sundar* emphasize the importance of scaling up economics education and policy research in accelerating poverty reduction in South Asia. First they argue that economic reforms require greater capacity for economic policy research and education. Economic knowledge and policy research are critical to meet South Asia's development challenge, while the need for greater evidence-based policy making and policy research stems from "second-generation" reforms. Second-generation reforms require much firmer domestic ownership and deeper local knowledge. In addition, South Asia is the world's largest recipient of remittances and the sizable South Asian diaspora wants to leverage their remittances to reduce poverty in their countries of origin. In order to most effectively utilize the valuable resources, it is suggested to establish a South Asia Policy Research Foundation for building adequate capacity in economics education and research.

Mauricio Cardenas and *Guillermo Perry* argue that the existence of high-quality master's programs in the Latin America Region has allowed a growing contingent of

economists to seek doctoral training abroad. Those who return to the region are actively publishing internationally and training very good professional economists at local universities, while their research tends to be applied and highly relevant for the region. However, many problems remain: the difficulty of funding theoretical research because governments prefer applied research, and the low-quality peer review in local journals. In the areas of training, it is crucial to improve the quality of the young PhD economics programs of LADE, the joint program of the Universidad de Chile, the Universidad Torcuato Di Tella in Argentina, and the Instituto Tecnológico Autónomo de México. Regarding policy research, a large pool of think tanks in the region generates applied knowledge. Also Latin America and the Caribbean has research groups such as the Economic Commission for Latin America and the Caribbean (ECLAC), the Corporación Andina de Fomento (CAF), and the Facultad Latino-Americana de Ciencias Sociales (FLACSO), in addition to the research network of the Latin American and Caribbean Economic Association (LACEA). However, LACEA faces challenges for the long-term sustainability.

Benno Ndulu, Michael Crawford, and Peter Materu discuss the Africa Region perspectives on capacity building. First, given that capacity building needs in Africa far outstrip the resources available, there is need not only to be selective in supporting but also to look for cost-effective approaches. Second, policy think tanks are playing a particularly important intermediary role in improving accessibility of research to policy. Third, given the public-good nature of capacity building, sustainability is not simply a matter of self-financing—it is rather more a matter of diversified funding of activities and sustained high demand for the output from these initiatives.

Homi Kharas discusses the status of higher-level economics education and research in the East Asia and Pacific Region in three parts: (1) some important characteristics and issues in the East Asia region, (2) a frame of reference for assessment, and (3) some options for the future. In the region, a very small group of Western-trained economists advises governments. National databases are inadequate for many research purposes. There is a gap in indigenous research to bridge theory and practical policy, while the tradition of systematic and scientific monitoring and evaluation of economic policies is absent. The World Bank's future support for capacity building in the East Asia region will continue to cover a number of parallel initiatives, including interaction with the Boao Forum for Asia as well as a research program on the implications of the rise of China and India. Finally, the establishment of centers of excellence, along with simultaneous programs of networking and research capacity-building will be considered.

Ulrich Hewer lists as advantages of “centers of excellence” in providing Western-style economics education and research in Eastern Europe and Central Asia: (1) economists can be trained in larger numbers at a lower per capita cost than they can be at Western universities; and (2) students are closer to home and develop contacts in the local professional and academic communities, and are more familiar with regional issues than their counterparts who have studied abroad. The best results can be achieved by building upon the experience of the existing centers in the region, including early emphasis on (1) creating local capacities for economics research, (2)

designing the programs as “*regional* centers of excellence” from the beginning, and (3) eliciting significant government buy-in locally and in the neighboring beneficiary countries. The World Bank’s Europe and Central Asia Region is in the process of making staff and funds available to help launch the Caucasus MA Program, to be based at Tbilisi State University (TSU), to serve Armenia, Azerbaijan, and Georgia (a combined population of approximately 17 million), plus parts of Turkey, Iran, and Iraq as well as southern Russia.

Session III: Developing PhD Programs

In Session III, *John Earle* draws on CEU experience since 1991 in capacity building and, in particular, the challenges in building a PhD program. Such programs have much smaller classes, require a great deal of one-on-one work, and are therefore much more expensive than MA programs. Unlike the MA program, a new PhD program in Eastern Europe competes directly with well-established Western programs. The problem of attracting students to an untested PhD program is therefore much greater. Perhaps the most difficult challenge is developing a vibrant research environment in which students can participate and learn as apprentices to more experienced scholars. Given that salaries at capacity-building centers seem unattractive to senior scholars, the programs need to offer some other motivation to encourage such people to devote more time to institution building. The best motivation would be research opportunities. Earle suggests that MA programs may be of the “plain vanilla” flavor—simply reproducing economics the same way it is taught in Western universities—while PhD programs may benefit from choosing some niche as a strategy for competing with existing programs and for providing more direct benefits to the region being served. This requires a delicate balance between providing economics education at the highest possible level while encouraging the development of a focus that will attract senior scholars and prospective students. The natural focus therefore involves the region but transcends it, what CEU in other contexts refers to as “the particular and the general.”

Jan Svejnar provides an overview of CERGE. It was founded in 1991 with four missions: (1) to train future public officials, university and college faculty, and researchers from the former Soviet bloc countries, (2) to stimulate and support academic and policy-oriented economic research, (3) to disseminate research and policy information to a wider group of professionals, and (4) to transfer the modern Western standard of scientific work. CERGE produces 15–30 MA graduates and 5–15 PhDs each year. The center currently has 16 full-time local and 5 part-time visiting faculty members, with 5 English-language faculties. CERGE has produced hundreds of studies that have been used by officials in the Czech government and international organizations. CERGE researchers have served as economic advisers to the president and prime minister of the republic, including several ministers of the government. While in the 1990s the main challenge was to obtain local recognition, at present the greatest challenge is financial, especially building an endowment.

Session IV: Curriculum Development, Recruitment, and Policy Research

In Session IV, *Ellen Hurwitz* summarizes what she learned during the conference: the importance of a financial plan and the need for an assessment study up front that measures the quality of education and research.

Jong-Wha Lee discusses the allocation of public and private resources for the production of tertiary education in developing and transition countries. Transitional economies in particular, which have limited resources, may face difficulties in improving school inputs at once, so setting priorities in allocating public resources is important. Also, to recruit and retain qualified professors and researchers, it is necessary to provide sufficient incentives.

Session V: Scaling up Capacity Building to Underserved Regions

In Session V, *Jeff Fine* raises the question of how to put a value on the kind of non-client-specific research. Cross-subsidization for economics education with business departments, unlike in the case of CCER in China, may not be feasible in many countries. Fine notes that the discussion at the conference has clearly established the need for intensified collaboration on a regional and global level. He also argues that donors are in the public sector and have a responsibility to finance public goods such as economics education and research. Fine therefore suggests establishing a support group or network, similar to the Consultative Group on International Agricultural Research (CGIAR), for the long-term financial sustainability of these centers.

Eva Sundquist discusses the Swedish government's support for EERC in Russia and Ukraine. The funding was executed through a special government fund, departing from funding through the Swedish International Development Agency because of enhanced credibility coming from the participation of the World Bank and the Open Society Institute. She also emphasizes the importance of a quality stamp attached to proposals supported by the World Bank; donors should be there for long-term support; indigenization should be taken as a priority; and independent evaluations should be carried out periodically.

Regina Yan discusses her experience as a donor representing the Eurasia Foundation, which co-founded EERC-Moscow and EERC-Ukraine. She observes that some of these programs are lacking in financial and administrative capacities, and often donors are to blame for their unwillingness to support such costs. Without such support these programs are handicapped in their ability to develop into sustainable and well-run institutions. In order to retain long-term support, she finds that it is essential to inform donors on different aspects of the program over time. Yan argues that capacity building requires both international donor support and long-term commitment from the local community.

Opening Remarks

Yehuda Elkana

IT IS MY PLEASURE AND PRIVILEGE TO WELCOME EVERYONE—SPEAKERS, PANELISTS, and distinguished audience—to this conference. I would like to begin by congratulating the World Bank for many years of dedicated effort in the area of capacity building. I also want to say how grateful we all are here at Central European University that this event is taking place at our institution.

This is a truly international event and promises to bring us up to date on crucial developments. There is every reason to be confident that participants as well as the World Bank will indeed succeed in drawing important lessons from the contributions presented here.

In addition to these words of welcome, I would like to make two remarks. Let me note that I have no pretensions to being an expert in the area under scrutiny, but perhaps I can for the moment profit precisely from the fact that I am standing here as a layman and not as a professional.

First, the World Bank's readiness to accord central significance to the problem of world poverty among its manifold interests and activities is definitely to be applauded. At the same time, in listening to politicians, we all realize that in most countries—in the United States, Europe, and elsewhere—the issue of world poverty is typically addressed in a hypocritical and superficial manner. This is indeed a very serious problem.

As for relevant research activities, from what is once again emphatically a layman's perspective, it seems to me that it would be imperative for research institutes in general and the World Bank in particular to take very seriously noneconomic aspects of the problem of poverty. This is because there is mounting evidence that an appreciation of such noneconomic aspects can significantly contribute to a better understanding of world poverty, and also—even more importantly—to our doing something about it.

What I am referring to here is the approach to poverty that Amartya Sen has propounded so effectively in book after book but that has still not become an integral part of research programs at economic research institutions and still has not been taken up by university departments of economics. You find the same approach in the

works of Arjun Appadurai, who has written perhaps more incisively than anyone else about the central issues at hand. Appadurai is an anthropologist who originally worked at the University of Chicago; he has recently become the provost of the New School for Social Research in New York. He has never failed to emphasize that when you deal with poverty you always deal with societies, nations, and so on. The point is that “soft” considerations such as aspirations, norms, and values are genuinely effective economic factors, not merely extraneous cultural attitudes, and must also be accommodated by economists when thinking about poverty. I am aware that some work has already begun on these issues. Nevertheless, from the layman’s vantage point, what has been done so far is quite insufficient. It is therefore high time that serious research got underway, research that seeks to leverage concepts like aspiration (which is, in my view, among the most fundamental notions relevant to the problem of poverty).

For my other layman’s remark, I will have to refer to a conference that bore the title “One Year after Accession: Looking East, Looking West” and was hosted by Central European University a few months ago. Six or seven former or incumbent ministers of finance attended this extremely interesting event, some sitting on the panel and some in the audience. Currently serving or ex-presidents of the national banks of Hungary and of neighboring countries were also present. Now, quite surprisingly, each one of them put forward a “one-center” solution—that is, a proposal with a single formula for all the different problems arising in these countries.

I am the last person to pretend to have understood either the relative importance of these issues or that of the respective solutions proposed. I do not know whether one must tackle first, interest rates or inflation, or whether one must also take on board a number of other problems too. However, given my own background—which is not in economics but rather in the social sciences and the philosophy of science—I tend to regard with a high degree of suspicion every “all-purpose” explanation that poses to be both exclusive and total. I would urge instead the kind of research that attempts to strike a theoretical balance among alternative ways of reasoning and that seeks to accommodate as many relevant considerations as possible.

Let me recount a telling and, it seems to me, most pertinent episode from the field of medicine. A friend of mine, who had been diagnosed with cancer, sought my advice about whom to consult. I in turn asked a retired but still highly respected Swiss expert who told me the following: “We cancer people know only three things. We poison, burn, or cut. I advise you to try and find an expert who can do all three so that he or she would not decide solely on the basis of his or her limited expertise.”

I think this metaphor also applies exceedingly well to what we should expect of economic thinking. Accordingly, my suggestion to the World Bank as well as to many other research institutes is to begin thinking along these lines, that is, to adopt a markedly problem-oriented, pluralistic, and interdisciplinary approach. This, I believe, is crucial because world poverty is without doubt the most pressing challenge facing mankind today.

In closing, I would like to thank you for your attention and wish you an enjoyable conference.

Opening Remarks

Alan Gelb

ON BEHALF OF THE WORLD BANK, IT GIVES ME GREAT PLEASURE TO WELCOME YOU all to this very significant conference. I would also like to thank our hosts, the Central European University, for providing us with the occasion to meet here, and also for the great weather and for the opportunity to visit Budapest—an excellent experience for all of us.

I would like to start by noting that the initiatives in building capacity in the area of economic analysis and research are partnerships. The Bank has, of course, been very much engaged in this process, but we must emphasize that we have many partners. To mention only a few, they include Carnegie; Ford; Citigroup; the Eurasia Foundation; the MacArthur Foundation; the Soros Foundation and the Open Society Institute; USAID; the Finnish, Swedish, and Norwegian governments; the British government; the French government; and others. We greatly value their engagement, and thank them for it. Although the Bank is engaged in capacity building, we are not actually well set up for it, unlike a foundation or other long-term grant-giving financier.

Three points on this conference. First, I have been impressed by the depth of thinking in the papers, not only in terms of reporting what has been done, but also in setting out the philosophy that has underpinned capacity-building efforts. All efforts have faced choices—whether to go, for example, toward more professional and vocational education or toward more academic disciplines, and how to balance attention between methodology and applications. The choices that are made reflect distinctive philosophies, and I think we are going to learn a lot from exchanging perspectives on this.

Second, the title of the conference assumes something—that the capacity-building efforts have indeed been a success. We are taking it for granted, therefore, that these are successful efforts. But I don't think that we should stop there. We should always be going back and asking: How do we know that they are successful? What are the indicators that we are really looking for in terms of understanding whether an initiative is

successful? And how do we continue to justify the initiatives in terms of these criteria and measurements, which will be necessary to continue further support in the area? We should not be complacent about what has been achieved.

The third point is to note that the question of scaling up is critical. We meet here with a number of initiatives that have produced perhaps a few thousand trained people, whether through research competitions or courses or other approaches, but this number is really a drop in the bucket compared with the number needed to revitalize the economics professions in the regions concerned. This is a good time to think also about scaling up.

So, thank you all very much. I return you to the chairman.

KEYNOTE ADDRESS

Disciplines of Social Sciences: Separation or Cooperation?

János Kornai

I WOULD LIKE TO BEGIN BY RECOUNTING TWO RECENT EXPERIENCES. UNDER THE auspices of the Collegium Budapest Institute for Advanced Study, between 2000 and 2002, Professor Susan-Rose Ackermann of Yale University and I convened and directed a group of researchers who analyzed the topic “Honesty and Trust in the Light of Post-Socialist Transition.”¹ The group comprised people from various professions, including legal scholars, economists, sociologists, political scientists, scholars of political philosophy, and historians. We gathered for weekly seminars to report on the progress of our work. We were all perplexed by the fact that we had difficulties understanding one another. Each discipline is based on its (explicitly stated or tacit) axioms and basic assumptions. Each has its own language and vocabulary. Scholars in each discipline consider different contributions to be “classic,” but all think that the work they consider classic is familiar to everyone else. There is great variety across disciplines with regard to which contemporary works have become famous and which subjects have become “hot.” Despite this, members of each profession expected members of others to be familiar with knowledge in their field.

The interdisciplinary character of the research group demanded a certain kind of self-discipline from the participants. It compelled them to speak in seminars in a manner that is also comprehensible to others. We learned from one another and attempted to be open to ideas suggested by other disciplines.

In early 2005 I traveled to China. When preparing for the lectures that I was to give there, I tried to familiarize myself with the most recent literature on the Chinese reform process. I read a number of papers by the best economists studying the area and was struck by the fact that, despite touching on the political aspects of the reform, they did not refer to a single article from a political science journal. At the same time, I read papers by the leading political scientists specializing in this area and found the same one-sidedness—although they mentioned the reform of the economy several times, no reference was made to economic journals. Hardly any intellectual communication between these two groups of experts on China seemed to be taking place.

In view of this, I decided to take a closer look at the relationship among the various social science disciplines. Economics student Noémi Péter assisted me in this work. We focused on four disciplines: economics, political science, sociology, and law. We selected five leading journals from each of these disciplines and reviewed one volume of each, that is, all articles published in 2004.

We added up the number of references, which we classified in various ways (the method of calculation, the principles of classification, and the main results appear in the annex). In economics journals we found 316 articles to which our methodology was applicable. Of the 4,885 references found in these articles, 88.9 percent were also from economics journals, 6.6 percent from interdisciplinary social science journals, 2.2 percent from political science journals, 1.2 percent from law journals, and 1.0 percent from sociology journals. The overwhelmingly dominant source of knowledge for the profession of economics is, therefore, the profession itself—work published by other economists in economics journals. The profession is inward looking and scarcely acknowledges products of other social science disciplines. A similar situation prevails in the other examined disciplines (see annex).

I do not want to overestimate the value of the quantitative results of this miniature data collection. We would obviously obtain far more precise and reliable results if we analyzed several volumes of these journals edited in several different years and included more disciplines and journals in the analysis. On this occasion, we excluded from the summation references in which the discipline generating the source of the reference was ambiguous. A more precise calculation would require a great deal of work, and I hope that someone will carry it out. The conclusion of this small study is clear, however: the intellectual ties among the branches of the social sciences are very weak.

Where do we stand now with respect to separation and cooperation in the social sciences? What can be done to bring these disciplines closer together so that they will provide a coherent multipronged approach to the problems they now each confront separately? I attempt to give only a partial and draft response here, mainly to inspire the reader to think about these difficult questions. A deeper understanding of these problems requires more thorough and extended research.

Five Encouraging Examples of Interdisciplinary Approaches

The general picture of interactions across disciplines is slightly more favorable than that suggested above. I describe here five examples of intellectual streams, scientific positions, and methods that have crossed the confines of traditional disciplines and promoted convergence and cooperation among them. I am convinced that many other examples could be found.

Theory of Rational Choice

The theory of rational choice constitutes the core of neoclassical economics. Its rigorous discussion starts with Walras; Arrow and Debreu worked it out in greater detail.

Although this theory evolved within the framework of economics, it has become widely used in other disciplines as well. A pioneer in efforts to extend economics is Gary Becker, who was awarded the Nobel Prize in that field in 1992. Becker argues that, in many cases, the motives behind human behavior can be described by assuming that the decision maker who chooses among various alternatives will choose the one that guarantees the most favorable combination of benefits and disadvantages. This decision maker is assumed to be a consistent person whose preferences fulfill certain consistency requirements and who maximizes a utility function—that is, he or she attempts to make the optimal choice from the alternatives. Applying the model of rational choice allows us to analyze not only economic decisions (such as a producer's choice among various technologies or a consumer's choice between two commodities) but also a wide array of other issues, such as crime, suicide, family size, and elections.

My book *Anti-Equilibrium* (1971) discussed in great detail my criticism of the theory of rational choice. I am certainly not an uncritical supporter of this theory; instead I do understand the limits of the model. I should also stress, however, that it would be a grave mistake simply to throw it away. We should also avoid reducing the problem to a conflict between disciplines or subdisciplines, saying things like “we, the sociologists [or political scientists or legal scholars] dislike the theory of rational choice and you, the economists, want to force it upon us.” No, the point lies elsewhere. There is no such a thing as *the* sociologist or *the* economist. There are several kinds of sociologists and several kinds of economists. Economists include people, like me, who are critical of this theory but who know that it has significant explanatory power and therefore needs to be used and applied. We should, however, also understand the limits of its validity as well as its benefits.

Clumsy users of the theory of rational choice (and there are many of them) believe that it is a key to understanding *all* phenomena—that no human behavior exists that could not be described (perhaps with some slight strain) with the help of this model. In contrast, people who apply the theory sensibly and with sobriety (and there are also many of them) know that this theory can explain certain phenomena but not others. They also know that the explanation is only partially valid even in those cases where it has an explanatory power. It is unable to shed light on the entire phenomenon, but it is able to point out certain important elements. Therefore, I use the theory of rational choice only with caution and within appropriate limits. If I am faced with a phenomenon that needs explanation, especially if it is a complicated social phenomenon, I do think it is worth asking what the decision makers' motives are, what objectives are driving them, and whether they have easily understandable interests (these may be nonfinancial interests, such as motives to obtain power, or emotional motives). It is worth analyzing what inspires individuals to action because it helps us understand the reason for the event that takes place as a result of their choices and decisions, conscious or unconscious.

I am against the “imperialism” of the theory of rational choice, its aggressive diffusion, and the practice of imposing it on researchers. I consider it, however, very important and desirable to meditate about it and use it wherever possible. By now

none of the social science disciplines are capable of escaping the impact of this theory.

Game Theory

In the case of rational choice, a fundamental assumption (that a decision maker makes an optimal choice) has spread beyond the disciplinary boundaries of economics. In the case of game theory, *a form of description*, a possible technique for describing situations, has gone beyond the confines of a discipline.

The first illustrative examples to which game theory appeared to be applicable were social games, but Neumann and Morgenstern's classic work (1944) started to be applied to economic phenomena shortly early on. It soon became clear that the theory could be used to analyze any social phenomenon. More specifically, it is applicable to every situation that involves interaction (cooperation, conflict, harmonization of behavior, acting against other actors) among social actors or in which interaction might emerge. People are connected by a wide variety of social links. If there is any kind of a link between them, most phenomena related to their interaction can be described with some kind of a game-theoretical model, which can help lead to interesting conclusions. Phenomena that can be analyzed with game theory occur in the spheres of politics, family life, military situations, and countless other contexts.

Most academics working on game theory work in departments of economics. But game theory has grown beyond the confines of economics to become a general analytical technique applied across the social sciences.

Multivariate Analysis of Long Time Series of National Statistics

The abundance of data and the acceleration of computing are bringing the disparate branches of social sciences closer together. During the 1960s, the Republic of Korea, Brazil, and a few other countries achieved remarkably rapid economic growth. Researchers at the time noticed that all of these countries were governed by oppressive dictatorial regimes, leading some to conclude that dictatorship fosters growth by creating far better conditions for economic development than democratic systems do. The typical argument was to refer to one of the high-growth countries and attempt to draw some kind of a generalized conclusion from it or perhaps from one or two other such countries.

Many changes have taken place in the decades since then. First, huge databases have been created, with data series of 100 to 150 countries over long periods. Some of these time series cover economic data (for example, GDP); others cover noneconomic phenomena.

The other significant development that has taken place in past three decades is the development of extremely efficient computers, which allow for the rapid solution of giant equation systems, multivariate regression computations, and other mathematical-statistical analyses. These computers are able to carry out tasks that require 100,000 computations in a single series.

Many projects make use of the new possibilities offered by huge data banks and fast computers. Among the pioneers was Robert Barro (see, for example, his 1991 study). In the last 15 years this kind of analysis has become an industry in which hundreds of researchers work.²

The typical procedure is as follows. Say a researcher wants to explain an economic phenomenon (such as growth or income inequality) or a noneconomic phenomenon (such as the level of illiteracy). He or she may consider a wide variety of explanatory variables, ranging from quantitative economic statistical data, such as the investment rate or a country's openness to foreign trade, to various qualitative social characteristics, such as the extent of democracy or dictatorship prevailing within a political system. The researcher may account for the country's legal system (Anglo-Saxon or German). He or she may investigate how frequently corruption occurs and what the dominant religion of the country is.

If a diverse set of phenomena is included in the set of explanatory variables, the researcher can come up with more than a few arbitrarily chosen examples of factors that affect the growth of the phenomenon being studied. Following the careful analysis of this type of multivariate calculations may not always yield clear and unambiguous responses or lead to conclusive results. But whatever the outcome is, we have made a long step forward in learning. With the tools of statistics, the social sciences in general, not just economics, can now investigate the casual relations among a wide variety of economic and noneconomic phenomena.

This approach raises many serious methodological difficulties. Its application is disquieting in many cases. Researchers often abuse the methodology briefly described above and draw irresponsible conclusions from the analysis. Yet despite these problems, a method now exists that, if applied cautiously, may prove valuable in understanding complicated interrelations.

Let me express a warning about this method. Computers today are so fast that researchers can carry out experiments randomly—as the ironic article “I Just Ran Two Million Regressions” (Sala-i-Martin 1997) suggests. Anything can be put on the right-hand and left-hand sides, a regression can be run based on millions of calculations, and a well-fitting equation can be found. The warning by Tjalling Koopmans remains valid: all meaningful measurements and enlightening quantitative analysis must be based on an underlying theory (Koopmans 1947).

Use of “Soft” Data

Some two or three decades ago, economists would have taken seriously only empirical analyses that contained ex post statistical data. They would not have accepted the idea that serious economic analysis could be based on interviews, believing that only market researchers or, perhaps, sociologists would conduct this kind of research, not respectable economists. Today this is no longer the case.

The profession now understands that the phenomena that take place in peoples' minds matter. Economists need to understand peoples' expectations, hopes, and perceptions; and they need to appreciate the values affecting their ways of thinking and

the levels of their optimism or pessimism. Welfare has always been among the variables considered by economists to be important, but this used to be measured exclusively by the volume of consumption. It has become common to attempt to measure the level of people's happiness by asking people how happy they are (see Frey and Stutzer 2002).

Many studies today are conducted by researchers who rely on techniques that had not previously been applied by economists, but had been regularly used by sociologists. These kinds of data may be obtained from a number of sources, including opinion polls, interviews, and responses to written or oral questions. The evaluation of a research project should not be based on whether the underlying data are "soft" or "hard" but in terms of whether the data are representative and consistent and the research carefully performed.

"System Paradigm"

I hope that it will not give the impression of immodesty if, as a last item, I list a characteristic *approach* that I usually apply to my own work, which I call "system paradigm" (Kornai 2000). Consider the historical period in which the former Soviet Union and Eastern Europe were under communist dictatorship. Describing exclusively the political regime (the political monopoly of the communist party) would generate a one-sided presentation of the region and the era. On the other hand, describing the economy solely by noting the elimination of private ownership as a means of production, the nationalization of all productive assets, the squeezing out of the market, and the central management of economic processes would provide another one-sided picture. A fuller picture would need to address both aspects, and also ideologies, the dominance of Marxist-Leninist ideals, the persecution of alternative views, and the rhetoric and propaganda of the communist regime.

The only possible way to understand the reality of this region before 1990 is to attempt to study the system as whole. We should attempt to understand simultaneously all spheres and dimensions of the system, how the various elements affected one another, what interactions prevailed among them, and how mutual interdependence emerged.

System paradigm has rich intellectual traditions. I would consider Karl Marx to be its first pioneer. Other remarkable scholars involved in it include Karl Polanyi (1944) [1962]; Friedrich von Hayek (1935, 1944); and Joseph Schumpeter (1942).

The application of a system paradigm is needed not only to study socialism but also to understand the capitalist system as a whole rather than only one or another of its spheres. This system approach has become especially important now, when change—or as Karl Polanyi puts it, the Great Transformation—is underway in the once-communist countries. Those who, over the past 15 years, have specialized in studying changes in the former Soviet Union, Central and Eastern Europe, China, or Vietnam—the so-called transitologists, including experts from the World Bank, the International Monetary Fund, and the European Bank for Reconstruction and Development—have a proper understanding of this. Even if they do not use the

phrase *system paradigm*, the character of their work compels them to apply this approach.

The system paradigm cannot be applied within the narrow borders of one or the other social science discipline. The very essence of the approach is its interdisciplinary character.

Desirable Directions

What are the desirable directions of change? I do not suggest destroying the borders that separate disciplines. I do not suggest that departments of economics, sociology, and political science be united into a comprehensive department of social sciences. I am not a merger maniac, and not only for reasons of tactics (that is, in order to prevent the struggles for power that usually follow mergers).

Separate disciplines are rich in valuable traditions, methodologies, and approaches. Members of each profession have a refined knowledge of a subset of the set of the literature in all social sciences. It would be a grave mistake if, in the future, only “universalists” conducted research and taught students in social sciences. I do, however, have three suggestions for improving the sharing of knowledge across disciplines. They are modest ones and perhaps have a greater chance of being adopted.

- ***Suggestion 1: Obtain at least a minimum knowledge of other disciplines***

Whatever your special discipline is, obtain a minimum knowledge of other disciplines of social science. Max Weber is not the only scholar outside of economics whose work economists should understand. Just as a minimum level of knowledge of mathematics and statistics is needed to get a PhD in economics, minimum requirements should be set with respect to the social sciences and history. As for “adult” researchers, we must educate ourselves. We should read far more works produced by the other social science disciplines, and we should follow their latest achievements and debates.

Should mandatory minimum requirements be set for students, or should we content ourselves with recommending that universities encourage broader knowledge and give credits for courses taken outside the basic discipline? I am not sure what the right answer is; it would be worthwhile to continue this discussion. But this is not the most important thing. The really important thing is the atmosphere prevailing within a university, and peers’ expectations from one another. There is a term used by members of the Hungarian intelligentsia: *professional barbarian*. It refers to people who are experts in a narrow field but who know nothing else. We need to create an atmosphere in which professional barbarians are ashamed of being uneducated, however strong they are in their own fields.

- ***Suggestion 2: Encourage interdisciplinary work and cooperation among experts from different disciplines***

Interdisciplinary work is more common than it was a few decades ago, but it has not yet become widespread. It would be desirable to have more interdisciplinary research projects and more interdisciplinary courses at universities.

The term *interdisciplinary scholar* does not convey high respect today. “She is the best philosopher among economists” is not high praise. This assessment needs to change.

A handful of journals cover two neighboring disciplines (for example, economics and sociology or economics and law.) But there is not a single prestigious English-language academic journal covering the whole body of social sciences. When writing my article on system paradigm, I failed to find a single journal in whose profile it could fit. I am happy that the volume being published by World Bank will include this paper. It is a paper that does, in fact, not fit into any specialized journal, either; and it would fulfill its aim only if it could be published in the journals of the various disciplines simultaneously. But the policy of editing prohibits such a practice by adhering to the right of first publication. A journal proud of its reputation would never become a second publisher. I mention this only ironically and to describe the current situation in which, despite the dumping of journals, there is not one adequate journal forum for comprehensive messages covering all social science disciplines. If I were younger, I would initiate the founding of a comprehensive social science journal.

- ***Suggestion 3: Encourage the development of a new kind of multidisciplinary scholar***

We need to encourage the appearance of a particular kind of a scholar, the “social scientist,” in the academic sphere. Most scholars will prefer to remain econometricians, or experimental psychologists, or empirical social anthropologists. But a small group of researchers and teachers who try to develop a more comprehensive approach to problems is needed. Such comprehensive minds are needed not only to become the new Hayeks or Schumpeters, but also to meet more modest needs. Presidents and prime ministers, for example, need advisers who have more comprehensive knowledge than the current advisers (often rather narrowly trained) have—advisers who are familiar with many disciplines, people with a thorough knowledge of history, political science, economics, sociology, and social psychology. They need not be experts in these fields, they need only be able to orientate within these disciplines and to know which books to read. Creation of this kind of scholar might help politicians obtain better advice than they have received so far.

As a conclusion, let me point out once more that there are no ready recipes for the solution of problems described in this paper. But this paper may be useful in drawing attention to a difficult problem that has not yet been handled properly.

Annex: Methodology and Numerical Details of the Study on References Across Disciplines

Five relevant journals each in economics, law, political science, and sociology were selected (table A.1), and every article in these 20 journals published in 2004 was analyzed. The selection of the economics journals was based on various surveys of “leading journals.” Experts in the other disciplines selected the journals in law, political science, and sociology. Although most of these journals are published in the United States, the set included at least one non-American journal in each discipline. Ultimately, the selection was rather arbitrary, although it appears to be certain that each of the selected journals rank among the leading 10 to 15 journals of their disciplines.

References in each article to articles published in the regular issues of other journals were tallied (table A.2). Sometimes articles that appeared in special issues were also included. For example, the analysis included the *Papers & Proceedings* issue of the *American Economic Review*, the *Conference Papers* of the *Economic Journal*, and the *Symposium* and the *Supreme Court 2003 Term* of the *Harvard Law Review*.

Individual references were assigned to one of the following categories: economics, law, political science, sociology, interdisciplinary, other. Articles on foreign affairs

TABLE A.1

Journals Selected in Each Field (2004)

<i>Economics</i>	<i>Law</i>	<i>Political science</i>	<i>Sociology</i>
<i>American Economic Review</i>	<i>American Journal of International Law</i>	<i>American Political Science Review</i>	<i>American Journal of Sociology</i>
<i>Economic Journal Review</i>	<i>Columbia Law Review</i>	<i>Comparative Politics</i>	<i>American Sociological</i>
<i>Journal of Economic Perspectives</i>	<i>Harvard Law Review</i>	<i>European Journal of Political Research</i>	<i>Annual Review of Sociology</i>
<i>Journal of Political Economy</i>	<i>Rabel's Zeitschrift</i>	<i>Journal of Democracy</i>	<i>Social Forces</i>
<i>Review of Economic Studies</i>	<i>Yale Law Journal</i>	<i>World Politics</i> ^a	<i>Sociology</i>

Source: Author's selections, with the help of Noemi Peter.

Note: a. The last issue from 2003 was included, as the journal published only three issues in 2004.

TABLE A.2

Number of Issues, Articles, and References Analyzed

<i>Item</i>	<i>Economics</i>	<i>Law</i>	<i>Politics</i>	<i>Sociology</i>	<i>Total</i>
Issues	27	32	18	22	99
Articles	316	65	164	176	721
References	8,637	9,952	6,567	12,827	37,983

Source: Author's calculations, with the help of Noemi Peter.

and international relations were characterized as political science articles; articles on gender were characterized as sociology articles; articles on criminology were categorized as law articles; and articles on economics, industrial organization, finance, industrial relations, business, and political economy were classified as economics articles.

The process of establishing the interdisciplinary category was as follows. In some cases, the title of the journal unambiguously identifies the disciplines whose areas it covers (for example, *The Journal of Law & Economics*). In other cases (for example, *Theory and Society*), judgment was required to determine whether the journal is interdisciplinary.

If the reference had been published in a journal, the relevant category was usually clear. Since other references were difficult to classify, they were grouped under "other." This category included all books, working papers, Internet sites, journal articles, newspaper articles, and other publications falling outside the five categories established.

Tables A.3 and A.4 reveal that the proportion of references to one's own discipline is very high if we consider the references classified into the five categories (what is more, the proportion is highest in the papers published in economics journals). The percentage figures in the diagonal entries reflect the high degree of "inward-looking" in all the disciplines under scrutiny. The figure was highest in economics (88.9 percent) and law (84.0 percent) and lowest in political science and sociology (65.8 percent for both these disciplines) (tables A.3 and A.4).

TABLE A.3.

Distribution of References

<i>Type of publication in which reference was originally published</i>	<i>Type of journal in which reference appeared</i>				<i>Total</i>
	<i>Economics</i>	<i>Law</i>	<i>Politics</i>	<i>Sociology</i>	
(1) Economics	4,344	256	341	625	5,566
(2) Law	60	3,428	70	190	3,748
(3) Politics	109	84	1,379	286	1,858
(4) Sociology	50	15	110	3,077	3,252
(5) Interdisciplinary	322	296	197	497	1,312
(6) Subtotal: Number of references identified by discipline or as interdisciplinary (items 1 through 5)	4,885	4,079	2,097	4,675	15,736
(7) "Others"	3,752	5,873	4,470	8,152	22,247
(8) Total (8 = 6 + 7)	8,637	9,952	6,567	12,827	37,983

Source: Author's calculations, with the help of Noemi Peter.

TABLE A.4

Distribution of References Identifiable as Originating in a Specific Discipline
(in percentage)

<i>Type of publication in which reference was originally published</i>	<i>Type of journal in which reference appeared</i>				<i>Total</i>
	<i>Economics</i>	<i>Law</i>	<i>Political science</i>	<i>Sociology</i>	
Economics journal	88.9	6.3	16.3	13.4	35.4
Law journal	1.2	84.0	3.3	4.0	23.8
Political science journal	2.2	2.0	65.8	6.1	11.8
Sociology journal	1.0	0.4	5.3	65.8	20.7
Interdisciplinary journal	6.6	7.3	9.4	10.6	8.3
Total	100.0	100.0	100.0	100.0	100.0

Source: Author's calculations, with the help of Noemi Peter.

Note: The 100 percent figures in the last row refer to that subset of all references that is displayed in row 6 of table A.3. For example, of the references of economics articles, the 4,885 *identified* references constitute the 100 percent displayed at the bottom of the table. A total of 88.9 percent of these 4,885 references referred to articles in economics reviews.

A more detailed study could try to distribute the references that fall into the “other” category. This study did so only for economics. For the results of the experiment targeted at a finer segregation of the “other” category, see table A.5, which shows that the disciplines listed here for closer examination are also mostly ignored as reference targets by economics articles.

The proportion of “other” is interesting with regard to the explanatory power of this analysis. We managed to classify 57 percent of all references in economics but just 41 percent in law, 37 percent in sociology, and 32 percent in political science.

TABLE A.5

Distribution of “Other” Items Cited in Economics Articles
(percent)

	<i>Pieces</i>	<i>Percentage</i>
<i>Category of “others” in total</i>	3,752	100
Of these, identifiable as originating in certain disciplines:		
(1) <i>History</i>	4	0.1
(2) <i>Mathematics, statistics</i>	87	2.3
(3) <i>Psychology</i>	103	2.8
(4) <i>Philosophy</i>	10	0.3
(5) <i>Anthropology</i>	3	0.1
(6) Subtotal: Identified references (items 1 through 5)	207	5.6
(7) Remaining unidentified references, in total	3,545	94.4

Source: Author's calculations, with the help of Noemi Peter.

Notes

1. Papers elaborated in the framework of the research project are collected in two volumes: Kornai and Rose-Ackerman (2004) and Kornai, Rothstein, and Rose-Ackerman (2004).

2. For discussions of this work, see Djankov and others (2003) and Knack and Keefer (1995).

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Lessons of Experience and Future Directions

Lessons in Capacity Building from the Open Society Institute

William Newton-Smith

This paper begins with a definition of “capacity building,” suggesting that we understand this notion in the present context as creating the power to produce locally the human capital needed for the development and preservation of open societies. This might be facilitated by the creation of new institutions or by the modification of existing institutions. Considering the mission of the Open Society Institute (OSI), the author lists what have come generally to be seen as the crucial ingredients in this normative ideal of an open society: an open society is a democratic society, governed by the rule of law with strong civic institutions. It is not merely a tolerant society, it is one whose members positively enjoy and value diversity in regard to ethnicity, religion, and culture. And, most importantly, it is a society of “engaged” individuals. This conception of an open society as one composed of engaged citizens seeking the knowledge necessary to refine their views on the issues of the day explains why OSI’s interest in capacity building in higher education is almost exclusively focused on the humanities and the social sciences. The author proceeds to offer conjectures for discussion and further investigation in the form of lessons learned by OSI about capacity building.

The first and most general lesson is that successful capacity building has to be contextualized, and it must have strong local involvement in its design and implementation. The second lesson is to make sure that efforts will enhance local capacity building rather than encourage a long-term dependency on nonlocal capacity. The third lesson is that one should think of enhancing existing local capacity rather than creating a new institution: *enhance, do not create*. The corollary is that effective capacity enhancement requires the commitment of a mentoring institution or institutions.

The paper then notes that if sustainability had always been a criterion for going forward with a project, many OSI projects that have turned out to be most successful would never have been allowed to start. An undue concern with issues of sustainability would tend to unduly discourage those exciting gambles that may, after all, be sustained. It is more useful to look at the creation of institutions in terms not so much of sustainability but in terms of costs and benefits assessed on an annual basis. In the case of NES and EERC, for example, the

cost per MA produced is a reasonably modest figure and so, even if these institutions proved in the end not to be sustainable, the benefits produced while they existed would make it worth having had them in existence even if for a limited time.

If, in the face of these lessons, one is faced with a young would-be capacity builder who nonetheless wants to create a new institution, the OSI experience suggests three lessons.

First, determine whether the market is ready for the product. Second, if the market is there, it follows that there is someone who will pay for the product. The new institution should charge for the product from the very beginning. The third lesson concerns the importance of beginning with a proper governing structure. From the beginning there must be an independent board that appoints the rector or director and controls the finances—it can become something of a challenge to introduce a controlling board at a later stage.

The need to build capacity in economics education remains pressing. If we do not find the substantial funds needed to replicate the successes of EERC, CERGE, CEU, and NES, we must nonetheless proceed using more limited resources to enhance the education currently on offer. And that means working with existing institutions.

THE ORGANIZERS OF THIS WORKSHOP MADE AT LEAST TWO MISTAKES IN ASKING ME to speak. First, I am a philosopher and no philosopher can approach a topic without first dissecting the terms in which it is posed. When Boris asked that I talk about the experience of the Open Society Institute (hereafter OSI) in capacity building in economics education my natural reaction was to ponder the very concept of “experience.” What is the nature of experience? How should one best define the concept? Of course I know something about experiences by virtue of having them. But what are these things that I have? Is it right to even think of experiences as being “things”? This train of thought took me to Descartes’ sceptical challenge: How do I know that there is anything other than my experiences?¹ Perhaps I am nothing but a brain in a vat being fed electro-chemical impulses that simulate a virtual reality. Well, some months later I still had no transcendental proof of the existence of a world beyond my experiences. For all I know, I remain alone in the world. Strictly speaking that should read: For all I know the world is in me, but never mind.

In desperation I decided to leave experience alone and move to the next term: *capacity building*. The notion of a capacity is another tricky one, philosophically speaking. You do not see capacities; they are not given in experience. We experience only what we call their manifestations. And tough-minded empiricists deny that there is anything over and above these “manifestations.” In the hope of making progress I re-read an entire book on capacities by Nancy Cartwright that has a particular focus on economics. After 181 pages of close argumentation she concludes modestly enough that a capacity is a “something in the world” (Cartwright 1989, p. 81). That being so, there is a world after all; a world inhabited at least by capacities and perhaps other things. While her book thus helped to stem my sceptical Cartesian doubts, it made me lose my grip entirely on the notion of a capacity and hence on the notion of capacity building. Consequently I turned to the friend of desperate philosophers, the *Oxford English Dictionary*, which defines a capacity as “the ability or power to do, experience or understand something.” That seems good enough to be getting on

with given an appropriate specification of the particular ability or power. I suggest that we understand capacity building in the present context as creating the power to produce locally the human capital needed for the development and preservation of open societies. This might be facilitated by the creation of new institutions or by the modification of existing institutions.

We can come to the organizers' second mistake, which was to ask anyone from the Open Society Institute to speak about anything. For we have been programmed to seize any opportunity to propagandize about OSI's mission, and I am going to take a moment to do just that. For in assessing our successes in capacity building to date, and in outlining how past experiences are shaping future endeavors in capacity building, we need to do so in relation to our conception of what we are aiming to do. The term *open society* was popularized by Popper, who did not pause to give it much positive content.² In the early days of the Open Society Institute there was much debate about how to articulate the notion of an open society. George Soros (2000) hoped to derive the content from Popper's notion of fallibility—the idea that rational agents recognize that they are fallible and that even their most cherished beliefs may be wrong.

Certainly you can derive some ingredients of the notion of an open society from this starting point. The basic argumentation was laid out by John Stuart Mill in his *On Liberty* (1982).³ Mill argued that we have an interest in the development, the articulation, and the forceful defense of views contrary to our own. For we have to recognize that we may be mistaken, and the process of confronting the counterarguments may move us from error to truth. And even if we are not mistaken, we will develop a better understanding of the contents of our beliefs and of the grounds for them through a process of challenge in open, public debate. Thus we have an inherent interest in freedom of expression and freedom of the press.

But there is much in the concept of an open society that cannot be derived from the recognition of human fallibility. For our present purpose it will be best to leave aside the philosophical groundings and merely list what have come generally to be seen as the crucial ingredients in this normative ideal of an open society. First and foremost, an open society is a democratic society, governed by the rule of law with strong civic institutions. It also embodies what I would term "tolerance plus." It is not merely a tolerant society, it is one whose members positively enjoy and value diversity in regard to ethnicity, religion, and culture. And, most importantly, it is a society of "engaged" individuals. That is to say, the citizens, or at least a significant proportion of them, have the capacity to and an interest in the use of rational discourse as the means of settling issues. It is a society that places a high value on acquiring knowledge relevant to social decision making and one that cares to discuss and debate widely the issues involved.

The world being what it is, building and maintaining such societies do require a stable economy offering at least an element of economic growth. The absence of stable economic growth can tend to create the conditions favorable to the development of non-open societies. And hence OSI does take a particular interest in capacity building in economics and management education.

This conception of an open society as one composed of engaged citizens seeking the knowledge necessary to refine their views on the issues of the day explains why OSI's interest in capacity building in higher education is almost exclusively focused on the humanities and the social sciences. For the natural sciences are quite peripheral to this aim. If we (that is, society) decided to abandon all research in physics and chemistry, that would not impede our ability to build and maintain an open society in the least. Indeed, we might well be better off if the resources currently expended on the high-tech hard science of physics were deployed instead to more socially worthwhile ends. When I last checked, the annual budget of CERN (the European Organization for Nuclear Research) exceeded the entire expenditure on education in Albania. We (in particular the Albanians) would be better off with an appropriate redistribution of the CERN funds to promote general education of the type required by an engaged citizenry.

The situation is entirely different in the case of the humanities and the social sciences for two reasons. In the case of some subjects—for instance, economics—the engaged citizenry needs the special knowledge that the subject provides in order to develop enlightened views on issues of social policy. Other subjects, such as philosophy (or at least certain areas of philosophy) seem devoid of any practical content. However, those subjects contribute to the development of the rational faculties needed by the engaged citizen. Through the study of philosophy in particular and the liberal arts in general, students come to master and enjoy the art of discussion, debate, and rational dialogue. Philosophy delivers a process rather than a product, a process whose internalization can contribute to the rational resolution of the issues of the day. Economics has a privileged position. It may indeed deliver special knowledge of particular relevance to practical decision making in the real world, as economists typically hold. But if it fails to do so (as the occasional skeptic claims) it can still claim with philosophy to provide useful training in analytical thinking.

The study of physics does tend to develop a kind of analytic ability, but it is not the sort of intellectual ability most suited to the resolution of issues of social policy. In this area we face intractable issues, issues for which we have no answer and, indeed, in regard to which we possess no methodology for finding a definite answer on which a consensus can be easily built. In spite of this we need to continue rationally discussing the issues, seeking to come up with the best answers we can. It is for this reason that the study of history or philosophy is of much greater practical utility in developing engaged citizens than physics or chemistry. I include economics with history and philosophy, mindful of the fact that this inclusion is contentious and that some see economics (or some future more mature form of economics) as being methodologically akin to physics.

Against this quasi-philosophical background, I turned to the less abstract issue of what we have learned in the course of seeking to build capacity. But first a sort of Surgeon General's warning is needed. As a philosopher of science I cannot even pretend that generalizing from a handful of cases without any controlled experiments is methodologically acceptable. For the most part what I offer are conjectures for discussion and further investigation.

The first and most general lesson is that successful capacity building has to be contextualized. One simply cannot take an institution that produces human capital in, say, Canada and replicate it in Tajikistan, expecting it to produce the same human capital in the same way. Perhaps no one proceeded after the Iron Curtain collapsed in quite such a crude, imperialistic way. However, it is certainly true that in the early 1990s, some who sought to indulge in capacity building were not sensitive enough to the local context. This lesson has a corollary to which I will return below: capacity building must have strong local involvement in the design and implementation phase in order to maximize the chance that the project has been properly contextualized.

Creating institutions is obviously not the only way one can build human capital in the postcommunist world. One can also do this through scholarships, fellowships, and exchanges to established Western institutions. However, this is the antithesis of institutional capacity building. Decades of scholarships will not on their own build local capacity. Indeed, using scholarships abroad as a means of delivering local human capacity can even institutionalize a kind of dependency. Scholarships do have an important role to play in building understanding and in enriching the perspectives of the young. They are certainly a good thing even between the United States and the United Kingdom. But on their own they do not build capacity. I give but one of countless examples to illustrate this contrast. We were approached by a well-known museum in the United States for scholarship funds to train students from the region in the conservation of art. There was a pressing need for a large number of trained conservators. But a museum in the United States is not the answer. Instead of an endless flow of students to the United States, bringing tuition revenues and adding to the cosmopolitan image of the museum, we proposed a time-limited program to develop a training center in the region with the museum acting as a mentor and “training the trainers.” The museum lost interest. This sort of capacity building does not generate tuition income and requires more work than the museum was prepared to provide. These reflections give us our second and rather obvious lesson: make sure that your efforts will enhance local capacity building rather than encourage a long-term dependency on nonlocal capacity.

Scholarships as a means of building human capital are in some contexts an absolute prerequisite of any future capacity building exercise. The conditions are not ripe for a capacity building exercise in Belarus or Uzbekistan at the moment. But unless we build a critical mass of human capital through a scholarship program, the conditions will never be ripe!

The third lesson we have learned is enshrined in the maxim: Don't Do It!

If you are thinking of creating an institution as part of a capacity-building exercise, do not do it. One should think instead of enhancing existing local capacity. The slogan should be: *enhance, do not create*. To make my argument marginally more respectable methodologically I will cite institutions with which we have been involved other than those devoted exclusively to graduate training in economics. I know that economics is special but I doubt that it is so special that lessons about capacity building in economics education cannot be learned from capacity building in other areas of higher education.

Working with a local institution is likely, though not necessarily, to mean, working with a state university. That has many advantages, not least of which is that it displays respect for those locally engaged and that display, in turn, will facilitate acceptance and dissemination. To elaborate I will use two pairs of examples. In St. Petersburg we supported the enhancement of the School of Management of the state university and the creation of the European University of St. Petersburg. Both teach economics; the former is technically part of the economics faculty. In terms of academic quality both are highly rated. But in terms of sustainability the contrast could not be greater. The School of Management has a guaranteed income stream from the state, a stream that will be increasingly augmented by tuition income. The European University has no income stream (unless you count the grants of Western foundations, foundations that are notoriously prone to fickleness). And being outside the state sector, the European University has no power to give recognized degrees, a constraint that severely limits its ability to charge tuition, unlike the School of Management. I am as concerned as they are that this excellent university may well not be able to surmount the challenge of sustainability. Insofar as sustainability is a concern (and I will be critical of any excessive concern with sustainability below), one should stick to enhancing local state universities. Obviously very special conditions need to obtain for this to be an effective strategy. In the case of the state university there was and is a rector prepared to grant relative autonomy to sectors of the university to develop independently. And there was a Western institution—the Hass School of Business at Berkeley—prepared not only to mentor the school through faculty and curriculum development but also to assist in fund-raising.

This third lesson has a corollary: Effective capacity enhancement requires the commitment of a mentoring institution or institutions. The mentoring institution can provide (among other things):

- Advanced degrees for the local faculty
- Apprenticeships in teaching methods
- Advice in curriculum development
- Assistance in fund-raising
- Visiting lecturers

Even with an extensive mentoring program, the cost of enhancement is small in comparison with the cost of creation. And, very importantly, the costs of enhancement are time limited. After a period the job is done. In the case of institution the costs can run indefinitely into the future.

Happily there is no longer the need to rely exclusively on relatively more expensive Western institutions for the mentoring. The School of Management in St. Petersburg is providing this service most effectively for departments in Belarus and Kyrgyzstan through a modular doctoral program that enables faculty to obtain a higher qualification while continuing to teach. We are interested in considering other proposals to provide in-region mentoring of weaker institutions by relatively stronger ones.

There is an interesting comparative history to be written of the American University in Bulgaria (AUBG) and the American University of Central Asia (AUCA), which will richly illustrate the pros and cons of creating a new institution versus the reform of an existing one. AUBG was created in Bulgaria as an American liberal arts college with an American faculty and an American administration, guided largely by the University of Maine. It largely replicated the curriculum and teaching style of an American college and was able to offer a quality education unique of its kind in Southern Europe from its very inception. On the positive side, this “creation by transplanted” has meant that AUBG received American accreditation early. But on the negative side, this style of creation has meant that AUBG has been slow to integrate *fully* into the local educational scene. For instance, even at the time of this conference, its degrees had not been recognized by the Bulgarian authorities. Happily, however, that changed subsequently.⁴ And, more worryingly, it is a costly operation. The extensive use of expatriate faculty means that there is no chance for AUBG to cover its costs from tuition income and substantial subsidies have been needed. By the time the local economy is strong enough to enable enough students to fund the real cost of education at AUBG, Bulgaria will have been in the European Union for some considerable time; by then the students with the means will have many other opportunities for quality liberal arts education elsewhere in the EU. While there is a reasonable chance that AUBG (particularly with recent improvements under the current leadership) will survive, this is by no means certain.

By contrast, AUCA started life as a faculty of the state university (“the Kyrgyz American faculty”). The faculty were entirely local and most instruction was in Russian. It offered a standard Soviet curriculum and style of teaching but was able to grant a degree recognized locally. I once asked the primary founder what it was that made the project “American.” She replied that it was “American in spirit.” At a certain point the project was given autonomy from the state university as an experimental self-governing institution, called first the “American University of Kyrgyzstan” and later the “American University of Central Asia.” AUCA as the descendent of a preexisting indigenous institution had two advantages over AUBG. First, it inherited the ability to give locally recognized degrees. And, second, it inherited a local faculty. The inherited faculty represented both good news and bad news. The good news was that the cost of running the institution was low and remains relatively low. AUCA has received very much less in subsidies than AUBG (in both cases the support has come almost entirely from the U.S. government and OSI). I am confident that the modest endowment provided by OSI and the U.S. government, together with tuition income, is adequate to make this institution sustainable. I hope that AUBG will be sustainable. However, even though it has received much greater financial support, its survival is not guaranteed; and this remains its greatest challenge. The challenge to AUCA is not merely to survive. It is to improve the quality of education. Many of the faculty still teach in Russian; the curriculum needs further reform and the qualifications of the faculty need to be enhanced. AUCA will have to struggle to meet these challenges over several more years if it is to achieve the American accreditation that AUBG obtained. The moral I draw from this thumbnail

comparison is that reforming an existing local institution enhances the chances of sustainability but makes real innovation more challenging. Transplanting a Western institution gives instant innovation, but makes sustainability challenging.

AUBG could improve its financial position and thereby increase its chances of becoming sustainable by regionalizing the faculty. It is perfectly feasible to staff the university entirely with lower-cost faculty members from Bulgaria and the neighboring countries who have been trained in Western universities or in Western-style universities such as the Central European University (CEU). But universities, even new ones, are fundamentally conservative institutions. And taking this idea seriously would call into question the university's own image of its identity. The AUBG board will tell you that AUBG is an American institution after all. And the students, who share this orientation with the board, complained strongly when there was a very modest increase in the percentage of regional faculty members. But this objective needs to be pursued in spite of this opposition. It makes financial sense and it serves the aim of capacity building in a general sense. AUBG can afford to pay Western-trained faculty from the region more than a state university in the region can. Consequently, AUBG has an important role to play in encouraging young faculty members to return to the region to teach.

I have sketched an aspect of the story of AUBG and AUCA to give further support to my negatively phrased maxim: enhance rather than create. Reflecting on the contextual character of capacity building, we can see that it was not a mistake to create AUBG. In the context there was no institution within the state sector that was ripe for enhancement. The success of such institutions as AUBG has played a role in changing the very context in which capacity building takes place. Universities within the state sector have become interested in replicating the kind of education provided at AUBG. For instance, at the University of St. Petersburg a liberal arts college, Smolny College, has evolved within the state structures. No doubt projects such as AUBG served as models, prompting the impulse to replicate them elsewhere as in St. Petersburg.

OSI is taking this general lesson to heart. Although we do not categorically exclude creating new institutions, our preference is now to work at enhancing existing institutions. Georgia is a case in point. We declined various proposals to create institutions and are working instead with Tbilisi State University to upgrade their research and teaching in sociology and international relations at the MA level, with mentoring being provided by the Moscow School of Social and Economic Sciences in the case of sociology and by Oxford University in the case of international relations. The approach involves faculty and curriculum development using partner universities.

This strategy of using institutions we have helped to develop to act as mentors for departments in the state sector is likely to be increasingly important for us. We are funding the departments of history and of political science in CEU to act as mentors to a range of university departments within the state sector. We hope thereby to improve the curriculum, the teaching styles, and the research abilities of the faculty in a number of departments and thus improve the education, in a sustainable way, of

many more students than we could if the same funds were devoted to creating a new stand-alone institution.

Suppose that you, as a young would-be capacity builder, having heard these perhaps cynical remarks of an older person, nonetheless wants to create a new institution. How should you go forward? First, find yourself a charismatic, driven individual who has never heard of the concept of sustainability. For, if any of the projects we have supported, including those that have proved sustainable, were required to show that they were sustainable at the time of their inception nothing would have happened. Even if you substitute the weaker notion of “having a reasonable prospect of being sustainable,” little would have happened and the world would have been a poorer place.

There is an interesting thesis to be written on the history of the discourse about sustainability. No doubt those of you in the World Bank have always been concerned with sustainability. This was not so in the foundation world. When OSI started its Higher Education Support Program (HESP) we were focused on finding good people who were doing interesting things and merited support. Sustainability was not even on our thought horizon. I remember my shock when someone in Washington some 15 years ago asked whether one of our projects was sustainable. That was not how we thought about things. If we had, many of our projects that have turned out to be most successful would never have been allowed to start. After the initial excitement of the early 1990s, a time came in which we started to think in terms of sustainability. Many of the things that foundations like to do (such as scholarships) are not sustainable in any real sense of the term. I sometimes have the cynical thought that the effect of this discourse about sustainability has been simply to loosen the criteria for the application of the term to the point where any intervention that has a good effect is deemed to be “sustainable.” In any event, I sense that this discourse was a fad that is now fading somewhat.

Whether an institution will be sustainable depends on many factors that are unknowable at the time the institution is created. A switch in policy from funding universities with block grants from the state to funding students with vouchers that they can use where they like can totally change the sustainability of an institution. And, as noted above, an undue concern with issues of sustainability would tend to unduly discourage those exciting gambles that may, after all, be sustained. I am not denying that sustainability is a virtue. My point is only that caring too much about sustainability is not a good thing. Consequently I suggest looking at the creation of institutions in terms not so much of sustainability but in terms of cost and benefits assessed on an annual basis. In the case of the New Economic School (NES) and Economics Education and Research Consortium (EERC), the cost per MA produced is a reasonably modest figure and so, even if these institutions proved not to be sustainable, the benefits produced while they existed would make it worth having had them in existence even if for a limited time.

Given that you have identified the charismatic, driven individual who does not think in terms of sustainability, what have we learned that might help him or her in taking his or her project forward? The OSI experience suggests three lessons for the

would-be institution builder. First, determine whether the market is ready for the product. It may well be that this is not a serious issue in regard to economics education given the success economists have had in persuading everyone globally that economists are essential for our well-being. However, we have learned in other areas that you can move too quickly. We are interested in capacity building in social work. As a first step we established an MA scholarship program to the United States. We had expected the returning MAs to both work as social workers and, most importantly, to become the nucleus we would assist in developing in the region local MA-level training. However, the market was not there. Social work is not even recognized as a profession in most countries of the region. The students were not able to find employment in the relevant government social services. Some of them work for relevant NGOs; others have joined the internal brain drain, using their English-language skills to work for multinational companies. We have not yet been able to find the right combination of a government and a university interested in taking forward the creation of a professional school of social work.

We have not abandoned this project but we are no longer confident that we will be able to add value given the current perceptions. Kyrgyzstan has recently recognized social work as a profession and has designated an institution dating from the Soviet era as the training school for social workers. The director told me that there is not a single properly trained social worker in the country. I thought this might be our opportunity to assist with faculty development. However, when I asked if this meant that he would have problems teaching social work he said “not at all!”

We ought to have been more cautious. A decade or so ago, we thought of developing capacity in the area of educational policy. We thought this particularly appropriate given the prospects of significant reform in the educational systems of the region. We envisaged creating two institutions that would teach education administration and policy: one in Russian for the CIS countries and one in English for Eastern and Central Europe. We largely abandoned the project on sage advice from someone from the World Bank who argued that the market was not yet developed. He rightly noted that ministries of education did not appreciate the need for the product of such institutions. He proposed that we make some smaller steps to convince governments of the benefit of individuals trained in educational policy and/or administration. In this regard the situation has definitely changed. For instance, we have just been approached by the minister of education in Georgia for help in developing MA-level training in this area.

If the market is there, it follows that there is someone who will pay for the product. This is the second lesson I would pass to the institution builder: charge for the product from the very beginning. In retrospect we should have moved earlier and more energetically to charge tuition at NES and EERC. Naturally such an approach needs to be married with financial aid in the form of student loans and needs-based scholarship support. It is sometimes said that there is a culture of entitlement that leads students to expect free higher education. If there is such a culture it is not unique to the region. Students in the United Kingdom, in resisting the introduction of tuition charges, seem to feel that charging them would infringe some inalienable

and universal human right! However, once charges were in place they paid. They are clever enough to calculate that the benefits of a degree outweigh the tuition costs. In general it seems to me that those who administer the programs we support are more reluctant to introduce tuition charges than the students are to pay them. The level of tuition should reflect the real running costs of the institution. The donors can then focus on providing the necessary capital investments and in providing the student loans available to all students and bursaries for those whose means are most limited.

The third lesson for our charismatic, driven individual concerns the importance of beginning with a proper governing structure. From the beginning there must be an independent board that appoints the rector or director and controls the finances. The driven charismatic individual naturally gets on with things. And it can become something of a challenge to introduce a controlling board at a later stage. We have a number of institutions (I am not thinking here of institutions providing graduate-level training in economics) that do not have such boards in place. And not having them in place, there is no succession mechanism to deal with the day that the charismatic leader is run over by a bus.

The need to build capacity in economics education remains pressing. But in moving forward we are going to have to think in terms of Ladas rather than Cadillacs. I must immediately remark that I am not suggesting that those who worked tirelessly to create the programs in Kiev and Moscow were driving around in Cadillacs. The interest and generosity of various funders including the World Bank enabled these centers of excellence to be established in very short order. I do not think that there is the same interest among funders at the moment, a moment when we desperately need to develop regional centers of excellence in graduate economics education in Central Asia. I certainly hope that we will find the substantial funds needed to replicate the successes of EERC, CERGE, CEU, and NES. However, if we fail we must nonetheless proceed using more limited resources to enhance the education currently on offer. And that means working with existing institutions, seeking to upgrade the faculty using modular doctorates among other things. It may take much longer in a Lada but you still get there in the end!

Notes

1. See Descartes (1985).
2. See Popper (1945), vol. I passim.
3. Mill (1982), chapter 2 passim.
4. Bulgarian accreditation was granted to AUBG on July 20, 2006.

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Teaching and Research in Modern Economics in the Russian Federation

The Experience of the New Economic School

Gur Ofer

The paper tells the story of the New Economic School (NES), a graduate school of economics in Moscow, in the context of and as a case study of the transfer of modern economics to the Russian Federation during the first decade of the transition to a market system and a democratic regime. The best-known part of such a transfer is the replacement of the Marxist version of “political economy” with modern economics, as a behavioral, analytic, and positivistic science as developed in the West over the last two centuries. As it turns out, a number of additional key elements of teaching economics (and in some cases other sciences) had to be replaced. There was the need to combine teaching with research; to change and expand the teaching of methods of empirical analysis; to replace the narrow focus and specialized teaching of economics (separately to each branch of the economy) with a broader and more general approach; to introduce new methods of teaching based on problem solving and on independent reading and studying; to open up the teaching and research in economics to the global arena, to integrate economics in Russia with that of the profession elsewhere, more along the Anglo-Saxon line than the continental one; and finally to supplement the dominant state-run system with independent institutions of higher learning, a part of the growing civil society.

The paper tells the story of the development of NES, and lists its main achievements in all the dimensions listed above and its development as a center of excellence in teaching research, policy work, and dissemination. By 2005 NES boasted an indigenous faculty of 15, many with PhDs from the West, publishing in leading journals; and more than 500 graduates. It is now run mostly by the Russian government and raises more than half its revenues in Russia.

The paper discusses some of the main dilemmas and problems: openness to the world and becoming a part of the global economics profession is highly beneficial to Russia but also brings with it the problem of brain drain. Leaning outward may come at the expense of visibil-

ity in Russia and involvement in major policy issues facing Russia and the transition. NES, together with its close partner the think tank CEFIR, seems to have been able to strike the right balance between these two poles.

THIS STORY STARTS IN THE FALL OF 1991. AT THAT TIME, THE SOVIET UNION WAS DIS-INTEGRATING, following August's failed coup. The political upheaval was only slightly more alarming than the state of the economy, which suffered from acute shortages, the breakdown of supply networks, and emerging inflation. Central planning was virtually dead, and whatever nascent market that existed was chaotic and dysfunctional.

During this time, I visited a number of institutes of economics in the former Soviet Union as a guest of a prestigious Moscow institute. Upon my return to Moscow, I met with George Soros—the financier and philanthropist who contributed large sums of money to the “opening up” of the Soviet Union—and expressed my astonishment at the almost complete absence of any new teaching of modern economics to accompany the emerging reforms. Mr. Soros's skeptical response was, “If you get an idea let me know and I may be able to help.” He was skeptical because I struck him as a typical absent-minded egghead academic, who spent most of my life in the ivory tower. He was right.

A few days after this conversation, a mutual acquaintance arranged a meeting for me with the head of the Central Economics and Mathematics Institute (CEMI), Valery Makarov, who was reportedly thinking along similar lines. He had done more than just think: whatever I had in my head at the time, Makarov already had in writing. Following the usual introduction he handed me a one-page document entitled “The CEMI Econometric School-CES,” which he proposed organizing through the joint efforts of CEMI, an American or European university, Moscow State University, and Dialog (an investment company). The document suggested three directions of study targeting three groups of students: modern economic theory (basically mathematical economics), econometrics, and business.

Richard Portes, a professor at London University and the head of the Centre for Economic Policy Research, also attended the meeting. We both offered to think about what Professor Makarov proposed. Portes may have been smarter than I was: he didn't come back to Makarov. I invited Makarov for a visit to Jerusalem, where we received the blessing of the Hebrew University, prepared a draft plan and a budget, and sent it to Mr. Soros. I learned later that Mr. Soros sent a colleague of his to Moscow to check out the idea; based on this investigation he gave the green light (backed by a modest financial grant to start the New Economic School (NES), a Western-style graduate school of economics).

Classes started just one year later, in September of 1992. Thirteen years later, as a result of the dedicated efforts of so many people who joined immediately and over the years, and with a total expenditure of about US\$20 million, we stand here today to tell you what we had in mind and what was accomplished.

Since its opening, NES has offered a two-year master's program in economics. Students are admitted on the basis of merit, determined by entrance exams in mathematics, English, and economics. The graduate curriculum was taken from those of

leading graduate schools in the United States. Graduate studies were preceded by one semester of undergraduate courses in statistics, mathematics, English, and basic economics. The academic year lasts 35 weeks, divided into five modules.

Over the years, courses on the Russian economy and on transition were introduced. More recently, more applied courses have been added; these were eventually clustered into a number of specializations. These courses were added largely in order to give more practical training to graduates who plan to work in the private and public sectors.

All courses are accompanied by weekly problem sets and section classes. In addition to course work, second-year students prepare a master's thesis, eventually within the framework of a research center that was established later at the school.

At the start, most teaching was done by visiting professors from the West and courses were taught in English. Over time, more and more courses were offered by new Russian faculty members, mostly in Russian. NES established a library with a few dozen leading journals and multiple copies of texts, a computer center with network and Internet connections, and a number of important data sources

For a few years NES charged no tuition. This was changed in 2001; tuition now stands at US\$5,500 year. The best students receive fellowships, and loans for the full amount are offered to all others. More details on the structure, rules, and culture at NES can be found on the NES website (www.nes.ru) and in what follows (see also Ofer and Polterovich 2000).¹

By July 2005 NES had graduated more than 400 students (see table 1). Most of these graduates work in the academic, public, and private sectors in Russia and in the Commonwealth of Independent States (CIS) (see table 2). In the 13 years since it was founded, NES has developed an indigenous faculty of 15. Many of these faculty members are graduates of NES; most earned their PhDs in the West and publish in international journals. NES also established its own research center and helped create a high-level think tank, the Center for Economic and Financial Research (CEFIR), whose researchers—most of them NES graduates—work on transition and the Russian economy. By 2005 NES's outreach center had organized more than 100 workshops and summer schools in economics all over Russia and the CIS.

On September 1, 2004, NES itself graduated into adulthood, when a board with a majority of Russians and a young Russian leadership took over its governance from the previously foreign-dominated leadership. NES will continue to need academic guidance during the coming years and continues to depend partially on Western financial support. But the assumption of full responsibility over the management of the school is an important part of a mission accomplished.

From the beginning, NES and CEFIR have cooperated closely in teaching, supervising students' research, and conducting research and policy projects. As part of the governance change, they also created a joint faculty, which runs joint seminars, and they are governed by the same board. They are gradually moving toward a full merger.

So let us go back to the beginning. The introduction of modern economics to Russia can be viewed as a foreign direct investment project, and as a transfer of tech-

TABLE 1
Number of NES Applicants, Students, and Graduates, 1992–2005

<i>Year</i>	<i>Applied</i>	<i>Admitted</i>	<i>Graduated</i>	<i>Number of diplomas issued</i>
1992	87	52	0	0
1993	116	53	0	0
1994	155	53	32	24
1995	129	62	31	37
1996	106	54	29	29
1997	112	60	38	38
1998	89	44	38	38
1999	94	46	42	42
2000	183	80	26	24
2001	190	86	22	24
2002	190	83	54	54
2003	185	83	61	63
2004	171	82	56	58
2005	196	102	52	52
Total	2,003	940	429	483

Source: NES files.

nology. The next section discusses the content and nature of such a transfer. The following section identifies some achievements and discusses a number of problems.

The Mission and Nature of the Transfer of Economics

The grand mission of the endeavor was to replace the Marxist economic paradigm and the way economics had been taught under the communist regime with a new paradigm of modern, Western economics—something that was completely alien to most Russians. The task involved an extremely radical shift, with only few precedents in the history of science. The change was complicated by the fact that it took place at the same time that many radical changes—political, social, and mental, as well as economic—were occurring. This meant that although the project itself had to be conceived as a long-term one, short-term requirements also needed to be addressed.

The design of the model of such a transfer involves two major aspects. The first is the choice of the package of content, methodology, and didactic elements. The second is the choice of strategy, the vehicle used for the transfer.

In terms of the vehicle for transferring knowledge, the enormous size of Russia (and other transition economies) and the limited financial and human resources available from the West for this task dictated a basic strategy of training trainers or even trainers of trainers. The main goal was to train a new generation of academic and professional economists for the new market economy that has started to

TABLE 2

Job Placements of NES Graduates, 1994–2005

<i>Item</i>	<i>Number</i>
Total number of NES graduates	469
Work in Russian Federation and CIS	283
Private sector	201
Financial sector	67
Consulting companies	57
Other	48
Manufacturing	29
Public sector	9
Academic institutions	69
Think tanks ^a	40
of which CEFIR	25
Universities	25
of which NES	12
Research institutions	4
International agencies	4
Work abroad	86
Universities	39
International agencies	6
Private sector	41
Study abroad (PhD programs)	93
<i>Graduates with additional degrees</i>	
Western PhD	70
Russian PhD (Candidate of Science)	12
MBA	11
MA	12

Source: NES files.

a. Many of the think tanks are in the public sector.

emerge in Russia. The strategy of transfer also had to take into account the fact that the shift would replace a deeply entrenched technology rather than introduce a new one on a tabula rasa. This usually calls for a strategy of a “green field.” Under these circumstances, resistance is expected and means must be developed to overcome it.

The transfer of modern economics to Russia was a much more complex, multi-dimensional task than simply replacing one body of knowledge with another. Before the Revolution, Russia had developed a very respectable—in some areas even exemplary—tradition in many fields of natural sciences, as well as in the humanities, culture and the arts, and the social sciences. There was an extensive system of higher education and research institutes, accompanied by a vibrant intellectual and cultural community with extensive international connections.

The Soviet regime fostered the development of higher education, mainly in engineering and the natural sciences; in the social sciences, literature, and the arts, the doctrinal bias was strong. On the verge of the transition Russia's situation was unique: unlike many other developing countries, it possessed a solid intellectual and cultural infrastructure, and the level of knowledge and research in fields related to economics, such as mathematics, was high. But other features of higher education and science had to be replaced. While the main focus behind the NES was on changing the content of economics, radical changes were also needed in the general scientific approach, organization, method of teaching and didactics, and related scientific fields.

Adopting Neoclassical Economics

Modern neoclassical economics is an analytical, positivistic behavioral science, based on solving theoretical or empirical problems through the development of theoretical models and their empirical scientific testing. This genre of modern economics had been slowly replacing the descriptive, historical, legal, philosophical, and institutional approach that dominated economics throughout the West until the end of the nineteenth century and continued to be practiced in continental Europe until after World War II.

During the second half of the twentieth century, economics slowly began to change in continental Europe and elsewhere; the process is far from over (Coats 2000; Frey and Eichenberger 1993; Frey and Frey 1995; Kadish and Tribe 1993; Rothblatt and Wittrock 1993. Early successful examples of such changes took place in Israel and Latin America. In Israel the transformation began when Don Patinkin joined the Hebrew University in 1948 (Patinkin 1994). Within less than a generation, academic economics in Israel achieved a respectable standing across the world and established modern economic training as the professional standard for both public and private management and policy making. Latin America also effected a transformation of the profession (Harberger 1996; Cardenas and Perry in this volume).

Combining Teaching with Research

As an analytical science, economics thrives best when teaching is combined with research, as is the case with respect to most other sciences. Teaching universities are by nature conservative institutions that store, conserve, teach, and disseminate knowledge and cultural traditions across generations.

A revolution in higher education took place in Germany in the nineteenth century, with the establishment of the University of Berlin, which combined research with teaching (Wittrock 1993). The university proved itself a key dynamic force in pushing the frontiers of science, not less in the rapid dissemination of scientific discoveries to (graduate) students and through them to the economy and society at large. French, German, and other European systems of higher education retreated later to some extent, increasing the number of independent research institutes and thus restoring some separation between teaching and research. But universities in the

United States improved on the German model, by becoming simultaneously teaching halls and scientific laboratories. The combination of teaching and research under one roof tilted the nature of universities from a strong conservative force that preserves and disseminates existing knowledge and traditional values into more balanced institutions that serve also as pioneers in creating new knowledge and reshaping values. At about the same time that universities began conducting research, economics was recognized as a distinct discipline and separate departments of economics formed. Formerly most economics study was conducted under the faculties of law.

Even before the Russian Revolution, a degree of separation between teaching and research had been brought to Russia from continental Europe (De Witt 1961). This trend intensified during the Soviet period. It fitted the needs of the communist totalitarian regime beautifully, since it allowed for better control of what was being taught at universities and ensured that scientific discoveries, whether “true” or “false” and potentially damaging—not to mention new ideas or values—were confined within the well-protected and controlled environments of more isolated research institutes. Research was conducted by a relatively small number of carefully selected specialists. The political elite dictated the directions and areas of investigation, even in the natural sciences. In the social sciences and humanities, such control was dominant, and the separation of research from teaching was even greater there than in the natural sciences. This separation made it particularly difficult to make the paradigm shift when transition began.

The combining of teaching and research is not only about the proximity and speed of dissemination. It is also about the investigative approach to teaching—teaching that encourages the search for solutions to unresolved issues and that promotes the analytical way of thinking, skills, creativity, and curiosity. This kind of thinking is fostered partially through teaching by problem-based learning, in which students regularly solve problem sets, when possible before their lectures, through self-study. This approach contrasts with lecture-based learning and the recitation of prepared (and censored) professors’ notes, a form of teaching that is typical in totalitarian regimes. No wonder that a comparative study on the quality of education across countries found the Soviet Union to be strongest on “awareness of facts,” weaker on their application, and weakest on creativity (World Bank 1996).

Combining teaching and research also helps make professors full-time residents at their universities, a rare phenomenon at Soviet universities. Decent salaries for such professors limit their outside commitments and contribute to their full-time presence at the university.

Using Quantitative Methods in Empirical Research

Research demands a quantitative methodology. Like other sciences, economics is based on empirical research that can test refutable hypotheses. Empirical research is an integral part of the new analytical economics. Empirical studies are designed to select the appropriate theory among a number of candidates. Empirical studies are the link between theory and concrete policy issues. (On the different approaches to

empirical issues between continental Europe and the Anglo-Saxon world, see Frey and Eichenberger 1993, Frey and Frey 1995, Tabellini 1995, and Coats 2000.) Econometrics and other quantitative scientific-empirical methods in economics were perceived as extremely dangerous for a regime that in many cases prescribed the scientific conclusions before the start of the investigation. To fill this gap, there is therefore a need in Russia for the teaching of, training in, and research on modern methodologies of empirical research. Fortunately, most Russian students are well trained in mathematics and statistics, the parent sciences of econometrics.

General versus Professional Education

A centrally planned educational system complements a totalitarian regime by making sure that people study only as much as needed for their predetermined professional activities (as well as social and political ones). This is both politically prudent and even economical, but only as long as planning in the allocation of human resources is efficient and the system remains relatively static; this condition, however, is seldom fulfilled. The extreme shortage of academics at the early stages of the great leap forward during the 1930s may have justified such a narrow approach. The result was the segmentation of much of higher education in the Soviet Union into many narrowly defined subspecialties at universities and, particularly, ministerial institutes of higher learning. This approach reduced the number of broader-minded academics, who might have become too independent and critical.

Modern universities face a constant tension between the demands of the society and the economy for professional training and the aspirations of “liberal education”—learning for its own sake, across a wide range of domains of knowledge. The Humboldt brothers in nineteenth-century Germany aspired to a liberal education, but during the course of the century the University of Berlin and other German universities developed a strong professional emphasis (Wittrock 1993). Although, all along, most undergraduates in the United States pursued a “liberal” education, most other countries begin discipline or professional teaching from the first or second year of studies. Even so, the breadth of studies in the West was much wider than in the Soviet Union.

Modern economics, as practiced in (most of) the West, is almost the exact opposite of the Soviet pattern. The main emphasis in the West is on general rules and patterns of economic behavior and on developing a way of thinking. Courses on the economics of agriculture or of natural resources may be offered, but there is no course on the economics of the steel or shoe industry. In specialized courses in modern economics, the aim is always to flesh out the general lessons and patterns that emerge from a specific problem (such as “Dutch disease,” or dynamic planning in the case of natural resources). This allows a graduate in economics to become a researcher or a professional economist anywhere in the system and to change positions over his or her career.

This broad approach to teaching has become even more important in recent years, as a result of the accelerating pace of technological, structural, and institutional

changes. At the same time human capital has become the main driving force of modern economic growth, and economic growth has become the main goal of competition among nations. Providing a general economics education, focusing on how to approach and solve problems and when to look for relevant information rather than on the accumulation of information, is the best way to ensure that economists contribute to efficiency and growth.

Creating Nonstate-Run Institutions of Higher Learning

Under the Soviet Union, nonstate-run institutions of higher learning hardly existed. Such institutions are needed in order to play a role in economics education in the CIS today. Development of a viable civil society that can mobilize social capital and help develop a cohesive society in the CIS is at least as important as building a market economy. Creation of an independent, nonstate higher education sector is also essential to ensure academic freedom, the competition of ideas, and pluralism. Many countries in the West that finance higher education through government budgets have managed to preserve academic independence and freedom. In the Russian Federation, however, where academic freedom was absent for a long time, the development of a private sector of educational NGOs at the side of the state sector is therefore very important.²

Nonstate higher educational institutions are also important to alleviate the financial burden on the public sector, especially during the first decades of transition, when the fiscal burden is especially heavy. Who, then, should pay? Students should bear some of the cost, preferably with the help of a student loan fund. The business sector, depending on the development of a proper market infrastructure but also as a supporter of civil society, should also contribute. Regrettably, many reformers and entrepreneurs in Russia who were ready to jump into the rough waters of a nascent market system have failed so far to recognize their responsibilities to support a well-developed nonprofit sector. It is essential that the business community understand that the market and the NGO sector are complements, essential partners in a balanced economy and society. The business community needs to support the nonprofit sector through grants that are not tied to direct benefits accruing to them. Providing favorable tax treatment of contributions to the NGO sector would encourage the private sector to play a larger role in its financing.

Openness

The backbone of modern economics is about the properties, positive and negative, of a market economy. Just when economics became an independent university discipline, at the turn of the twentieth century, the open American model of university education was developing. This model was based on multifocal (multichair) departments, with both intra- and interdepartmental pluralism; competition within and among universities; and significant faculty mobility across universities. Such a structure generated the appropriate incentives and rewards to achieve scientific

excellence (Tabellini 1995). This was in contrast with departments having a single chair, a rigid hierarchical structure, and limited faculty mobility between universities—and therefore poor incentives and weak competition—that characterized most universities and higher education systems in continental Europe, including to some extent those in Great Britain. This pattern prevails even today in most continental universities (*The Economist* 2005). Many observers believe that the open and pluralistic mode of research and teaching in the United States has partly accounted for the ascendancy of the United States over Europe in terms of economic research (Tabellini 1995).

Openness in economics education, as well as in other sciences, should extend beyond national borders. A free exchange of knowledge and people, cooperation, partnership, and cross-fertilization with other scientific communities around the world has been very important in the past; in this age of global knowledge explosion they are critical. The study of economics in the United States gained enormously in the late nineteenth and early twentieth centuries because U.S. universities sent people to study in Germany and because the United States benefited from the knowledge of immigrants (Mason 1982).

Russia today has much to gain from complete openness: the potential costs of brain drain are far lower than the losses incurred by scientific isolation. Openness is a two-way street, but remote, isolated areas have the most to gain from efforts made to reach them. In the case of Russia, the flow of knowledge will naturally be for some time in an easterly direction: Russians will study in the West, and ideas will flow eastward into Russia from Western universities. However, even at this early stage, new experiences of the transition have contributed to the economics by focusing attention on the specific issues of transition, institutional developments, and political economy. This contribution to economics was accomplished through the work of foreign as well as domestic economists. Initially, many Russians will seek to study modern economics in the West. But even those students of economics who stay abroad for good do not represent a total loss. They serve as important bridges linking economics in Russia to global economics. Significant numbers of Asian, French, German, Israeli, Italian, and Latin American economists have settled in the United States and other Western centers. But many also return to their countries of origin, having gained experience abroad.

Globalization and/or Americanization?

The issue of openness and of belonging to the global community of economists is related to the debate initiated by Bruno Frey and Reiner Eichenberger during the late 1990s regarding the differences between U.S. and (continental) European economists and economics. Frey and Eichenberger claim that the limited and segmented market for economists and economics in Europe keeps European economists busy with domestic economic issues and specific local institutions, with “down-to-earth” policy issues relevant to the countries or regions in which they work. In contrast, in the United States, where the market is vast and open, general theoretical issues take

center stage, and there is stronger competition, manifested by greater mobility and the emphasis on publication; economics there has moved away from being a real social science, engaged in issues of society (Frey and Eichenberger 1992, 1993, 1995; Frey and Frey 1995). This debate is also reflected in volumes edited by A.W. Coats, who examines whether the economics community is becoming “internationalized” or “Americanized” (Coats 1996, 2000). In these volumes there seem to be a consensus about globalization and internationalization; the debate is largely over the degree of domination of American economics over the process.

I side strongly with the views expressed by Vives (1995) and Tabellini (1995), who recognize the advantages in the larger market for economists provided by the U.S. model and the incentives that come with it. There may be some distancing of the content of economics from “real life” issues in parts of the top echelon of departments and journals in some fields (see Krueger and others 1991), but this gap is being filled by other economists, who use abstract models as guidance for systemic thinking and applications in empirical and policy-oriented studies. But even on the issue of content—high-brow theory versus “down-to-earth” issues—Frey and Eichenberger and others may not be completely right. The way economics is working in the United States leaves the door open for new ideas, topics, even entire fields that are imported from abroad and then expanded domestically and reexported. This is what happened with respect to Keynesian theory, with the introduction of open economy issues to macroeconomics, with the empirical studies of economic growth, and recently even with transition and the new institutional economics. The Americanization of the profession seems to be even more important in terms of the ways teaching and research are performed and how the professional market works than it is in terms of content.

Even Frey and Eichenberger observe how continental Europe has been joining the global market of economics during the past few decades, a phenomenon they mourn. Indeed, during this period continental Europe witnessed the flourishing and expansion of economics, partly as a result of the unification of Europe. A number of centers of higher and graduate studies and research in economics along the U.S. model were founded—institutions such as the Stockholm School of Economics, Tilburg University, the University of Louvaine, Bonn University, the University of Toulouse, Delta, the University of Madrid, Pompea Fabra University, and others. There has also been much more movement and exchange of people and ideas within Europe and between Europe and the United States, and Europeans have begun publishing more in English-language journals and offering some courses in English (Williamson 1996; Coats 2000).

The scientific environment in Russia is now ready to follow the American model, for two reasons. First, all along there has been in Russia a high level of teaching and preparation in mathematics of many students. This led to some extent to the second, related reason: the high development and level of the field of mathematical economics—it was more independent than other fields of economics from political interference, and closer in content and methodology to its counterpart in the West (Ofer and Polterovich 2000).

Achievements and Problems

The long discussion in the previous section came in order to present the long list of issues facing a decision to establish modern economics in Russia, or in any other former communist country. In addition to the issue of the content of economics, one would like to combine teaching with research, to introduce modern modes of teaching and learning (problem sets, long library hours, written exams), with an emphasis on quantitative methods for empirical investigation; to select a curriculum with as wide a horizon as possible, which includes an increasing number of Russian and transition-related courses; to guarantee openness and strong connection with the global economics community, by, among other things, inviting economists from the outside to teach and sending the best students to study abroad, and by requiring proficiency in English; and to create a solid, independent nongovernment institution, “owned” as much as possible by Russians, an example in many respects of a model civil society institute for the new Russia. And, to accomplish all the above while training academic and professional economists who will contribute knowledge, policy work, teaching, and research relevant to Russia and the transition. In summary, NES was conceived as a “center of excellence,” like some of those mentioned above, working to accomplish as much as possible of the above-mentioned goals. It was developed as such and is aspiring to become as good as the best among them. Given the long aspect of the needed change, no wonder that the choice was made for a “green field” strategy, albeit in cooperation with a Russian research institute (CEMI); and no wonder the Russian partner excelled in the field of mathematical economics (Ofer and Polterovich, 2000).

Thirteen years later, there is the first and only department of economics at a graduate level in Russia with a majority of Western-trained faculty, including quite a few graduates of NES. The faculty, full-time faculty—another first in Russia—is now (2005) made up of 15 tenured and tenure-track members, fortified by additional slate of domestic instructors. They do research and publish in Russian and in Western journals,³ go to conferences, and work hard to earn tenure or promotion. NES and its close partner, the research center CEFIR, have so far brought back from abroad 15 economists with PhD, a few of whom are teaching and working in other academic institutions. How many other Western-trained PhDs in economics are there in Russia? Finally nearly 250 graduates are holding positions as economists in the emerging market sector in Russia. Let’s turn now to discuss some of the problems and dilemmas facing NES.

Russian versus “Global” Orientation

While most of the goals seem by now more or less clear, the issue of the appropriate mix and balance among them, or that of the “center of gravity” of NES, that was mentioned above in a global context, deserves further discussion. Should NES aspire to develop a “global” orientation, or should it direct more effort and give priority to a domestic, Russian orientation? This question recently came up during deliberations

among members of the NES community over a new mission statement for NES for the next decade or two. The issue arose in view of criticism that NES had not achieved the impact or visibility it had hoped for in the domestic policy realm. To make sure NES and CEFIR are deeply engaged in Russian and transition-related research and policy work. They have not interacted satisfactorily with other bodies, however. Some NES and CEFIR members have recommended that the institution adopt a stronger domestic orientation. Several questions need to be addressed. Should faculty research be oriented to topics covered by international journals or to domestic ones? How much of this work should be Russian and policy oriented? What is the appropriate mix of economic theory versus practical, professional training of students?

My view is that if the meaning of a “domestic” orientation is the continental model described by Frey and Eichenberger, this direction is even less appropriate for Russia than it is for Europe. Only a global context, connection, and guidance can provide Russia with the tools needed for sound economic policy, and only a global reputation can provide NES with the capability and position to have a say in economic discussions over Russian issues. NES is a small and elite institution in a very large country; it cannot engage in everything. In my view, it should be responsible for the link to the outside world. NES should apply this link to economic and policy issues in Russia at the highest level and train professional economists to work in the Russian environment, and it should do both these things with a hefty dose of spillover of modern economics. At least some of the economic problems faced by Russia are among those that are currently of significant interest in the field (the economics of institutions, transition, political economy). The international arena is thus ready to discuss and publish good work in these areas. Let me add that most of the academic publications of the faculty of NES and CEFIR in international journals are related to Russia or transition, as are most of the master’s theses prepared by the second-year students (recent faculty research projects are shown in table 3). CEFIR, although doing high-level academic research, is devoted to work on the Russian economy and transition. Diverting faculty members to do too much “visible” short-term policy work would, in my view, be a grave mistake that would undermine the central mission of NES.

Regarding the curriculum, it is true that it was initially almost entirely theoretical, similar to that of leading graduate schools in the West. Over the years, more courses on Russia and transition were added, and more emphasis was directed to theoretical courses in fields more relevant to Russia. In a gradual process that is still going on, more “applied” courses are being offered to prepare graduates better for positions in the private sector. These applied courses are now clustered into specializations such as finance and policy analysis.

Another aspect of the inward orientation of NES is the small number of graduates that have taken positions in the public sector (see table 2). This is partly explained by low public wages and the wide wage differentials between the private and public sectors. Low wages is also one reason why only a small number of NES graduates, with or without PhDs, teach at other universities. But one must assume that this phenomenon is also explained by the potential threat to higher ranking officials from better-trained professionals. Among the small number of NES graduates that did go

TABLE 3

Research Projects by NES and CEFIR Faculty, 2004/5

<i>NES</i>	<i>CEFIR</i>
<ul style="list-style-type: none"> • Econometrics of Financial Markets: Nonparametric Methods • Who Holds Power in the Russian Parliament? • Financial Policy of Russian Companies • Topics in Microeconomics • Income Distribution, Mobility, and the Labor Market • Imperfect Information and Bounded Rationality with Applications to Macroeconomic Dynamics • Natural Resources Potential and Russian Economy Development • Empirical Auctions • Knowledge Economy Market in Russia • Trends in the Banking Sector in Russia and Bank Ratings IV • Economics of Nonprofit Organizations • Globalization and Economic Growth in Developing and Transition Economies: Institutional Aspects • Welfare Effects and Society Losses of Taxation and Inflation • Topics in Microeconomics: Experts, Intermediaries, Communication • Mathematical Models of Electricity Markets • Macroeconomic Reforms in Russia: The Appraisal of Social Economy Consequences in General Equilibrium and Microsimulation Models • Capital Flows in Transition 	<ul style="list-style-type: none"> • Microeconomic Estimation of the Consequences of Tax Reform (Taking into Consideration Expectations of Economic Agents) • Technical Assistance to Develop the System of Direct and Contingent Liabilities Management of Tver Oblast • Technical Assistance to Develop the System of Direct and Contingent Liabilities Management of the Taimyr Autonomous District • Monitoring the Administrative Barriers to Small Business Development in Russia • Development of "Standard" Monitoring System of Regional Finances • Entrepreneurship and Environment in Russia • Microeconomic Estimation of the Consequences of Tax Reform (Taking into Consideration Expectations of Economic Agents) • Technical Assistance to Develop the System of Direct and Contingent Liabilities Management of Tver Oblast • Technical Assistance to Develop the System of Direct and Contingent Liabilities Management of the Taimyr Autonomous District • Impact of Active Labor Market Programs in Transition Economies • Microsimulation of Tax-Benefit Reforms in Russia • Legal Reform Project

Source: NES and CEFIR files.

to the public sector, a few reached higher positions. NES should look for ways to be more aggressive in sending its graduates to the public sector. Time and more public sector reforms may expedite this process.

Openness and Brain Drain at NES

To date, nearly 200 NES graduates have enrolled in foreign PhD programs in economics (a few are enrolled at business schools). The list of universities at which NES graduates are studying is impressive, as is the fact that almost all of these students received full four-year fellowships from these institutions (table 4). By the summer of

TABLE 4

PhD Studies Abroad, by University, 1994–2005

<i>Institution/year</i>	<i>1994–2001</i>	<i>2001–2</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>Total</i>
Total	119	9	14	16	12	9	179
Australian National University	5						5
Boston University	5						5
Brandeis University	1						1
Brown University	2						2
University of California, Berkeley	1						1
Cambridge University	2						2
Carlos III University, Madrid	1				2		3
Carnegie Mellon University	1						1
Catholic University of Leuven	2						2
University of Chicago							
Department of Economics	1		1				2
Graduate School of Business	3			1			4
Columbia University							
Department of Economics	1			2			3
Columbia Business School		1					1
Cornell University	1		1	1		1	3
University of Delaware	1						1
De Montford University, United Kingdom	2						2
Duke University	4	1		2	1		8
Université de Geneve	1						1
Harvard University	7		1		2	2	12
Hebrew University	1						1
Indiana University, Bloomington	3						3
John Hopkins University	2						2
Université Libre de Bruxelles	1						1
London Business School	3		2	3	2		10
Maastricht University, Netherlands	1						1
University of Maryland, College Park	3						3
MIT/ Economics and Sloan School	6		2				8
University of Michigan, Ann Arbor	3		1				4
Midi Pyrénées Sciences Economiques, Toulouse	3	1				1	5
New York University	1				1		2
University of North Carolina, Chapel Hill	2	1					3
Northwestern University	5	1		1	1		8
Oxford University	1						1
University of Pennsylvania	2					1	3

(Table continues on the following page.)

TABLE 4

PhD Studies Abroad, by University, 1994–2005 (continued)

<i>Institution/year</i>	<i>1994–2001*</i>	<i>2001–2</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>Total</i>
Pennsylvania State University	8	1	4	2	2		17
University of Pittsburgh	1						1
Pompeu Fabra, Barcelona	1				1		2
Rochester University	3			1			4
Rutgers University	1						1
University of Southern California	1	1					2
Stanford University							
Stanford Business School	1					2	3
Department of Economics						1	1
Stockholm School of Economics	4	1					5
Tilburg University, Netherlands	4	1	1				6
University of Toronto	1						1
University of Virginia	1						1
University of Washington (St. Louis)	2						2
Western Ontario University	1			1			2
Wharton School, University of Pennsylvania	1		1				2
University of Wisconsin-Madison	7						7
Yale University	5	1					6
INSEAD, France				1			1
Colorado Business School, Denver				1			1
UCLA						1	1

Source: NES files.

2005, nearly half of these students were still completing their studies. Of the 70 or so who had already completed their PhDs, many stayed abroad, taking positions in academia, consulting, and international organizations. Nearly 40 NES graduates have accepted academic positions abroad, many of them at top-ranked universities, such as MIT, Yale, Columbia, Stanford, and the London School of Economics and Political Science. NES and Russia can expect to reap significant benefits from the contributions of these people, even if they stay abroad. Indeed, many of them have already come to teach at NES, to lead outreach workshops, to collaborate with NES and CEFIR faculty on research projects, and to undertake their own research on economic issues related to Russia and the transition. They clearly help NES fulfill one of its central missions: positioning itself in the global arena.

The experience of other countries has demonstrated that academic (and other) communities of foreign nationals abroad contribute in many ways to the advancement of the field in their country of origin. They provide a foundation for global networking, which is so important today. Even if all this talent is “lost” permanently to Russia, NES has already generated substantial net benefits to Russia. In Israel hundreds of stu-

dents have pursued PhD studies in economics in the West. Many among them did not return to Israel; some returned at a later stage. Yet academic economics in Israel is thriving at six major universities, two of which—the Hebrew University and Tel Aviv University—are among the top 100 departments in the world. Other countries in which significant numbers of nationals have remained abroad have also prospered intellectually.

The return to NES and to Russia of young faculty members from the West is influenced by economic considerations. There is no way to make academic salaries in Russia equal to those in the West, especially in the United States, and there is little chance of bringing people back given Russian academic salaries. Since the late 1990s, NES has offered returning faculty members an annual salary of \$35,000 (plus permission to devote 20 percent of their time to non-NES work). This level is a far cry from academic salaries in the United States and or salaries in the Russian private sector. The dilemma is clear: salaries have to be raised in order to compete with the West, but raising them severely limits the number of Russian universities that may be able to match them. Higher salaries also place a heavy financial burden on NES, which lacks the support provided to private universities in the West by their alumnae and their endowments. This issue is also related to whether or not it is possible to differentiate between salaries of returning and domestic scholars.

There seem to be something in the claim, voiced mainly by Oded Stark (2003), that merely opening the opportunity to study (and stay) abroad lures so many highly talented candidates to the field that it produces a clear net gain in the stock of human capital in the country of origin alone. But even if this is not true, I do not see an acceptable alternative to adopting an open approach for NES. The option of providing only limited training or otherwise constraining the free choice of graduates to move, especially in a country that was locked for so long, is absolutely unacceptable.

NES and CEFIR are doing their best to bring back as many qualified economists as possible. They, however, cannot bear the full responsibility for attracting back all their graduates and others who are studying abroad. Both the former and current presidents of Russia spoke of the importance of study abroad for economists and managers, and of the need to make special efforts to bring these people back. This can be done, for example, by creating a special national fund, financed by the business sector and the government that provides adequate salaries and an advanced scientific infrastructure and environment in order to attract back Western-trained academics. If such conditions are created, more of these scholars will return. After all, Russia is now one of the most exciting places in the world for economists. NES proves this on a small scale; it is up to Russia to do so on a wider one. The needed changes are especially important for the university sector. The main mission of NES is to transform economics in Russia; this demands the involvement of many more universities. It is time to expand the teaching of modern economics beyond the small group of institutions that are already teaching it at the graduate level. It is also time to increase cooperation among the members of this small group.

When NES was established, it was assumed that a major reform in higher education would take place relatively soon and that NES would be able to provide the needed academic cadres to help accomplish this goal. This has still not happened in a major way.

NES may thus think of itself as ahead of its time. For similar reasons, there seems to be weak demand for PhDs in economics in government and the public sector.

Worrisome developments in Russia may make the country less attractive to come back to even for Russians who would prefer to live and work in their motherland. Russia has made strides toward becoming a market economy and a free democratic society. But lately there seems to have been a significant slowdown in economic reforms and some retreat in democratic freedom. In a recent paper, Yegor Gaidar warned against such developments, which he characterized as “authoritarian tendencies” and labeling these developments a “closed democracy” (Gaidar 2004). During a recent visit to Moscow, I was confronted with a headline in the *Moscow Times* that read “FSB Chief: NGOs a Cover for Spying” (FSB is the main intelligence office of Russia and the heir of the former Soviet KGB) (May 13, 2005, p. 1). The FSB chief was probably referring to NGOs with Western connections. Taken seriously, this headline reads like a warning against openness, international cooperation, visiting professors, and the development of a civil society. These recent developments cause people who have learned to enjoy and appreciate the benefits and advantages of free societies to hesitate about giving these benefits up. Many seem at least to sit on the fence, postponing making a final decision about returning.

Clearly, a number of factors, including those mentioned above, determine the rates of retention for different countries. Why do only 9 percent of Chinese students, but 85 percent of Korean students, who study abroad return home after graduation? Is there here a gap between lagging expected developments in Russia and the success of NES? I hope that this gap will soon prove to be a temporary one and that Russia will catch up before too long.

Financing NES

NES still lacks full financial security. It has been fortunate to receive steady support from a number of top Western foundations, beginning with the Soros Foundation (this support now comes via the Higher Education Support Program) Eurasia, the Ford Foundation, the World Bank, and the MacArthur Foundation. Most of these still provide annual or multiyear grants, but some are weighing exit options. Efforts to supplement, not to speak of replacing, this Western support with Russian donations have been only partially successful. About half a dozen NES chairs are financed by Russian donors, albeit on an annual basis, and a few other Russian donors provide smaller, less-steady grants. At the beginning this could have been explained by the financial situation in Russia; but following the crisis of 1998, money is not an issue anymore. The issue is partly lack of recognition of the key role of NES by the new class of entrepreneurs and affluent people, and partly the lag in the development of the culture of philanthropy and support of civil institutions by the business sector.

The lack of support may also reflect suspicion toward the West and the fear of being identified as a supporter of openness and of connections to the West. The transfer of control and governance to a Russian body seems already to improve matters. Should NES make more efforts to demonstrate its contribution to Russia? Until

more Russian support can be generated, it is up to Western supporters to continue to stand by NES, financially and through public support.

The financial problems of NES are just one aspect of the gloomy financial situation of higher education in Russia. The state budget is unable to provide the funds needed for a reformed and transformed system of higher education, including significantly higher academic salaries. Such higher salaries is a precondition for the rehabilitation of the profession of academic teachers as full-time professors, in both teaching and research. Given the severe budget constraint, Russia has shifted toward increasing commercialization of public universities, by charging tuition to a growing proportion of students at state universities and by allowing the growth of private for-profit, tuition-based higher education institutions. Although these are legitimate steps, they deny higher education to most of those who are unable to pay. Here, too, NES has been a pioneer, by establishing, in cooperation with a private Russian bank, a student loan fund that allows any qualified student to enroll and to pay the tuition in the form of a 10-year loan (including a 2-year grace period) to be repaid as a relatively small proportion of the student's salary after graduation. A national program of student loans could provide a partial solution to the financial plight of higher education in Russia. For NES the student loan fund provided by the Bank serves as financial source akin to an endowment. NES and its supporters are starting to examine possibilities and options for transforming grant-based financial support into further elements of an endowment, with the aim of eventually providing NES with an endowment that will enable it to reduce or eventually eliminate Western support.

Concluding Comments

There are a number of ways to accomplish the transfer of new knowledge, none of which is without problems. Given the enormity of the task, an onslaught from many directions is definitely warranted. First, during the past 15 years many state universities across Russia have slowly been changing their curriculums by replacing some old courses with new ones. In most cases, principles of modern economics are taught at various levels, using both translated Western texts and new Russian ones. A good principles course can convey much of what economics is all about.

Second, new domestic "green field" institutions of higher education have been established, staffed largely by Russian professors who are self-taught or who have received some training and guidance from abroad. Examples include the High School of Economics (HSE), a state university in Moscow and a number of other major cities established in 1992, and the European University established a few years later in St. Petersburg. A multitude of private institutions also teach economics (and business), albeit at a much lower level. These institutions are extremely important, as they can reach large number of students and act as an important stimulant of change for more conservative universities. When NES was established, its founders considered establishing it within Moscow State University. Russian friends warned that this would not be possible. In 2004 a graduate school of modern economics was opened at Moscow State University, albeit independent of the faculty of economics, which is also changing, if very slowly.

Third, institutions such as the Economics Education and Research Consortium (EERC) (see Campbell's paper of that name in this volume) have disseminated knowledge. The idea is to spread modern economics and modern research, even though at a rather basic level across the largest area possible.

Fourth, the Russian–Western partnership at NES has brought the study of modern economics to Russia in full force. Initially, this was accomplished by importing a complete Western graduate curriculum and inviting mostly visiting professors to teach. Later the best graduates were sent to the West to obtain PhDs in order to gradually build an indigenous academic base and faculty for modern economics in Russia. (For a full discussion of NES, see Ofer and Polterovich 2000.) While the choice of the NES variant reveals the preferences of those who took part, it also reflects their perceptions of their comparative advantage.

The strategy for technology transfer chosen by NES seemed to have a number of clear advantages. One of the most important is the combination of the importation of the entire package of modern economics from abroad and the nesting of the program within a joint venture that is institutionally and conceptually “owned” by Russians. This feature is very important for the success of foreign direct investment and technology transfer projects in general. This strategy, although providing the best economics available and doing the most to protect it within the Russian institutional environment, could not be directed to a large audience. It was conceived as a train-the-trainers model, or even elevated above it—a resource center that provides advice and inputs, a model that shows the right and safe way, and that can be seen as a goal for others.

In the brainstorming meeting on the new mission of NES mentioned above, a second set of options for the future was presented in addition to the “global” versus “Russian” (or “focused” versus “broad”) issue. Is NES ready to embark on new tasks, such as developing an undergraduate program, establishing a PhD program, creating master's programs in public administration, and the like?⁴ It was decided that NES should stick to its original mission of a “center of excellence” in graduate economics, by expanding the faculty to 20–30; strengthening its financial base; somewhat diversifying the curriculum by offering more “applied” options, including a program in finance; and, on this more solid base, trying harder to integrate more fully into the economic action of policy making in Russia, though always from the “global” base (NES, 2005). This decision not to expand laterally is a courageous one, for which the new leadership of NES should be commended. The new mission can improve sustainability and increase the institution's impact. Joining forces with CEFIR and eventually, it is hoped, with the EERC will provide the required critical mass and sustainability needed to fulfill the joint mission.

Epilogue

In September 2004 I gave up my position as chair of the international advisory committee of NES, when Sergey Guriev was elected rector and Maxim Boicko chairman of the board. Erik Berglof became the new chair of the international advisory com-

mittee. Over the past dozen years people have asked me why I got involved in the NES project. There are two answers. The first is that after 25 years of studying the Soviet economy (during which I was never allowed entry), it seemed out of place to continue to do routine research in the face of the revolutionary changes that were taking place, changes that for the first time I was also able to witness firsthand. I felt the urge to do something about what was happening. The second answer is much simpler and explains most of the important changes (decisions?) in one's life: a heavy dose of sheer chance or the intervention of heavenly powers.

Working on and at NES was arduous, but it was very gratifying to watch NES form, grow, bloom, and mature. The work was particularly gratifying as a result of the close cooperation with so many close partners who became dear friends, in Russia and around the world.

Notes

1. A detailed report about NES, the *2003–04 Annual Report*, can be found at http://www.nes.ru/files/annual_report/AR2003–2004.pdf.
2. An article in *The Economist* (2005) finds a positive relationship between the quality of higher education and the plurality of types of ownerships and sources of finance.
3. Among the journals that published works of NES/CEFIR faculty are *American Economic Review*, *Econometrica*, *Quarterly Journal of Economics*, *Journal of Economic Perspectives*, *Economic Letters*, *Journal of Economic Development*, *Journal of Public Economics*, *Journal of Money, Credit and Banking*, *Journal of Comparative Economics*, *Economics of Transition*. A full publication record can be found at http://www.nes.ru/english/research/publications_external.htm.
4. Starting a PhD program is extremely expensive, as it requires outside advisers. Once more members of NES's faculty receive tenure, this option will become more natural and feasible.

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Creating a Market-Oriented Research and Education Institution in a Transition Economy

The Experience of the China Center for Economic Research at Peking University

Justin Yifu Lin

At the beginning of transition from the socialist planning economy to a market economy, China did not have a modern economics profession and the contribution of modern economics to China's transition was small. However, as the Chinese economy becomes more market oriented, there has been an increasing need for modern economics education and research. To meet this need, the China Center for Economic Research (CCER) at Peking University was built in 1994 with the initial support and endorsement of the Ford Foundation and the World Bank. In the past 11 years, the CCER has expanded from 6 to 27 faculty members, all with PhD training in economics from universities abroad, and has become an important education and policy institution, as well as an academic research one, in China. Currently, the CCER provides undergraduate double major programs, an MA and PhD in economics, an MA in finance, and an international MBA program to over 2,500 students each year. The CCER is also active in policy consultations with the Chinese government and international organizations, in addition to its excellent academic publication records both domestically and internationally. The CCER's success is attributable to its members' devotion, personal qualifications, and democratic arrangements; and its commitment to education and independent research, outreaching, networking, continuous innovation, and service culture. In the coming years, the CCER plans to strengthen its PhD program by student exchanges with other universities abroad, and initiate a NBER/CERP type network and a consortium of similar institutions in other transition and developing countries.

CHINA WAS THE FIRST CENTRALLY PLANNED ECONOMY TO MOVE TOWARD A MARKET economy, and so far it has also been the most successful. Since the end of 1978, when the transition began, China's annual GDP growth rate has averaged 9.4 percent and the economy has grown by a factor of 10.3. In the same period, international trade grew at a rate of 16.7 percent, and China's trade volume has increased 56 times—from US\$20.6 billion in 1978 to US\$1,154.8 billion in 2004. When China began

this transition, the nation's ranking in the international trading system was number 34. Now, China is number 3.

In spite of China's success in moving to a market economy, the country did not have a modern economics profession, and in the beginning of the transition, modern economic analysis did not play a major role. At that time, the Chinese government wanted only to improve the performance of the old planning system, not replace the old system with a completely new market system. It therefore adopted a gradual, piecemeal approach to the transition process. Under the old system, there were bottlenecks in almost every sector of the economy. With the gradual, piecemeal approach, a good policy maker was someone with a good grasp of the economic realities and a liberal mind. The policy maker needed to know where the bottlenecks existed and be pragmatic in introducing policy changes that could remove the bottlenecks. As long as the policy maker could do this, the direct effects of policy changes would outweigh the indirect effects and the economy could grow dynamically.

This piecemeal approach was successful, but success in the past does not guarantee success in the future. As China's economy has become more and more market oriented, the economic system has become more complicated. The negative indirect effects of reforms in state-owned enterprises—both in the financial sector and in other sectors—often outweigh the positive direct effects of those same reforms. General equilibrium-type analysis is required to assess the potential direct and indirect effects before undertaking policy reform. Conducting this kind of analysis requires that Chinese policy makers and researchers have a good understanding of modern economics. For China to complete the transition to a market economy, it is therefore imperative to have institutions that can engage in modern economic research and provide education in modern economics. In response to this need, the China Center for Economic Research (CCER) at Peking University was set up in 1994.

In the rest of the paper, I provide an overview of the CCER's achievements, discuss the lessons that may be relevant to similar institutions in China's transition and in other developing countries, and provide brief outlines for the CCER's future development.

Missions and Achievements of the China Center for Economic Research

The CCER was founded with seed money from the Ford Foundation and an endorsement from the World Bank. It aims to mobilize domestic and international resources for bringing together a group of well-trained economists to contribute to economics education and research at Peking University. It also aims to contribute to China's market-oriented reform and development, as well as to the development of modern economic theory.

The CCER has expanded from 6 faculty members in 1994 to 26 members in 2005. All faculty members have PhD training in economics from leading universities abroad: 24 from the United States, 1 from the United Kingdom, and 1 from Japan. The CCER has the largest concentration of foreign-trained economists in China.

At the beginning, the CCER had two very small offices in an old Stalinist-style building. Today it is located in a beautiful, spacious area that was once a royal garden. The improvement in the CCER's working space mirrors its continuous development in the past decade.

Education Programs

The primary mission of the CCER is to provide modern economics and management education in China. To achieve this goal, in 1996 the CCER set up an MA and a PhD program in economics.

A student who has completed the required economics courses and written a thesis can obtain an MA or PhD in economics. Normally, it takes two to three years to complete the MA degree and an additional three years to complete the PhD. Annual enrollment at the CCER is 15 students in the PhD program and 45 students for the MA program.

The CCER's MA program is considered the best in China. Upon graduation, about one-third of these students go to work in the financial sector; one-sixth go to work for government institutions. About half enter PhD programs at distinguished universities in the West, including Harvard, the University of Chicago, Stanford, Yale, Northwestern, and many other universities worldwide. Among these students, about one-third accept jobs at universities, one-third go to work in the financial sector, and one-third go to work for government institutions.

In the fall of 1996, the CCER began offering a double major in the economics program as well as a minor in the economics program to undergraduate students at Peking University whose major is not economics. These two programs have become very popular. In September 2003 the programs were extended to undergraduates outside Peking University. The CCER now admits 800 undergraduate students a year to these two programs. They are the largest undergraduate programs at Peking University.

For improving the business education of its students, the CCER set up a group of International MBA programs (BiMBA) at Peking University in 1998. The programs were established jointly with a consortium of 26 U.S. universities, with Fordham University in New York as the degree-granting university. BiMBA offers a full-time MBA program, a part-time MBA program, and an Executive MBA (EMBA) program to meet the professional and scheduling needs of students. The interactive, participative American pedagogy is followed, but cases are often taken from Chinese situations.

The International MBA program admits about 200 students a year. In 2005 both *Fortune* and *Forbes* magazines ranked BiMBA the top-ranking MBA program in China.

In response to the needs of financial sector reform and development, the CCER, in cooperation with the School of Economics and Finance at the University of Hong Kong, started offering an MA program in finance in 2001. Students who complete the required courses and thesis in two years obtain a master's degree in finance. The program is considered the top financial training program in China.

The total number of students at the CCER increased from 352 in 1996 to 2,588 in 2004, a more than sevenfold increase (see table 1).

In 1995 the CCER established a committee to organize and publish a series of textbooks on economics and management. Professors Gang Yi and Wen Hai served as editors in chief. To date, 14 economics and management textbooks have been published. Most of the authors of these textbooks received their PhDs in economics or management abroad and have extensive research and teaching experience both in China and abroad. These textbooks contain many real problems in China as examples in discussing the theories.

Research

CCER faculty members are committed to increasing the quality of research on economics and management, to analyzing problems in economic transition using modern economic theories and methods, and to bringing economic research in China up to the international level. CCER faculty and students have been very productive in conducting theoretical and policy research. Many research papers have been published in top economics journals in China and abroad. Numerous research findings and their policy implications have had a significant impact on Chinese economic reforms and government policy making.

Between 1994 and 2004, CCER faculty published 49 papers in top international economic journals, such as the *American Economic Review*, and more than 400 papers in Chinese economic journals. Faculty members also published more than 70 books, 20 of which received domestic and international awards. Fifty-five papers written by CCER faculty were included in the U.S. Social Sciences Citation Index from 1994 to 2004.

TABLE 1

Enrollment at the CCER, 1996–2004

Year	Economics program							Total
	PhD	MA	Undergraduate			MA in finance	MBA/EMBA	
			Major	Minor	Outside university			
1996	2	10	287	53	—	n.a.	—	352
1997	11	26	435	128	—	n.a.	—	600
1998	15	49	584	105	—	n.a.	77	831
1999	22	68	895	155	—	n.a.	156	1,292
2000	13	85	971	—	—	n.a.	303	1,573
2001	16	107	1,418	38	—	41	403	2,047
2002	19	115	1,083	58	—	43	433	1,751
2003	31	116	1,601	52	50	42	504	2,396
2004	33	116	1,689	36	141	40	533	2,588

Source: CCER.

n.a. Not applicable.

— Not available.

In addition to academic research, since its founding the CCER has participated in almost every single policy dialogue in China. It has maintained an independent voice in financial sector reform, state-owned enterprise reform, WTO accession, rural reform, and many other policy issues, in some instances supporting the government and in others diverging from the government's stand.

CCER policy recommendations are supported by careful research and analyses. Since 1994 CCER has created many research commissions. These have included 27 national- and ministry-level projects, 32 international projects, and 12 projects funded by private firms. The projects have covered macroeconomics, international trade, monetary policy, financial reform, state-owned enterprise reform, private sector development, industrial organization, the securities market, rural development, the labor market, the land tenure system, the health care system, the social security system, population policy, and other issues.

To facilitate research on the emerging equity market, the CCER launched the CCER Chinese Securities Market Database in 2000. The database covers current and historical data since 1990, when the Chinese securities market was reopened. The variables in the data set include the share prices, reports and news of listed companies, and securities market regulations. The database has been used frequently by researchers on China's financial market. The CCER has also developed a partnership with China's National Bureau of Statistics and has access to the bureau's household survey, enterprises survey, and census and other data.

The CCER receives many visitors from abroad each year. At the end of the visits, many of them remark that they feel at home at the CCER. Unlike their visits to many other institutions in China, they could carry out the same kind of intellectual, critical dialogues at the CCER to which they are accustomed at their own institutions.

Training and Short-Term Programs

To maximize its impact on education and China's reform, the CCER provides training programs in economics and management for faculty at other universities, journalists, government officials, and managers in both domestic and international firms and organizations.

Training of Faculty

Only a small number of faculty with PhD training in economics and management have returned to China. In order to improve the teaching quality of economics and management at other Chinese universities, in 1999 the CCER started a short-term summer training program for junior faculty at other universities. The courses covered international finance, international trade, international business, dynamic econometrics, microeconomics, macroeconomics, and related fields. To support development in the hinterland provinces, the CCER offers a training program for faculty members of management schools in western China. With grants from the business community, the CCER trains 10 business school faculty at the BiMBA each year.

Research Training and Mentoring Program for Young Women Economists

As in many other places in the world, there is a gender gap in the economics profession in China. Together with a group of overseas economists, and with financial support from the Ford Foundation, in the spring of 2002 the CCER launched a training program for young women economists. The goal of the program is to increase the presence of women in economic research and education by providing rigorous training and mentorship to young women faculty. The program also aims to promote economic research and education on women and gender issues in China. The instructors and research mentors, who have extensive experience in teaching and training, have established respectable research records on important issues in China. In just two years, this program has achieved tremendous success. The number of women economists participating in domestic and international conferences has increased markedly.

Fellowship Program for Journalists in the Financial and Economic Media

With the coming of the information age, public opinion has played an increasingly important role in shaping the directions of China's reform and future development. Journalists are key players in the formation of public opinion. Since 1999 the CCER, together with *Caijing Magazine*, a leading biweekly journal, has sponsored 10 fellowships for outstanding economics and finance journalists and editors in the Chinese media to study at the CCER. The fellowship program involves a three-month-long, tailor-made program in economics, management, and in-depth analysis of financial news. The responses from fellows who have completed the program has been overwhelmingly positive.

Training for Senior Officials in Government and Business

In response to the need to improve policy making and management in a market economy, the CCER offers training programs for officials in government and the business sector. In association with the ministry of health and the China Academy of Health Policy at Peking University, since 2002 the CCER has hosted the China Hospital Management Program for executives of Chinese hospitals. The program cooperates with the North Shore–Long Island Jewish Health System to help upgrade the management skills of hospital executives in China and satisfy their demand for advanced and international management techniques for health institutions in fields such as finance, human resources, quality control, and information systems. The CCER also provides training for senior officials of China Telecom, Ping'an Insurance, Taikang Insurance, Novartis, and other companies.

Exchanges

Part of the CCER's basic mission is to promote academic exchange. Since its founding, it has developed various programs to promote exchange with other economists and research institutions, in China and abroad.

Weekly Seminars

Inaugurated by Professor Robert Mundell of Columbia University in March 1995, the CCER's Weekly Economic Theory and Policy Seminar invites distinguished scholars to present their research papers on theoretical or policy issues. The list of distinguished scholars includes Nobel laureates, the president of the American Economic Association, professors and researchers from China and overseas, domestic and international entrepreneurs, presidents of foreign universities, and high-ranking officials from the Chinese and foreign governments.

Visitors and Postdoctoral Programs

Started in 1996 under the sponsorship of the World Bank, CCER's Visiting Fellow Program has invited more than 10 visiting scholars from China and abroad to conduct three to eight months of research at the CCER. The CCER postdoctoral program, started in 1998, allows young economists with PhDs in economics from other universities in China or abroad to spend two years at the CCER. More than 100 overseas Chinese economists and domestic scholars have visited the CCER through these programs. During their visits, the CCER has organized workshops, study groups, and short courses for them. In addition, CCER faculty members have attend academic conferences in the United States, Japan, the United Kingdom, France, Australia, the Republic of Korea, Hong Kong (China), Taiwan (China), and elsewhere.

Annual Lecture Series

To promote modern economic research and education in China, the CCER established the Yan Fu Memorial Lecture on Economics in 2001. Mr. Yan (1854–1921) was one of the first Chinese scholars to study abroad. He was a former president of Peking University. His translation and publication of Adam Smith's *The Wealth of Nations* in 1901 marked the introduction of modern economics to China. Every year, the lecture series invites a world-class scholar of economics to deliver a lecture. Nobel Prize winner Robert Mundell, of Columbia University inaugurated the Yan Fu Memorial Lecture Series in October 2001. Professors Amartya Sen and Partha Dasgupta have given the subsequent lectures.

With the aim of enhancing international exchange in economics as well as economic development in China, the CCER, with support from the Hong Kong and Shanghai Banking Corporation Limited (HSBC), sponsors the HSBC-PKU Economic Forum. Nobel Laureate A. Michael Spence, of Stanford University, inaugurated the lecture series in 2004. Nobel Laureate Gary Becker, of the University of Chicago, gave the 2005 lecture.

China Economics Annual Conference

The CCER initiated the China Economics Annual Conference in 2001 with the aim of strengthening academic exchange and economic research and education among economists at Chinese universities. The first conference was held in October

2001 at Peking University. The secretariat for the conference is housed at the CCER, but the conference site rotates every year. The conference has become the largest gathering of economists in China, with the number of participants rising from between 200 and 300 in 2001 to between 600 and 700 in 2004.

Annual NBER-CCER Conference

Since 1998, the National Bureau of Economic Research (NBER) and the CCER have jointly sponsored an annual conference on issues related to China, the United States, and the global economy. The NBER sends a delegation of about 10 economists to the conference each year. The Chinese delegation includes CCER faculty and members of other universities and research institutes.

Conferences on Selected Topics

Based on the interests of economists in China and abroad, the CCER has organized several national and international conferences each year on selected topics related to China's development and reform. Topics covered have included rural development, land tenure reform, poverty reduction, and income inequality.

Summer Camp for Honor Undergraduate Students

To promote exchanges among undergraduate students majoring in economics, interactions between students and economists, and interest in research on the Chinese economy, since 2000 the CCER has organized an annual Summer Camp for Honor Economics Students. The camp also provides the opportunity to select some of the most outstanding students to join the MA program at the CCER. Each year 30–40 third-year undergraduates attend the summer camp. Half of them become graduate students at the CCER.

The London School of Economics and Political Science–Peking University Summer School

With the success of China's transition, there is increasing demand from foreign students to understand the Chinese economy. In 2004 the London School of Economics and Political Science joined with the CCER to meet this demand. The courses offered at the summer school include courses on China's reform and development, economics, finance, and management

Dissemination and Networking

Another part of the CCER's mission is to foster economic reform and development in China. To that end, the CCER takes part in several programs for disseminating its findings and promoting networking among economists.

Web site

CCER's Web site (www.ccer.edu.cn) features the latest news, publications, and major activities of the CCER. Each day the site receives about 22,000 visits. In Jan-

January 1999 the CCER established the first electronic network, the China Economic Network (CENET; www.cenet.org.cn) for Chinese economists. Since 2001 CENET has served as the official Web site for the secretariat of the China economics conference. The Web site aims to promote economic research, education, and exchange in China; to provide domestic economists and policy makers with a wide range of information and data; and to become an important information and communication channel for economists in China and abroad. It receives about 80,000 visits a day.

The CCER Newsletter

To publicize the CCER's research findings and policy recommendations, the CCER publishes 50–60 issues of newsletters annually, which it sends to more than 900 domestic policy research institutes, academic institutes, and representatives of the media. The newsletters have attracted widespread attention within policy circles in China and have had a visible impact on policy and the public opinions. Articles in the newsletters have often been picked up by other newspapers and outlets.

Occasional Working Papers

To disseminate CCER faculty members' research results promptly, the CCER publishes occasional working papers, in English and Chinese. The working papers are downloadable from the CCER Web site. The CCER exchanges its working papers with other economics departments and research institutes in China and abroad.

The *China Economic Quarterly*

To promote rigorous academic researches in China, in 2001 the CCER established the *China Economic Quarterly*, a peer-reviewed journal. The Chinese-language journal publishes original theoretical and empirical research as well as extensive literature reviews on new development in specific fields. It is considered the leading economic journal in China.

The *CCER Economic Papers*

The *CCER Economic Papers* is a Chinese-language quarterly journal of the CCER Graduate Student Association. It is an academic publication for promoting research by graduate and undergraduate students. The articles can be downloaded from the CCER Web site.

Nobel Laureate Lecture Series

In 10 years the CCER has become an influential research and education institution in China and the world. To celebrate its success, the center organized a Nobel Laureates Lecture Series for its 10th anniversary. Ten Nobel Laureates—Gary Becker, Robert Fogel, Clive Granger, James Heckman, James Mirrlees, Robert Mundell, Douglass North, Vernon Smith, Michael Spence, and Joseph Stiglitz—gave lectures.

Lessons Learned

Nine lessons can be drawn from the successful experiences of the CCER.

1. *Devotion, passion, and a common goal.* The key factor behind the CCER's success has been the group of devoted and passionate faculty members who have been willing to sacrifice personal benefits and seize every opportunity arising from China's transition to contribute to the betterment of Chinese society.
2. *An elite team.* The CCER's success has depended on faculty members who were not only devoted but also talented. The CCER is proud to say that, if one asks people in China to provide the names of China's 10 best and most influential economists, at least 5 in the list are from the CCER.
3. *Democratic institutional arrangements.* The CCER has an extremely talented group of faculty. Each has a unique personality, unique opinions, and unique ideas. The principle of democracy has allowed them to work together successfully. All major decisions are made not by the administrator alone but rather at the CCER's faculty retreat each year. The role of the administration is to build consensus on major initiatives and to implement the decisions agreed upon by all faculty members.
4. *Seeking rather than waiting for resources.* The CCER did not wait for the government or for an institution to provide it with funds. Instead, it mobilized funds actively from all possible sources to achieve its goals.
5. *Research and education.* Research and education are the CCER's core missions. All members understand that without excellent research and education programs, the CCER cannot sustain itself as an influential institution. Therefore, although the center engages in a variety of other activities, all faculty are committed to active research and teaching.
6. *Independent research on problems relevant to the Chinese economy.* In terms of research, the CCER needs to be independent and the projects it undertakes need to be relevant to China. *Independence* refers to both the conventional ideology and the conventional wisdom of the Washington Consensus. China is in a process of transition. Many old institutions need to be torn down. However, the institutions necessary to implement the policy recommendations of the Washington Consensus work may not yet be in place. Therefore, it is necessary for the CCER to remain independent of both influences—that of conventional ideology and that of the Washington Consensus—to make its research and policy recommendations relevant and helpful to China's transition.
7. *Continuous innovations.* Continuous innovations are necessary both in the CCER's programs and in the ways the institution is run. Innovation is needed not only because of the rapid expansion of the CCER but also because of the natures of the CCER and Chinese society. At its founding, the CCER was the only institution in China in which every faculty member had received PhD training abroad. This remains true today. At the beginning, Chinese society

tended to be very suspicious of the CCER's intentions. In such an environment, many experiences from other institutions abroad could not be adopted. The CCER had to find its own ways for performing its functions. In a rapidly growing transition economy, one needs to be pragmatic about what can be done; one also needs to be innovative in handling challenges in a totally new institution.

8. *Outreach and networking.* Outreach and networking are important. If the CCER talked only to its own faculty members and students, its influence on society would be limited. To increase its impact, domestically and internationally, the CCER adopted an outward strategy, using its unique position in China to create networks with individuals and institutions in China and abroad.
9. *Service, tolerance, and a humanistic working environment.* The success of the CCER depends not only on good faculty members but also on capable support staff. It is important to cultivate a culture of service, tolerance, and a humanistic attitude among support staff. To achieve this goal and be proud of their jobs at the CCER, staff should embrace the CCER's missions and be committed to contributing to China's transition.

Directions for Future Development

The CCER has expanded from 6 faculty members at its founding in 1994 to 26 faculty members in 2005. To do what it wants to do in China, it needs more faculty members and more innovations. In addition to increasing the numbers of faculty and securing reliable funding sources, the CCER is trying to strengthen its work in three areas:

- *Developing exchange programs of PhD students with other universities.* The CCER hopes to send PhD students to spend a semester or a year at top universities in the United States, Europe, and elsewhere to conduct research on their dissertation topic and increase their international exposure. After receiving their PhDs from the CCER, students are most likely to stay in China. This exchange program will enhance not only the CCER's PhD program but also the overall quality of economics education and research in China
- *Building up an NBER/CEPR type of research organization for economists at other universities or research institutions in China.* This new organization would encourage economists in China to work on development and reform issues, provide them a Web site on which to publish their working papers promptly, and allow them to meet regularly in small groups with other economists working on similar topics.
- *Networking with similar institutions in transitional and developing countries.* There are many new institutions similar to the CCER in Eastern Europe, the Russian Federation, and other developing countries. They face similar challenges. The experiences and research findings from each of them may be particularly relevant to others. Therefore, the CCER hopes to initiate a network among these new institutions.

Note

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Comment on Gur Ofer and Justin Yifu Lin

Marek Dabrowski

BUILDING A SYSTEM OF MODERN ECONOMICS EDUCATION IN THE POSTCOMMUNIST countries of Central and Eastern Europe and the Russian Federation is challenging, for variety of reasons. Some of them relate to the past (and not only to the communist era); others reflect the current institutional flaws in university education and scientific research in most transition economies, or an agglomeration effect (that is, the concentration of the best human potential in a relatively small number of countries and academic centers). I will try to address some of these issues and discuss the role that high-quality education initiatives supported by international public and private donors can play to improve the situation.

The Region's Difficult Historical Legacy

The poor quality of economics education in former communist countries is usually linked to the legacy of the communist ideological and political control of social sciences and the entire education process. This is true but it does not give a full historical picture. Even before the communist era, Central and Eastern Europe was on the periphery of modern economic thought and high-quality economics education. During the twentieth century, only a few scholars from this region—such as Vasiliy Leontieff, Nicolas Kaldor, and Michal Kalecki—really contributed to the mainstream of economic theory on a global scale, and all of them did their important work in the United States or the United Kingdom. When Kalecki came back to communist Poland after World War II, his contribution to mainstream theory was definitely over.¹

Before World War II, most universities and university-level economics schools in Central and Eastern European had a very practical, business-type orientation, without a wider intellectual context. As result, graduates who were interested in high-level academic careers had to continue their education in Western Europe and the United States.

The communist period brought a dramatic deterioration in higher education in the region, as “bourgeois” professors were forced to stop teaching and leave universities, were forced to emigrate, or were killed (this was the fate of many Russian economists in the 1920s and 1930s).²

In that period, all disciplines of the social sciences, including economics, had to serve the communist party and its Marxist-Leninist ideology. Research agendas and university curricula were oriented either toward building the “theoretical” foundation of a communist, nonmarket economy or toward dealing with technical questions related to the central planning of production and investments in various sectors and industries. The theoretical focus led to the development of such disciplines as the political economy of socialism and the theory of central planning. The focus on technical questions led to various types of sectoral “economics.” Some of the directions of theoretical analysis—for example, various optimization models of central planning, price setting, and investment allocation or foreign trade—accomplished a high level of technical sophistication and employed modern econometric methods. But because they were based on unrealistic ideology assumptions about the behavior of economic agents, most of this work was useless in guiding policy decisions. When central planning simply disappeared at the end of 1980s, it left most of the academic and research community in the region completely unprepared to deal with the new challenges of market-oriented reforms and market education.

The far-reaching political, ideological, and (sometimes) police control over universities in the former communist countries was augmented by the physical isolation of these countries and their harsh censorship. As result, even scholars who wanted to learn how a market economy worked had problems doing so, because they could not travel freely abroad and lacked access to Western publications. Their only possible avenue for studying the functioning of a market economy was through the prism of the Marxist-Leninist “critique” of capitalism.

However, there were some gaps in the communist party’s total ideological and political control, and these gaps increased as the communist system gradually weakened. First, countries that experimented with “market socialism” (the former Yugoslavia and, to smaller extent, Hungary and Poland in the 1970s and 1980s) had partially to reorient the agenda of their economic research and their curricula of economics education. These countries enjoyed more freedom in terms of contact with the West (including academic exchange and cooperation) and weaker censorship. Second, geopolitical rivalry with the West required some knowledge about the capitalist enemy. To meet this need, some enclaves in which capitalism and the market economy were studied—within the Academy of Sciences of the Soviet Union or similar institutions in other communist countries—were permitted.

After the collapse of communism, these gaps and enclaves proved sufficient to produce a relatively narrow group of reformers who took professional responsibility for the economic transition in many countries, in most cases with success. However, these enclaves were insufficient to effect the reconstruction of economics education and economic research.

What Has Happened in the Past 15 Years?

One might have expected that the collapse of communist control over the social sciences and education, the breaking of ideological taboos, the increase in freedom of speech and thought, the opening up of the former communist countries to the outside world, the substantial technical assistance and research cooperation, the revolution in information and communication technology, and other factors would have helped change the state of economics education and research in the region. Unfortunately, it did not: economics education (both public and private) and economic research in former communist countries continues to be very weak.

The old guard of communist professors continues to teach economics in both state universities and new private economics and business schools. Although the official curriculum has been modified, the content and quality of teaching has not changed much. Formally, topics such as the political economy of socialism and capitalism, the theory of central planning, and the theory of “scientific communism” have disappeared, to be replaced by macroeconomics and microeconomics, trade theory, and other courses taught in the West. In practice, however, these new courses are taught by faculty who either remain mentally and emotionally engaged in the previous system or whose own economics education is simply substandard. Many of them have poor command of English, so their access to Western textbooks, academic papers published in the international refereed journals, and the teaching practice of Western universities is very limited. They teach exclusively in their national languages, forcing their students to use textbooks they wrote instead of internationally recognized textbooks, and their teaching methodology is completely outdated.

In the rapid proliferation of a higher economics and business education in most transition economies, quality has been compromised in favor of the quantity of diplomas granted. At the same time, national labor markets have created a limited demand for high-quality economics education. This limited demand has usually been satisfied by the graduates of Western universities, whose number is gradually increasing. The accession to the European Union (EU) of 12 postcommunist countries may intensify this process.

The picture in economics research is very similar to the picture in economics education. Research remains dominated by public universities, research institutes of the Academy of Sciences, and “sectoral” institutes controlled by various ministries and government agencies. The research agenda and the quality of the research lags behind the real needs and challenges facing the transition economies. The newly created private (or nongovernment) research centers are usually too small and financially weak to play a more important role in this sphere. Only a few of them have established solid national and international positions. These unfavorable trends have been determined not only by limited and distorted financing but also by a limited supply of well-educated graduates capable of, and interested in, carrying out high-quality research.

Let me briefly highlight some of the institutional and policy factors that impede progress:

- The structure of both universities and public research institutes remains highly hierarchic (feudal). Obtaining a senior position (professorship) takes at least 20 years of and requires obtaining two or three academic degrees (a “normal” PhD, called in some countries a candidate of science; a “habilitation,” called in some countries a doctor of science; and sometimes a state professor degree). Many transition countries do not officially recognize (or did not recognize until very recently) academic degrees obtained at U.S. or Western European universities. Candidates for academic degrees are forced to present and publish their dissertations in national languages rather than in English. The official evaluation/attestation criteria for universities and research institutes (and, consequently, the recruitment criteria for their academic staff) give priority to domestic academic degrees and domestic publications in national languages rather than publication of high-quality, internationally recognized research. This sector is thus essentially closed to external competition, allowing poorly educated “red” professors³ to control academic nominations and the distribution of public funds for research and education.⁴ Academic careers of prospective young scholars are either stymied or blocked, because they are considered dangerous competition to the “old guard.”
- Public funding of economic research and higher education in economics is not only limited (due to fiscal constraints) but also badly distributed. In most transition economies, political populism continues to maintain the illusion of free higher education, which is practically unrealistic and hinders the introduction of a transparent mechanism of support to students from low-income families and competition between public and private universities on equal terms. Most research funding goes to institutional support to “old-type” publicly owned research institutes instead of financing concrete research projects on a competitive basis. The financial mechanism tends to favor incumbents at the expense of market “newcomers” (that is, potential competitors).
- Poor funding and rigid rules of employment and remuneration of academic staff result in low basic salaries that are unrelated to output. This reward system stimulates adverse selection of staff, with the most gifted young graduates preferring careers in private business or academic careers at Western universities. Those who opt for careers at domestic universities and research institutes search actively for second or third jobs, often only loosely related to their academic job, in order to be able to maintain an adequate living standard.
- Western Europe does not provide a good model either. Although universities and public research institutes in Western Europe are better financed, offer higher salaries, and do not face the specific problems of postcommunist transition, they suffer from many of the institutional flaws that affect their Central and East European counterparts. The structure of academic life and careers is feudal, the system of academic employment is inflexible, and most funding comes from public sources. As result, most European universities and research institutes lose in competition with similar institutions in the United States and United Kingdom.

- Agglomeration effects seem to play an important role in shaping the education and research market. In the past few decades, high-quality economics education and research have become increasingly concentrated in a small number of academic centers in the United States, the United Kingdom, Canada, and Israel. Because of the lack of good track records and reputations, universities and research institutes in postcommunist countries face substantial barriers in attracting internationally respected scholars, private funding, or demand for education and research services. Internationally, these institutions are perceived as capable of meeting only local demand and conducting research on local topics. Changing this perception will not be easy.

The Role of New Education Initiatives

Thanks to the efforts of international official and private donors, a few Western-type centers of graduate economics educations have been established in the region. The Central European University (CEU) in Budapest, the Center for Economic Research and Graduate Education (CERGE) in Prague, the New Economic School (NES) in Moscow, and the Master's Program of the Economics Education and Research Consortium (EERC) at the Kiev-Mohyla Academy are the best known and have the best track records. Although these institutions can train only small numbers of students, it is hard to overestimate their positive demonstration role in the mostly outdated education systems in the region. These institutions are important for several reasons:

- They set a high education standard and provide a kind of benchmarking for domestic education initiatives, especially in the private sector.
- They supply the new generation of economic think tanks in the region with well-educated young researchers, helping to upgrade their still limited human potential.
- They help create regional research networks and international academic contacts for their professors and graduates.
- They offer “bridging” to further (mostly postgraduate) education in the West.

These initiatives face a number of serious challenges, related largely to their financial sustainability. Many donors who have supported these institutions are now looking for exit strategies. Some of them wrongly assumed that economic recovery in the region and EU accession of Central European and Baltic countries would create sufficient domestic sources of financing for foreign financing to be phased out. Too early withdrawal of international donors and forcing the new education institutions to search for alternative (mostly domestic) sources of financing could cause a variety of problems, including a decline in educational standards; the “nationalization” of curricula, academic staff, student recruitment, and teaching languages; and a shift in emphasis from economics to business.

Is There Hope for the Future?

Is there any chance of improving the bleak landscape of economics education and research in the region? Some factors related to globalization and European integration may help improve education standards, at least to a certain extent.

Continued economic growth, the inflow of foreign direct investment, and increasing trade and investment links with the outside world will increase demand for well-trained economists. This may also increase demand for economic research and analysis, financed from public and private sources. Increasing demand for high-quality economists can be met by Western universities, especially given European unification. However, it is very unlikely that outsourcing can fully solve this problem, and outsourcing education involves the risk of brain drain. Local labor markets in Central and Eastern Europe and Russia may therefore push for upgrading at least some their domestic education institutions.

The increasing role of the single European research market (particularly of EU-funded framework programs) will help upgrade some research institutions in transition economies (mostly but not only in EU new member states) in terms of their human potential, research standards, and market mode of operation. In fact, this process has already begun. EU-funded education support and research training schemes can also help upgrade the standards of some universities in the region.

A natural generation change may eliminate or at least reduce the problem of red professors who resist changes in education curricula and methods. However, positive changes depend on far-reaching institutional reforms in higher education and research institutions, particularly changes related to financing, employment rules, and the system of academic degrees.

Even under the most optimistic scenario, the role of the new education institutions will remain important, and they will require continuing donor support for a quite a long time. These institutions should retain their regional character and not be “nationalized.” They represent a kind of international public good that should not be lost.

Notes

1. The same was true of the other important economist of Polish origin, Oskar Lange, who was well known for his polemics with Ludwig von Mises in the 1930s. His contribution to mainstream theory was more problematic, however. His attempts to defend the potential economic effectiveness of a socialist economy looked very elegant in terms of formal modeling, but this defense was never confirmed in practice. Again, after coming back to communist Poland, his role as the internationally known scholar was finished.

2. Nikolai Kondratieff, the author of the theory of long waves in business cycles (popularized by Joseph Schumpeter) spent eight years in communist prisons before being killed in 1938. He was just one of many examples of Bolshevik and then Stalinist terror victims among Russian intellectuals and scholars.

3. The former German Democratic Republic is an exception. After German reunification, the old academic cadres in social sciences were fired and replaced by “imported” faculty, mostly from the Federal Republic of Germany.

4. The collapse of the communist regime was associated with the introduction or enhancement of the autonomy of state universities, research institutes, and academies of science. Combined with continued budgetary funding, the feudal hierarchy of academic degrees and positions, and the lack of external competition, it helped consolidate the position of “red” professors and slow adaptation to the new market conditions.

Comment on Gur Ofer and Justin Yifu Lin

Jeffrey Miller

IT IS A PLEASURE TO DISCUSS THESE PAPERS BY TWO PEOPLE WHO HAVE BEEN SO INSTRUMENTAL in establishing economics educational projects in transition economies. Having directed a similar, more limited project in Bulgaria in the early 1990s, I can appreciate both the effort and the rewards that come from working to establish programs such as the China Center for Economic Research (CCER) and the New Economic School (NES). Although the success of such projects is hard to measure in the short run, the impact of economics educational programs can be significant if people understand more about the economic situation that surrounds them and are able to make decisions and implement policies that improve the well-being of their countries.

What is most striking is how similar the goals of the CCER and NES are. As Ofer states them:

The grand mission of the endeavor was to replace the Marxist economic paradigm and the way economics had been taught under the communist regime with a new paradigm of modern, Western economics—something that was completely alien to most Russians. The task involved an extremely radical shift, with only few precedents in the history of science. The change was complicated by the fact that it took place at the same time that many radical changes—political, social, and mental, as well as economic—were occurring.

Later Ofer states that “the main mission of NES is to transform economics in Russia.” In these statements there is clear recognition that accomplishing this mission is not a simple task. It is not normal changes that are required but rather “an extremely radical shift, with only few precedents in the history of science.” Indeed, the breadth of the changes raises the question of whether the establishment of such a program is like placing a foreign organ into the human body, only to see the organ rejected by the body.

Ofer argues that the issues are more than just a question of content. Indeed, they involve a major reorganization of how economics should be taught. At NES, teaching and research—activities that were pursued in different institutions during the communist period in Russia—are seen as highly complementary activities. Rather than teaching the material so it can be learned by rote, NES promotes a more investigative, problem-solving approach. This approach is designed to give students a broader perspective than they would receive from professional training. Although Lin is less explicit about the approach his program has taken, it is clear from the research achievements of the faculty at the CCER that the objectives are similar.

Establishing such radically different institutions in a stable environment would have been very difficult. It is hard to imagine, for example, European institutions of higher education rapidly adopting the American model. As Ofer points out, the separation of research and teaching, characteristic of the European model, had additional advantages within the Soviet system; and thus the Soviet system was an even more extreme version of this model.

Given the dramatic changes that were taking place in the business and economic environment in both China and Russia during the economic transitions in these countries, some changes in their education systems were clearly warranted. First, if these countries were to move to a market system, people needed a better understanding of these new arrangements. Indeed, it appears that the educational systems are adjusting content to the study of market institutions, although many teachers lack formal education in market economics. To help improve this situation in China, the CCER has created outreach programs for faculty at other universities, including a program specifically for faculty from management programs in western China.

Second, the educational system needs to adjust to the new work environment. Under the old system, people who graduated from a university could expect to spend their life in a particular line of work. Market arrangements create a much more fluid work environment, requiring people to be prepared for a range of possible jobs during their working years. The changing work environment also places greater demands on people to obtain additional education or training later in life. The notion of life-long learning is foreign to many people, especially older people, in transition economies.¹

When I read these articles by Ofer and Lin, I was particularly interested to see where the graduates of NES and the CCER are working. There were two reasons for this interest. First, the program I directed in Bulgaria was very successful on a personal level for the students, but it was not clear to me that it was successful in meeting the objective of having a major impact on economic instruction in Bulgaria. Second, job placement by graduates is an indication of how the program may be affecting economic policy making.

With regard to the first point, the small number of graduates that are teaching at Russian institutions other than NES suggests that the program may not be having the “trainer-of-trainers” impact that was hoped. This was a major objective of the program in Bulgaria, and the results there were similarly disappointing. Ofer points out that one reason for this is the low pay of professors in Russia. This is undoubtedly an important factor; but another important factor, which he also mentions, is at

work as well: the potential threat to higher-ranking officials from better-trained professionals.

The CCER appears to have been more successful in this regard than NES, with approximately one-third of its PhD graduates teaching at other universities. The influence of the CCER on economics instruction is broader than this, since the CCER has also established outreach programs and prepared textbooks for more general use in China. Furthermore, the connections that the CCER has with the policy-making community have enabled it to participate in “almost every single policy dialogue in China.”

In our Bulgarian program, we recruited young people who planned to teach as well as faculty members who were already teaching economics. Graduates who were seeking work had difficulty finding positions. Several graduates who already had positions in economics programs were junior faculty. When they returned to their positions, they were given only limited opportunities to use their new skills. Often they ended up teaching courses directed by senior faculty members who determined course content.

From recent discussions with Bulgarian graduate students at the University of Delaware who have expressed interest in returning to Bulgaria to teach, my sense is that there are still major barriers to university teaching for economists with Western training. This lack of opportunity is encouraging many Bulgarian economists to stay abroad.

Although I have seen no studies to confirm this, I suspect that the failure of universities in transition economies to adapt is having other ramifications. At first I expected that poor instruction would lead university students to demand better instruction through protest or other channels (for example, “voice”). This has not happened. Instead, the best students are going abroad for their education, and many are not returning.²

Turkey provides some interesting contrasts to this situation. Although Turkey is not a transition economy in the formal sense, its economy has been going through a transformation that has many parallels to the transition process. The heavy involvement of the state in the economy began to change only in the 1980s. A process of privatization of state enterprises is now underway, but some estimates still place government employment in the nonagricultural sector of the economy at 60 percent.

Since 1986, when Bilkent University (in Ankara) admitted its first students, there has been a movement to establish private universities. Several of these universities (for example, Koç in 1994 and Sabanci in 1999) were founded by families that controlled large holding companies. Bilkent, Koç, and Sabanci, in particular, have been seeking to achieve a high standard of academic excellence by recruiting faculty with degrees from Western universities and, if possible, teaching experience there. Instruction is in English, which gives students and faculty access to the global academic community.

All three of these Turkish universities expect their faculties to teach and do research. As they see it, the university’s reputation will depend on its publication record in Western journals. They pay their faculty salaries that are competitive in the global marketplace rather than the local-market salaries paid by other universities, which are only a fraction of these salaries. These economics departments recruit new faculty from graduate programs in the United States, just as an American university

does. In many ways, these universities represent the kind of private university that Ofer sees as important for Russia.

There are interesting parallels between these Turkish universities and the CCER and NES. Of course, the CCER and NES have a much narrower focus on economics and business, mostly at the graduate level, while the Turkish programs are full-fledged universities with broad programs. So let me focus on the Turkish economics programs.

One striking feature of these programs is that talented economists are returning to Turkey. As a result, instruction and understanding of market economics in Turkey is improving. The competition from these universities is also increasing the pressure on other universities to raise their standards.

The research being done by the economics departments at all three universities has a strong theoretical focus. This was not intentional, at least at Sabanci. In fact, when the organization of Sabanci University was originally discussed, economics was not going to be a department; instead there was going to be a policy program. The evolution of the economics department partly reflected the interests of Turkish economists studying in the United States. Since many Turkish economists were interested in theory, the Sabanci department gravitated in that direction. But there was also another reason. In many ways it is easier for economists outside the United States to publish in U.S. journals if their work is theoretical. Even if their work is applied, data available on the U.S. economy are better than data on other economies; and it is easier to publish in U.S. journals if the topic relates to the U.S. economy.

Although the economics department at Sabanci is first rate, so far it has conducted relatively little research on the Turkish economy. This may change over time as the department matures—the university is only six years old and the faculty is young—but the pressures to publish will still encourage work unrelated to the Turkish economy.

How does all this relate to the CCER and NES? First, theory has been the focus of research at NES; it is likely to remain so if NES seeks an international reputation. However, as Ofer explains, there is international interest in what is taking place in Russia, so there is more latitude to pursue more applied work in Russia than there is in Turkey. My guess, however, is that there will continue to be a strong pull toward theoretical work at NES.

The CCER is in a different position. The success of the Chinese economy has generated international interest. Doing research on the Chinese economy is not a major liability for economists there, and the CCER has made an effort to encourage research relevant to China. Indeed, establishment of the London School of Economics and Political Science—Peking University is one indication that interest in China is very broad. This makes it much easier for the faculty to publish in Western journals and burnish the reputation of the CCER.

An important aspect of the growth of the Turkish universities is that they are indigenous organizations that have grown to meet needs as perceived by the local community. There is a strong interest in these institutions from the business community, which has provided financial support and been intensely involved in the management of the universities. The head of the Sabanci holding company, for example, has been very much involved as an overseer of the university's development.

Sabancı is also the first university in Turkey to adopt an American-style liberal arts undergraduate curriculum, where students can change their concentration after they have enrolled at the university.³ Sabancı demonstrates that new institutional arrangements can evolve through a process of entry.

After 13 years, NES still does not have this kind of local support. Its financial support is still coming from outside Russia. As Ofer points out, the situation may change if the business community, which now includes individuals who have accumulated substantial wealth, decides to support such efforts.⁴

Although I know very little about the local situation in Russia, I would be concerned that NES does not have an association with any Russian institution. When we set up the program in Bulgaria, we tried to find a local institution with which to associate. We failed to find a suitable partner, so I can understand how difficult this can be—but the failure to find a suitable partner is one reason why that program no longer exists and was, perhaps, an indication that Bulgaria was not prepared to support such a program.

Although the CCER received seed money from the Ford Foundation and an “endorsement” from the World Bank, it is not clear from Lin’s description what the sources of continuing support are. It would be useful to know more about this, as it might provide guidelines for other programs.

Although I have focused my remarks on the potential impact of the CCER and NES on economic education in China and Russia, we should not lose sight of the fact these programs can be very meaningful on a personal level for the students who attend them. Students in these programs understand that these programs can connect them with the larger world community and thus can have a significant impact on their lives. I expect that many young people in these programs will make an important contribution to future economic developments in their countries.

Notes

1. In Bulgaria in the early 1990s, we tried to recruit older faculty to participate in the economics program. Interest was very limited, partly, I believe, because “life-long learning” was not part of the culture. Once someone completed schooling, formal education was over.

2. The number of students receiving higher education has increased significantly in Bulgaria. This may reflect a change in the number of openings in universities. Universities can now provide more space because there are now additional financial resources available to universities provided by tuition-paying students.

3. In practice, setting up a university where students could change their concentration after admissions was difficult for Sabancı, because admission to Turkish universities is based on a national exam and a sorting process in which students are asked to identify a university and a program within that university. The process assumes that students will stay within a certain field of study once they enter a university .

4. The Turks are rightfully proud of what they have accomplished. I have heard that a Turk suggested to a Russian oligarch that he might be remembered longer for starting a university than for purchasing a football team.

COMMENT

Historical Specificity and the “Generality” of Economics

Ugo Pagano

Capacity Building: The Reemergence of an Old Problem

Is there a trade-off between the generality of economics and its relevance to particular situations? How much general economics should one teach relative to the economic analysis of specific situations? These problems, considered by Professor Gur Ofer, have arisen in many institutions, including the Central European University, where they are currently the object of a lively debate among the members of the department of economics.

This is not surprising. The tension between “historical specificity” and the “generality” of economics has always been around, and it is very unlikely that there will ever be a decisive resolution to this old *Methodenstreit*.¹

Professor Justin Lin has observed, “In spite of China’s success in moving to a market economy, the country did not have a modern economics profession, and in the beginning of the transition, modern economic analysis did not play a major role.” Indeed, according to him, what was important for the initial success of reform was the knowledge of specific bottlenecks. Only recently, he notes, as China has become more and more market oriented, has the general view of the market system that is supplied by modern economics become important.

The right balance between “general economics” and historical specificity has important implications for the type of institutions through which modern economics is taught. Professor Newton-Smith argues that sponsoring and relying on local institutions is more cost-effective than building new ones. These local institutions may also be influenced by one’s view of their role—whether one sees them as engaged in a simple technological transfer or as combining in some creative way established theories with local knowledge.

I find it difficult to understand the precise implications of this point for the best ways to achieve capacity building. On the one hand, one can argue that preexisting

institutions are more likely to be endowed with local knowledge than they could creatively mix with general economics. On the other hand, one can argue that a creative role of institutions (involving much more than simple technological transfer) may also require the foundations of new organizations (sometimes the old ones may be suited for simple technological transfer at best).

“General Economics” Under Socialism and During Transition

I agree with Professor Gur Ofer when he argues that the generality of economic theory is one of its strengths. I am puzzled by the observation of Professor Lin, who notes that general economics was not applied in the early days of the successful Chinese transition. He maintains that this deficiency was simply due to the fact that modern economic theory was not known in China at the time. I am afraid that this is only one of the reasons for this deficiency. I believe much economic theory was not very relevant and was sometimes even damaging. During the years of socialism, the generality of economics often led to misunderstanding situations. It is therefore not surprising that China did better than some former socialist countries that received advice from Western consultants.

During the years of socialism, in the West the Arrow-Lange-Lerner theorem was a benchmark for much economic thinking. This theorem states the formal equivalence of market economics and central planning.² Both market and planned economies were represented by the means of the Walras's auctioneer economy, where individuals write their trading and production plans on tickets and are allowed to implement them only after the auctioneer announces equilibrium prices.

Major characteristics of market economies were ignored by this abstract construction. Whereas in the auctioneer economy exchanges occur at equilibrium prices, in real market economies, exchanges happen mostly at nonequilibrium prices, and disequilibrium is a real phenomenon that all market economies must face. Moreover, whereas in the auctioneer economy enforcement is assumed to be costless, in real-life market economies costly complementary institutions are required for the the implementation of contracts.

The representation of planning by means of the model of the auctioneer economy (where the planning office would play the role of the auctioneer and the firms' managers were instructed to choose those quantities at the prices announced by the auctioneer) was even more damaging. In the Walrasian economy, agents write the quantities that maximize utility and profits at the prices cried by the auctioneer on tickets. They are then were asked to implement their decisions only at equilibrium prices. In real planned economies, there is no auctioneer (or planning office) working at zero costs. Agents have very little incentive to reveal their information. Each round of information exchange would have taken a long time, and the final plan would have been related to a changed reality. Even if the process had converged, there was very little incentive for agents to carry out their plans; managers were unlikely to carry out the plans that maximized profits simply because they were ordered to do so.

The “generality” of the Walrasian general equilibrium theory did very little to help the understanding of the main features of socialism and capitalism. It was, however, politically useful. It seemed to point out some sort of convergence of economic systems that could, in turn, give some (limited) support to a peaceful coexistence between the two blocs. The 1975 Nobel Prize in economics was won together by the Leonid Kantorovich of the former Soviet Union and the Tjalling Koopmans of the United States for “their contribution to the optimum allocation of resources” and was a tribute to the mathematical equivalence between market prices and planned shadow prices that could, in principle, be the basis for economic optimality. However, beyond these theoretical and political niceties, this type of approach had several shortcomings. Perhaps the saddest of them was that it suggested many imaginary and abstract ways to reform the socialist economies that did not work outside the generalizations of economic theory.

If most economic theory did not help much during the years of socialism (and, in some cases, was damaging), it was even less useful when socialism collapsed. In this situation, the main issue became how to build the institutional foundations of a market economy. The analysis of these foundations had often disappeared in the formal equivalences of economic theory. Little had been understood about the sophisticated complementary institutions that are necessary to the working of the market economy; and little had been understood about the diversity of corporate governance models that had differentiated synchronically and diachronically the evolution of real-life market economies.

Sometimes, especially in the early debates, *transition* became a misleading word that implied implicitly a unique starting point and a unique point of arrival. It ignored both the plurality of starting points of the former socialist economies and the plurality of capitalist models to which these economies could be directed. The main issue became the speed of transition, with “gradualists” and “shock therapists” monopolizing much of the debate. Despite emerging robust empirical evidence, few “general economics” theorists would have been ready to recognize that novel institutions such as the Chinese township and village enterprises could play an important role in the transformation of some socialist economies in specific moments of their history. “General economists” would not necessarily have helped the early successful stage of the Chinese transition to a market economy.

Graduate Teaching and Historical Specificity

Despite these considerations, I would still agree with Professor Ofer that in graduate teaching one should concentrate more on general economics than on specific situations. One can even argue that the limitations of the theories we have considered stem more from the absence of than from the excesses of genuine generalizations and that in fact one has to generalize more, and in the appropriate directions, to obtain general economic statements that are useful to deal with specific situations.

Statements such as the Arrow-Lange-Lerner theorem derive from the idea that the central problem of economics is the scarcity of resources—that is, the lack of sufficient physical resources to satisfy our needs. Thus much economics has concentrated its analysis on the choices of rational individuals who coordinate decisions at given market or accounting prices.

The problem with this view of scarcity lies in its lack of generality. It limits the scarcity problem to only one dimension. The assumption of the unbounded rationality of individuals and given prices hide two other important dimensions of scarcity: the scarcity of adequate cognitive ability on the part of those making the choices and the scarcity of adequate institutions. Much modern economics has generalized the analysis of the scarcity problem in these directions, making economics better suited to deal with specific real-life situations.

The extension of the economic notion of scarcity to cognitive scarcity has generated two lines of investigation. The first is related to the common ignorance that individuals have about the future, which may imply that they may be unable even to attribute probabilities to different events. The second deals with the different degrees of ignorance that characterize different individuals. Asymmetric information is the source of different types of both market and central planning failures; it has pushed us very far from equivalence statements à la Koopmans-Kantorovich. Recently, because of the growing awareness of the centrality of the problems related to bounded cognitive resources, the assumption that individuals are endowed with the same and complete rational capabilities has been questioned, and much research has focused on the specific mechanisms of decision making.³ Much behavioral economics, with its emphasis on particular, sometimes cultural-specific, problems seems less general than the standard neoclassical approach based on universal maximizing behavior. However, the attention to specific decision-making mechanisms derives from the fact that the restrictive assumption of free unbounded rationality has been removed and the economic scarcity problem has been generalized. This generalization implies that the degree of rationality may also depend on specific historical and social conditions. Particular types of rational capabilities may grow together with the development of markets; they cannot be taken for granted at the beginning of a transformation process.

The extension of the scarcity problem to the limited availability of adequate institutions implies that we have to give up the idea that all countries at any moment in their history have institutions (including market institutions) that are adequate to their needs. Institutions are produced by using preexisting institutions; often this production process can succeed only if it comes together with the production of other complementary institutions. To put it in another way, the understanding of institutions cannot be dissociated from the analysis of their history in specific countries. Modern institutional economics, with its emphasis on specific institutions, may look much less general than neoclassical economics.⁴ But the attention to specific institutions comes from removing the restrictive assumption of the free availability of adequate institutions. It comes from a generalization of the scarcity problem that has always been the central problem of abstract economic thinking.

Toward a New Relation Between Historical Specificity and the Generality of Economics

Is there really a trade-off between the generality of economics and its relevance to specific situations? The usual answer is “yes”; and there are good reasons for this answer. During the years of socialism, the excessive emphasis on standard equilibrium analysis inhibited a clear understanding of the specific features of this system. At some deeper level, however, the genuine generality of economics increases the understanding of particular decision-making problems and particular institutional contexts. A more general economics may become less abstract and better suited for building bridges with specific historical situations. However, if more general economics is to show its full potential, we have to reverse the trend of many U.S. graduate schools, where economic history has been eliminated as an important subject. Although a true general economics should remain at the core of graduate teaching, the history of different countries must once again play an important role in curricula. Or, to use economic jargon, the teaching of general economics and the teaching of specific histories should not be seen as substitutes but as complements.

Notes

1. For a recent account of the Methodenstreit and its relevance for current economic debates, see Hodgson (2001).
2. For a review and a criticism of this literature, see Pagano (1985, 1992). A remarkable exception, which anticipated much later institutional thinking, was Kornai (1971).
3. This approach is also leading to a new understanding of the relation between economics and other fields. See, for instance, Camerer, Loewenstein, and Prelec (2005).
4. For examples of this approach see Aoki (2001) and Bowles (2004).

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Innovation, Imitation, and Adaptation

The Experience of 15 Years of Upscaling Hungarian Higher Education in Economics

László Csaba

The last 15 years have seen structural changes in Hungarian higher education in terms of content, time, space, and organizational structure. As Hungary has moved closer to the standards and practices of the European Union, the structural weaknesses of those systems has been replicated. Changes in Hungarian higher education driven by ideology and bureaucracy have resulted in a mismatch between the supply of university graduates and demands of the labor market in the medium to long run, a trend that is likely to intensify. Strategies to avoid this labor market incompatibility and the degradation of university research capabilities include the promotion of centers of excellence as well as continuous performance and quality control of faculty.

HIGHER EDUCATION IN ECONOMICS AND BUSINESS ADMINISTRATION IN HUNGARY reached a turning point in October 2005 when the Constitutional Court decided to make only minor modifications to the Law on Higher Education, which affirmed Hungary's adherence to provisions of the Bologna process. In its ruling, the court resisted the initiative of opposition forces, including most university representatives, who had sought a full-scale reversal of Hungary's participation in the Bologna process. Set out in the Bologna declaration and subsequent documents, this is the European Union's program to unify academic degree standards within a European Higher Education Area, thus allowing students and faculty to move across borders and ensuring the mutual recognition of degrees. The program calls for all participating countries to adopt a three-tiered system of bachelor's (BA), master's (MA), and doctoral (PhD) degrees, taking, in most cases, three, two, and three years, respectively. This implies a breach with the classic Continental European tradition of variety in types of degree and length of study required and an approximation of the model used in the United States and the United Kingdom. Also in line with UK and U.S. practices, lines of study that were previously rigid—in which achievement of the MA unconditionally required a BA degree in the very same area—have given way to more flexibility.

The decision to adopt the Bologna framework, which comes within the context of a larger process referred to as Europeanization, promises to bring deep changes to higher education in most of the postcommunist countries, and particularly in Hungary. Hungarian education used to be organized under entirely different principles and procedures. Under communism, the Prussian model was retained, and higher education was divided into two fields. Colleges (*főiskola*) were designed to serve the immediate interests of the business community by preparing graduates for practical jobs, with only minimal introduction to general principles and academic studies. The best graduates from colleges often continued their studies at universities (*egyetem*) and at the postgraduate level. However, unlike colleges, universities remained elitist and academically oriented institutions. Although enrollment in institutions of higher education among 18- to 25-year-olds rose from about 2 percent to about 5 percent by 1989, this was still significantly below the numbers typical of Western Europe.

Social pressures arising from democratization, the perceived need to emulate Western European or European Union (EU) practices, and the very real needs of the economy and of the buoyant business community—international and local—for properly trained specialists who understand the workings of the market economy have all contributed to an unprecedented quantitative expansion of higher education in Hungary. Likewise, the need to retrain middle-age and older employees, who typically hold engineering, agricultural, or humanities degrees, has created a very real social demand for economics education. Private schools and semiprivate initiatives of existing universities, as well as quickly growing new faculties, have entered this promising market by offering numerous programs and courses, especially master of business administration (MBA) programs and executive MBA programs for midcareer professionals.

This is not the place to analyze why this quantitative expansion has failed to follow any plan or vision, even a tentative one. The expansion of higher education has not been confined to economics and business studies, law, and public administration. Similar tendencies have emerged throughout the academy—especially in the humanities, but also in engineering and in previously little-known and barely supported fields, from psychology to filmmaking to communications and information technology.¹ What is clear is that this unrestricted quantitative expansion has had repercussions. Policy makers boast that “we have opened the doors of the universities,” meaning that in place of the previous 2 to 5 percent of 18- to 25-year-olds enrolled in institutions of higher education, in 2005 more than 40 percent of this cohort was enrolled. But the quality of the degrees granted has experienced a free fall, if for no other reason than the validity of the Gauss curve showing the probability distribution of mental abilities. Moreover, the shortage of graduates that characterized the early transition period has given way to oversupply. The mismatch between nominal qualifications and labor market performance has grown, as an ever-larger number of university and college graduates end up in jobs requiring lower qualifications than they have. The wage differential between university graduates and those who have completed only college or other skills training has been diminishing dramatically since 2000 (Galasi and Varga 2005).

This story is, to a large degree, a replication of the Western European experience, in which the expansion of higher education was driven by social and ideological goals: equal opportunity, equal access, regional equalization, social mobility, and so forth. Meanwhile, the labor market was reshaped by the paradigmatic changes resulting from the widespread use of information and communication technologies throughout the economy, affecting everything from macroeconomic theories to business organization.² For this reason the mismatch between graduates and jobs has been growing: university, and, especially college, graduates face an ever-longer wait until they can begin their first job (currently 9–12 months for those with economics and business degrees). The growing number of jobless people with higher education is a warning for policy makers and analysts alike (Simonyi 2006).

In the remainder of this paper I summarize the evolution of economics and business education in Hungary, analyze the implications of recent expansionary trends, and make recommendations for policy alternatives.

Changing Patterns of Higher Education in Economics

Higher education in economics in Hungary used to be concentrated in the Karl Marx University of Economic Sciences, which became the Budapest University of Economic Sciences (BUES) in 1991. Nearly every leader in higher economics education, in the economic sector of government, and in business and banking has been a graduate of this institution. In 2000 the BUES was integrated with the College of Public Administration, and in 2003 the University of Horticulture was incorporated as well and renamed Corvinus University. The university now functions, in line with the stipulations of the Law on Higher Education, as a multifaculty, multidisciplinary institution. The synergies that emerged from these reorganizations seem insignificant, for insiders and outsiders alike. In addition to BUES, the flagship institution, Budapest had three colleges specializing in finance and accounting, commerce and tourism, and international management. These—originally organized along the Prussian model mentioned above—formed the Budapest Business School in an attempt to retain their *de facto* independence and their status, and also to prepare for the Bologna process.

The traditional predominance of the capital city in economics education has recently been challenged by the proliferation of economics and business faculties and colleges across the country. At this writing, the Hungarian Accreditation Committee, an interdisciplinary and independent academic regulatory agency, has granted 21 institutions the right to issue economics degrees. The new institutions are of several types. One group consists of the descendents of regional affiliates of the core institutions, such as the College of Business in Szolnok, an offspring of the College of Foreign Trade. The Faculty of Economics and Business in Pécs, already more than 30 years old, is an outgrowth of the regional branch of the BUES. Another group consists of faculties of regional universities that did not previously provide business education. They include the economics faculties in Debrecen, Szeged, Győr, and Sopron. The reorientation of some universities that had a focus on heavy engineering, as in

Veszprém and Miskolc, or that provided higher education in law but not economics, as in Szeged, has added to this group. Mention should also be made of the “green-field” institutions, which have been established in response to regional or local demand and ambition. These are based either on the omnipresent teacher training colleges or on the equally ubiquitous (but declining) agricultural colleges. The Kodolányi College of Székesfehérvár and the Nyíregyháza College are examples.

In addition to the types listed above, many established institutions have adjusted to the new conditions by launching business courses of various sorts, first as part-time offerings and then as full-fledged programs. For example, the former Trade Union Academy has transformed itself into the International Business School, one of the first fully private business schools in Hungary. Increasingly, established institutions have begun granting managerial degrees as a second diploma. The prestigious Budapest University of Technology extended its activity to economics education, changing its name to the Budapest University of Technology and Economics. Kaposvár was perhaps the most successful of these local initiatives.

The number of students receiving an economics degree of one sort or another each year increased tenfold in the period between 1990 and 2005. This impressive quantitative development reflects the proliferation of institutions throughout the country. Nonetheless, it would be hard to question the continued leading role of Corvinus and the capital city in general. Every major research institute is located in Budapest, not only those of the Academy of Sciences but also the more business-oriented units, such as Kopint-Datorg, GKI, Financial Research, Ecostat, the Institute for Economic Growth, and ICEG-Europe, as well as research units of banks and consultancies. The disadvantages facing provincial institutions have clearly diminished, both because of the information technology revolution (for example, electronic subscriptions to leading libraries help students overcome locational disadvantages) and because of growing involvement in EU-related and EU-financed projects. Still, the gap between quality and quantity, between core and periphery, persists. Mobility among students has increased, and the establishment of new graduate institutions has helped ease the regional overconcentration, but the crux of the problem remains. University exchange programs, especially involvement in Tempus, Socrates, and other EU-initiated exchanges, have helped many students and junior faculty acquire foreign work-study experience and participate in international conferences. But the probability of having a guest professor of truly international standing, or one who does not speak Hungarian—thus contributing to active language skills of students—is still much higher for students in the capital city.

As far as curriculum content is concerned, the transition phase was dominated by lecture notes and textbooks produced domestically, usually by the professor teaching the course, following classic Continental practice. With the passage of time and with increased international experience, core and basic courses have tended to adopt Hungarian editions of internationally used textbooks, such as the works of Samuelson and Nordhaus, Mankiw, and Krugman and Obstfeld for macroeconomics; Varian for microeconomics; and Giddens for sociology. The switch was made easier because Corvinus University had already adopted the standard macro/micro approach, com-

plemented by comparative economics, back in 1986, and other institutions tended to follow (sometimes with a lag) whatever was done in Budapest.³

It is important to recall that, contrary to some ideology-loaded retrospectives, the economics curriculum of the pre-1990 period was not plain rubbish. Unlike a number of other ex-communist countries, Hungary, with its “goulash communism,” allowed for the very gradual but perceptible professionalization of most of the areas taught by economists. Although students of every faculty, whether medicine or music, were expected to pass exams in the “ideological disciplines” of Marxism in order to earn MA or PhD degrees, economists were expected to know their trade, whether that was marketing, finance, logistics, or industrial organization. In each of these areas, the Hungarian textbooks were based on their Western counterparts, and nobody could follow these books unless they were familiar with concepts of marginalism. Regular exchanges of faculty and participation in international forums allowed professors to assimilate and adjust to contemporary standards. In macroeconomics, reliance on econometric methods required and allowed for the use of standard mainstream analysis. Furthermore, a special three-semester course was offered on non-Marxist economics, introducing most of the major schools and concepts of Western thinking. This course made the ritual references to the deviation of these Western schools from Marxist views. Nonetheless, the quality of this course was acknowledged by one of the world’s leading academic publishers, Macmillan, which published a revised and extended version of the textbook several years before the systemic change (Mátyás 1985).⁴

In sum, whatever we may think about the level and quality of contemporary economics research in Hungary, with the benefit of hindsight it can be seen that the fundamentals of higher education in economics tended to be on par with Continental European standards.⁵ This is not to idealize the latter, or to negate our criticism of that model’s mismatch with labor markets and its parallel loss of ground to the Anglo-Saxon academy. However, the broad adherence to Continental standards made the restructuring of economics higher education much less painful and more gradual in Hungary than in most other postcommunist countries.

It is in this context that the quantitative and regional expansion of economics education, as well as the Bologna process and Europeanization in general, must be addressed. This expansion has taken place in a period of pervasive financial restrictions. Furthermore, the deconcentration of resources also means that the traditional lead institutions have suffered disproportionately as resources are splintered to set up new and untested institutions across the country. Library resources are particularly scarce. The split between new opportunities and financially constrained realities has widened by the year.

The process on the whole has been ambiguous, as in other countries of the region. On the one hand, research and exchange opportunities that opened up with Hungary’s association and then accession to the EU have provided major incentives for faculty to publish and also to teach in line with international standards. Publishing abroad has become quite common, though the journals and books vary in quality and level. On the other hand, the growing teaching load as well as the financing

of research principally through projects have made fundamental and theoretical research unrewarding and thus marginalized. The standardization of curricula has encouraged the mobility of students, but the research profiles of individuals and institutions tend to be lost. Research at universities in general is relegated to second place, and “normative financing”—that is, funding of colleges according to student numbers rather than academic excellence—has further contributed to the decline of academic morale.

From this perspective, the changing mix of competition and cooperation, both domestically and internationally, comes to the fore. In order to be competitive, Hungarian universities must play by the rules and make best use of the greatly improved opportunities for student exchange, faculty mobility, and research projects financed by external organizations, including business associations. On the other hand, they are unlikely to remain important players unless they regain their lost—or never realized—research prominence. They must be able to cooperate, in both research and training, but they must also hone their competitive edge. Their former competitive advantages—their bridging position between East and West, their ability to teach according to U.S. standards, and curriculum and promotion procedures in line with U.S. practices—are now irrevocably lost, even for such elite institutions as the Central European University. Unless universities are able to develop truly novel research capabilities, cutting-edge research, and a climate favorable rather than hostile to academic excellence, and unless they rely on academic performance criteria rather than on arbitrarily constructed and meaningless rankings⁶ in assessing their accomplishments, the declining trend will not be reversed.

Challenges for the Future

As Hungary arrives in the safe haven of the EU, Hungarian higher education in economics faces new challenges. Approximation to the new Continental European standards under the Bologna process has, by and large, been accomplished. In particular, Hungary is emulating the concept of the “service university,” rather than the Humboldtian university, and is meeting a variety of nonacademic requirements of mass society with a view to building the welfare state (Hrubos 2004). But in assimilating such Western European practices, the country has in a sense become a victim of its own success.

If we compare the average unemployment rate of the EU’s euro area, which was 9.8 percent in 1996–2000, 8.4 percent in 2001–4, and 8.6 percent in the third quarter of 2005, with the Hungarian rate, which was 8.0 percent, 5.7 percent, and 6.4 percent for the same periods, we see that the EU approach has not been entirely successful.⁷ Any impartial observer should feel uncomfortable at seeing the official zeal for emulating those less efficient practices. One of the commonplaces of research on employment and growth is concerned with human capital theory and relates the quality—rather than the mere length—of study to success in labor markets, in terms of both wages and job satisfaction. The Lisbon Strategy of the EU, in its March 2005 revision, considers the adjustment of higher education to labor market demands, thus

leading to more and better employment, to be a major task facing the EU member states.

If this is the case, the current order in which reform measures are implemented should be reversed. As a first priority, universities, at least the leading ones, should be empowered to carry out cutting-edge research. If not, they will be little more than advanced-level secondary schools, where knowledge is not created but merely reproduced. And because these advanced secondary schools will absorb public financing based on their high enrollment—something I doubt can be sustained—research universities will no longer be financed as units of public administration. As long as the British practice of financing lead universities more lavishly than other schools is followed, “normative financing” will be a direct trigger of ever-declining academic standards and ever-growing quantitative orientation. Instead, the basis for differentiation among schools should be the academic accomplishment of their faculty, defined in conventional academic terms and measurable through customary methods of scientometrics. These methods include the number and quality of publications (especially articles in foreign and English-language journals, and monographs published by presses other than the university’s own), their impact as gauged by citation indexes, and so on. Universities that are “centers of excellence,” in EU parlance, deserve more public funding. The rest may want to follow suggestions for the “enterprising” university, although under the limits implied by quality standards.

The current Continental European arrangements by no means guarantee that universities will fulfill labor market needs.⁸ Curricula tend to be shaped by ad hoc considerations such as the individual interests and background of the faculty. Most of the time there is not even a minimum of quality control, as this would require regular assessment by external experts of content, structure, and output indicators. At the moment, student preferences—which are often aimed at minimizing effort rather than maximizing skills for long-term benefit—are the main influences on both structure and student numbers. In the Hungarian case, empirical analyses point not only to the unsustainability of the current number of institutions (70!) issuing college and university degrees, but also to the structural oversupply of humanities and social science education, as well as the inadequate presence of private capital (Adler 2005, 51).

Unfortunately, the first attempts to introduce tuition fees and cost contributions, in the context of the 1995 adjustment package, foundered on an adverse social reaction encouraged by the then-opposition forces. Since that time, public discourse has continued to frame higher education as a principal channel of social mobility as well as the major component of welfare provision to be extended by the state. This discourse denies longstanding sociological findings that point to the high quality of private higher education. Further evidence of this is the proliferation of private fee-paying courses and institutions in all fields, not only in the financially more rewarding consultancy and finance areas. With the introduction of the student loan system in 1999, the major counterargument to fee-based education, namely, that it denies equal access, has been addressed adequately. And the number of fee-paying students in public universities has exploded. By 2005 more than 50 percent of all

university revenues came from students in form of fees and contributions—this in a system that is theoretically free of charge.

At the same time, as Deputy Secretary of Employment and Labor Ágnes Simonyi (2006) explains, low levels of qualification and the inadequate quality and inappropriate structure of college and university degrees constitute a stumbling block for employing more people in better jobs, as called for by the Lisbon Strategy. In other words, the current system provides neither equity nor efficiency.

It is unfortunate to note—on the base of countless conferences devoted to the subject—that the ideal of lifelong learning has remained mostly an empty slogan in Hungarian universities and colleges. Equipping students with the analytical and personal qualities needed for lifelong learning would entail teaching them abstract skills and theories, as well as how to ask previously unheard or simply unconventional questions and how to find sources of knowledge. Instead of this, institutions gear their teaching to the requirements of the graduate's first workplace. It is not only the remote provincial colleges that believe that career building requires the reintroduction of the medieval practice of industrial apprenticeship.

Likewise, cooperation with the business community exists mostly—indeed nearly exclusively—in areas where entrepreneurs need cheap, low- to medium-skilled labor to meet their immediate needs. Although this form of cooperation should not be rejected, this is *not* what the university-business relationships in Scandinavia and Japan—to cite the most successful examples—are all about. In sum, in terms of both teaching input and organizational structures, ongoing practices in Hungarian higher education seem to be based on a misunderstanding of the real needs.

Achieving a proper balance between the local and the global is a continuing challenge. The Hungarian case reflects two extremes, neither of them desirable. On the one hand, we can see countless cases in which the challenge of transnationalization—beyond the EU alone—has led to seclusion, that is, to national and local exclusionist tendencies in terms of staff and teaching materials and incongruity with mainstream academic developments. In quite a few courses, mainstream ideas continue to be portrayed as extreme, while radical, critical, and heterodox approaches are treated as the standard. This occurs in fields from macroeconomics to international economics to finance, in addition to public policy and sociology, to mention two major borderline areas. In other cases, universities (including my own institution, the Central European University, until about 2001) fashion themselves as enclaves. They do so by sustaining an institutional isolation from “events on the ground” or simply cultivating a culture of dissimulation, exceptionalism, and nonintegration.

In both these extremes, the spillover and synergy effects that otherwise would accrue from having centers of excellence will be minimal. Furthermore, with the evolution of the structure and content of the curricula at the local lead institutions, the replication of British “red brick” or large U.S. state universities had clearly ceased to be an accomplishment by the early 2000s. Although it is relatively easy to overcome the tendency to be isolated from local realities, the tendency to be isolated from international trends may be one of the reasons that many of the degrees from those schools do not sell on the labor market. This is a warning that young graduates

may be attractive to employers mainly as low-wage labor, irrespective of the individual's career plan.

A related but separate challenge is to avoid bureaucratism and other traps inherent in EU-related activities. For two decades the EU was seen, with considerable justification, as a paragon of modernization, a model to be followed under almost any circumstances. This situation has recently been changing, however, both in society in general and in higher education in particular. The unfolding crisis in EU policies and institutions, culminating in the rejection in 2005 of both the Constitutional Treaty and the Financial Perspective for 2007–13, has diminished the attractiveness of the EU as a model for the new member states (Csaba 2005). With respect to higher education, other EU countries, at least on the Continent, face problems that are similar to or worse than Hungary's. Furthermore, the capping of EU funds by the net contributors, coupled with the inability of incumbents to reform expenditure priorities, has made EU decision making even more cumbersome and time-consuming than before. If a decade ago a three-page proposal ensured quasi-automatic financing in 70 percent of cases, today 10 applications, of 50 to 60 pages each, may yield one project actually financed.

This unwieldy process may become a compelling constraint on the entire spectrum of higher education. At the lower end of the continuum, smaller universities may lack both the skilled personnel and the administrative capacity to deal with such projects efficiently. This may lead to self-exclusion, not only from the projects but also from the civilizing and educating functions of international cooperation, including opportunities to acquire tacit knowledge and research skills and participate in networking. This cooperation is the real point of the entire EU exercise, but its benefits could be missed completely if universities are excluded—or exclude themselves—from participating.

At the higher end of the continuum, the lead institutions are already deeply involved in global networking, project writing, and cooperation with multinational business. If they shortsightedly opt for EU involvement as a replacement for these diverse types of cooperation—whether for reasons of prestige, politics, or inflated expectations of funding—then they are obviously missing the point.

Being active in several universities, I can easily conceive of both circumstances as a very real threat, at least in terms of opportunity costs. In an ideal world, the EU itself would narrow its priorities and simplify the criteria for evaluation. In the real world, however, there seems to be a better than even probability that procrastination and waste of scarce administrative resources, as well as diversion of research capabilities to administrative tasks, will continue.

Can Expansion Be the Way Ahead?

Facing these difficulties, each institution has three basic options. One option is to “wait and see”; this translates into a passive strategy, accepting erosion while trying to mobilize social and press support and finding excuses rather than solutions for the lack of measurable performance. This is what most colleges tend to do. The second

option is to close down inefficient units and join in consortia as junior partners, accepting a submissive role that may end in complete integration with or subordination to a dominant partner. This approach, which is actually encouraged by regulators, has been put into practice by a number of provincial colleges that have merged into a lead institution in their area, such as the Agricultural College in Mosonmagyaróvár. Finally, there is the “management dream” solution—the solution of unconditional and ceaseless expansion.

A commonplace of management sciences is the principle that anything that does not grow is likely to contract. For this reason, as well as for reasons of remuneration, which is normally related to institutional size, prestige, and power, managers tend to think big. This is true not only in industry and banking but also in higher education. This “bigger is better” instinct often translates into an ideology of growth or a power game that pays little heed to anything else, including efficiency. In the business world, the merger craze of the 1997–2000 period produced some conspicuous failures, such as DaimlerChrysler and Deutsche Bank, that might have served as a warning. But most academics do not read business news.

Let us be clear from the outset that there are no economies of scale in most areas of research. This holds true for economic research (as distinct from the administrative tasks of managing large numbers of undergraduates in their various capacities). We would rarely find Nobel winners or other influential personalities speaking in the huge auditoriums of the university-industrial complex in Continental Europe. There is, however, *synergy*, provided that departments cooperate on academic projects and teaching, that there is a lively intellectual atmosphere, and that making ends meet does not occupy faculty members 24 hours a day. Thus the development of core research and related curricula at the advanced level, fostering the role of the university as a research center by means of domestic and international conferences and other forms of (not necessarily formal) interaction, may create a fertile soil for productive academic exchange. But such activities can hardly survive on their own, especially if they concern areas that are detached from the core research interests of (and teaching lines of) existing faculty. In that case, synergies remain imaginary.

From this perspective, ill-conceived expansion may be the gravest threat to both the quality and the viability of an institution. And I would argue that all expansion other than organic expansion is ill-conceived. For instance, joining forces with others only to become bigger, or to acquire the necessary number of faculty members or the diversity stipulated by regulation, will produce only failure. Likewise, the quest for ever-larger numbers of students—irrespective of student quality, non-fee-based financing,⁹ and physical infrastructure—can only lead to the continued decline of academic standards, as has indeed been observed at public universities over the past 15 years or so. Efforts to foster cooperation with institutions very unlike the mother institution in terms of their profile and priorities will surely backfire. No synergy can be expected from purely administrative mergers between completely unrelated but geographically close institutions forced into a formal union, as is the case with most citywide and neighborhood-inclusive universities.

The only promising solution, in line with industry and banking experience, is a combination of consolidation and very gradual expansion of the lead institutions. Consolidation means slimming as well, focusing on basic competences and outsourcing nonessentials in line with established principles of industrial organization. It means creating security for senior faculty combined with regular external assessment and other forms of quality control, such as a requirement to publish a minimum number of academic books and articles in a given period of time. It also means regular turnover in the faculty, quite in line with industrial practice, but quite opposite to the arrangements enshrined in the current Law on Civil Service. Turnover means opening up mobility pathways for young, talented faculty while relocating academically less able persons to intellectually less innovative, though organizationally important, positions (such as the university administration, as distinct from the academic senate). Being promoted to director of student affairs—or of procurement, disciplinary procedures, external relations, press relations, special operations, business relations, or the like—does not demean a middle-aged colleague who will never publish a book or a cited contribution to any academic journal but is still an asset to the college community. More reliance on open advertising of jobs, prohibition of direct promotion to full professorship in the mother university, and maintaining a contingent of foreign faculty may all contribute to bringing about more mobility and quality control than currently exists.

Expansion should be very gradual, if for no other reason than because of the current overexpansion noted above. This gradual approach may help avoid the indiscriminate hunt for paying students, irrespective of their quality and orientation. Rapid expansion can make it easier for insiders to thwart the inflow of new blood, recreating the ossification that plagues much of the European university establishment. Instead, the broadening of financing sources to include foundations, civic associations, alumni, and (of course) foreigners would be important. Changing the overly restrictive laws on inheritance and taxation to exempt donations channeled to higher education could open up incalculable resources, as long as universities and academia in general remain the most trusted social institutions across Europe.

Last but not least, there is an urgent need to seek closer cooperation with the business community, including nontraditional forms of cooperation. This relationship can be valuable on both the input and the output sides. With respect to input, no amount of alumni support and civic initiative can replace the serious and long-term commitment of business in leveraging the necessary levels of funding for a university. This is less pressing in the area of economics and business studies than in, say, the humanities or medical sciences, but the soaring cost of books, computers, and office space nonetheless makes this inflow of resources an imperative. This form of cooperation is easier to “sell” to the business community, so more effort should be directed toward this end.

On the output side, the business community has an immediate interest in improving the quality and thus the employability of university and college graduates. In addition to support for practical training, as noted above, a major injection of funds for improving the quality of education can be expected if appropriate channels are found and if tax provisions are favorable. Reforming the systems of public dues is

high on the agenda in most of the EU countries, old and new, so this step is actually more feasible than it might have appeared only a few years ago.

From the university's perspective, it is important to realize that the traditional opposition to business interests—once considered the *sine qua non* for any intellectual—is no longer sustainable. Indeed, such opposition is self-destructive in the contemporary context. One of the underlying problems of European education has been the full nationalization and subsequent enforcement of uniformity in higher education, a policy driven by ideological prejudices rather than by sound empirical, sociological, and economic analyses. The outcome, in Hungary, has been a society in which social status, inherited social capital, and other forms of tacit knowledge derived not from formal education but from family circumstances and upbringing together form the criteria for leadership in the Hungarian business world.¹⁰ In other words, the social equalizing function of a university education has been undermined.

At the same time, the academic community is increasingly vulnerable to populist political trends that have rendered university education and spending on research legitimate objects of constant budgetary cuts. And while it is perhaps true that a degree of marketization in the sphere is inevitable, this will take a long time, for both structural and psychological reasons.¹¹ Meanwhile, there is an urgent need to act. This includes the pressing need to diversify funding as a way to secure academic independence and quality control at the same time.

In my experience, working with “practical men” has been the best way to overcome mutual prejudices, acquire first-hand knowledge of issues of mutual concern, and develop the understanding and atmosphere of trust that strategic cooperation requires. In this way, improvement of curricula may occur without introducing forms of tutelage, and there may be increasing willingness to fund research and development that does not yield immediate profits. This is, under Hungarian conditions, perhaps more than a hope, but surely less than a certainty.

Notes

1. For further discussion see Polónyi and Tímár (2001).

2. For further discussion see Hámori (2005).

3. For further discussion see Zalai (1990).

4. Tellingly, the publisher includes the volume in its Radical Economics series.

5. This is an intricate issue that I addressed in some detail in an extensive study published several years ago (Csaba 2002). Many economists who trained in Hungary in the period between World War I and World War II later became world-famous, although they invariably left the country to complete their academic careers. Examples include the British lords Nicolas Káldor, Thomas Balogh, and Peter Thomas Bauer, and in the United States, Tibor Scitovsky, Béla Balassa, William Fellner, and John C. Harsányi, the Nobel Prize winner.

6. At the time of writing, two such rankings have been published. One, compiled by the Academy of Sciences in *Világgazdaság* (November 4, 2005), relies on self-evaluation and perception by students. The other, published in the weekly *Heti Válasz* (no. 43, 2005), relies on a variety of factors such as parents' and employers' assessments as well as student opinions. None

of the criteria measure academic accomplishment, not even the *Financial Times's* criterion of annual earnings of graduates 5 and 10 years after leaving school. For a more analytical critique of international rankings, see Török (2006).

7. All data are from the European Central Bank (ECB 2005, 41).

8. See, for example, Polónyi and Tímár (2004, 1071).

9. It is usually impossible to raise fees high enough to cover the full cost of tuition, at least at the undergraduate level. However, at the MA and PhD levels, with the availability of public and private sponsorship and fellowships, this may become necessary for any institution that cares about quality. Providing student loans has also developed into a viable business for banks.

10. See Laki and Szalai (2004).

11. It may be that this marketization is not as far-reaching as Bokros (2004, 215–18) suggests.

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Capacity Building and Policy Impact

The Experience of the Global Development Network

Ramona Angelescu and Lyn Squire

This paper describes the approach to capacity building undertaken by the Global Development Network (GDN) and the lessons learned during the six years of the organization's independent operation. GDN, a "worldwide association of research and policy institutes, promotes the generation, sharing, and application to policy of multidisciplinary knowledge for the purpose of development." GDN's approach to capacity building rests on five broad principles. First, its proposed mission and structure were tested, before the network was officially set up, with a thorough survey analysis of both the existing demand and the existing supply of the kind of services GDN might offer. It was evident from this analysis that GDN would fill a significant gap in the field. Second, GDN's organizational structure was designed to allow as much experimentation and learning as possible. Third, it was decided to provide a menu of services rather than rely on a single vehicle. The various activities (Regional Research Competitions, the Global Development Awards and Medals Competition, Global Research Projects, the Web site and online library of development resources, and the annual conference) incorporate different capacity-building elements, including mentoring, cross-fertilization, and training, as well as funds and resources for writing, presenting, and publishing research. Fourth, further research activities would be undertaken on an ongoing basis to fill gaps in our understanding of capacity building and policy impact. Finally, ongoing monitoring and evaluation of both the capacity-building process and the outcomes was given considerable weight. The main lessons learned include the need for *balance between need and meritocracy* of individual researchers or institutes targeted for capacity building; the scarcity and critical *importance of funds* for any capacity-building effort; and last but not least, the realization that *policy impact* is the goal most difficult to reach, yet crucial in importance, if contributing to economic development and poverty reduction are the ultimate aims of our work. In short, translating research into policy remains the biggest weakness and greatest need at the same time.

ECONOMIC DEVELOPMENT AND THE REDUCTION OF POVERTY ARE UNIVERSAL GOALS that can be pursued in a multitude of ways, through short- and long-term solutions. Identifying the most pressing issues in a particular socioeconomic context and devis-

ing strategies to remedy the problems requires in-depth knowledge of both issue and context, especially if viable, long-term plans for tackling underdevelopment and poverty are sought. The crucial role of research—and within it the centrality of capacity building—cannot be overstated. “Strengthening people’s capacity to determine their own values and priorities and to act on these is the basis of development. Capacity building is an approach to development rather than a set of discrete or pre-packaged interventions” (Eade 1999).

Empowering researchers in developing and transition economies to conduct social science research independently is only the first step in achieving the goals of economic development and poverty reduction. High-quality research that has little or no impact on policy will ultimately fall short of the goals of economic development and pro-poor growth. “A fundamental goal of capacity building is to enhance the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options” (UNCED 1992). Thus research has to be relevant, current, credible, and comprehensible to policy makers. Research capacity-building efforts need to incorporate these elements as well.

The Global Development Network (GDN) was formed in 1999 to support and link research and policy institutes involved in the field of development with one another and with policy makers.¹ According to its mission statement, GDN, “a worldwide association of research and policy institutes, promotes the generation, sharing, and application to policy of multidisciplinary knowledge for the purpose of development” (GDN 2000). Achieving these goals involves building policy-relevant research capacity in developing and transition economies in order to generate and sustain effective—and home-grown—socioeconomic policies. Capacity building, in other words, is at the core of GDN’s mission. The drive toward the production of high-quality research in the developing world is supplemented, however, by a focus on the policy impact of research as well.

Both research capacity and impact on policy are notoriously difficult to assess for at least two reasons. First, improvements in researchers’ skills in collecting and interpreting data, employing the most advanced methodologies and tools for analysis, writing proposals and papers, as well as presenting findings are typically not easy to measure. Policy outcomes are even harder to trace back to a particular research study. The problem of measurement is virtually impossible to surmount in any definitive manner. Even if capacity and impact could be easily measured, assessment faces a second difficulty, namely, appropriate treatment of the counterfactual. Capacity building is undertaken by a range of donors, intermediary networks such as GDN, and universities, most commonly working independently of one another. As a result, capacity building carried out by one institution may simply displace the same or a similar activity undertaken by another institution with no net increase in capacity. Alternatively, two institutions’ capacity building efforts may be complementary, but separating the net effect of each in terms of increasing research capacity is very difficult. Identifying the areas most in need of capacity building and then surmounting the measurement, counterfactual, and attribution problems when assessing the impact of specific efforts on enhancing capacity are all extremely difficult tasks.

Starting with this realization in mind, GDN's approach to capacity building adopted five broad principles. First, the proposed mission and structure were tested, before the network was officially set up, with a thorough analysis of both the existing demand and the existing supply of knowledge generation, sharing and application services of the kind GDN might offer. Second, GDN's organizational structure was designed to allow as much experimentation and learning as possible. Third, since different forms of capacity building have different capacity-building attributes, it was decided to provide a menu of services rather than rely on a single vehicle. Fourth, there was a clear recognition of the need to undertake specific research activities to fill gaps in our understanding of capacity building and policy impact. Finally, the difficulties of evaluation notwithstanding, the importance of monitoring efforts carefully on an ongoing basis and learning from our own experience was given considerable weight. The rest of the paper will describe in detail these five principles in the context of GDN's own experience. The final section will draw out lessons for other individuals and organizations involved in building development research capacity with policy impact.

What Do Researchers Want? What Is Being Supplied?

In line with the first principle outlined above, the proposed mission, structure, and service portfolio of the Global Development Network were tested in 1999, both in terms of demand and supply.

Analyzing Researchers' Needs

To assess the needs of the research community in developing and transition economies—GDN's target beneficiaries—the launch of GDN was preceded by a survey of 512 research institutes throughout the developing world; this survey revealed strong support for a global network focused on development research and its translation into policy. (See GDN 2003a.) The survey's response rate was 39.5 percent, with 202 research institutes participating. Nearly all of them rated an institution such as GDN as "valuable" or "extremely valuable," while annual meetings, staff exchanges and fellowships, and information on funding opportunities emerged as the top-rated activities (table 1).

The survey also revealed that most respondents were electronically connected: staff had their own e-mail in 55.1 percent of reporting institutions and used the Web regularly in 40.5 percent.² In terms of research output, data, and information on organizations and individuals, researchers expressed stronger preference for searchable, online databases accessed through the Web. On a scale of 1 (not valuable) to 7 (extremely valuable), online databases received an average rating of 6.4, annually produced CD-ROMs received a 5.3 average score, and printed materials received a 4.9 average score.

The top two ranking activities—annual conferences and staff exchanges/fellowships—naturally require large expenditures. On the other hand, virtual com-

TABLE 1

Findings of 1999 Survey of Research Institutes

<i>Issue</i>	<i>Percent of respondents</i>
GDN rated as valuable or extremely valuable	99.5
Strong support for	
Annual meetings on global development	59.9
Staff exchanges and fellowships	58.4
Receiving information on funding opportunities	54.0

Source: GDN.

munication and an online depository of information on development research would be relatively inexpensive, at least in per capita terms. In short, the more specific lessons that emerged from the 1999 survey were:

- Social science research is underfunded based on the indirect evidence gathered in the course of the survey
- Global (as opposed to regional) provision of activities is cost-effective and needs do not vary considerably across regions.
- GDN should focus on the limited, well-designed provision of high-demand, high-cost activities (annual meetings, training, scholarships), coupled with the widespread provision of online, low-cost services.

GDN would thus provide a cost-effective mix of services highly demanded by the research community in the developing world.

Assessing Supply

Once demand for a particular service is estimated, the analysis always ought to be supplemented by a current supply-side evaluation. The importance of providing unique services and avoiding duplication is enhanced in the nonprofit sector where funds are limited and needs abound. To maximize the impact on research capacity building in the developing world, GDN sought to provide services not supplied by others. Therefore, it was decided in February 2000 to undertake a study of the existing supply by other institutions of products similar to those supported by GDN. Accordingly, a High-Level Committee was formed to oversee this work as well as to evaluate the progress and effectiveness of GDN in light of its results. The main categories of analysis were:

- the levels and trends in the absolute amounts for research oriented funding, including a breakdown into research projects, professional development, and networking;
- the levels and trends in thematic coverage;
- the levels in regional coverage;

- the amount of funds going to core funding of research institutions;
- the importance of research-oriented funding in bilateral and multilateral agencies, both absolutely and relative to foundations that specialize in research funding; and
- the distribution of funding between country-specific, regional, and global programs.

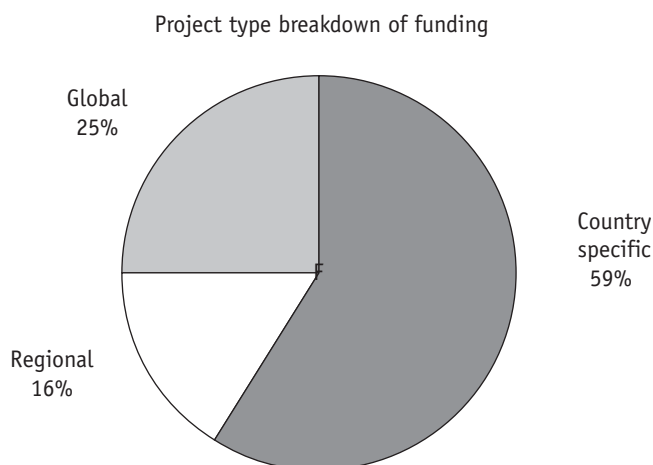
This report revealed an increasing gap between the demand for policy-relevant research in the developing world and the supply of funds for this purpose, the need for extensive mentoring and monitoring of research progress to ensure quality, and the scarcity of institutions serving as intermediaries or brokers among donors, research institutes, and policy makers. At the same time, the report expressed a concern that much of the research agenda in the developing world is influenced by the developed world and it emphasized the need for reducing brain drain by offering research opportunities to scholars in developing and transition economies (GDN 2001: 15).

It is also interesting to note that, as can be seen in figure 1, most funding by donor agencies has traditionally been targeted to projects that only involve one country. Although 59 percent of funding goes to country-specific projects, only 16 and 25 percent go to regional and global projects respectively.

The key conclusions of the 2000 High-Level Committee analysis can be summarized as follows. Funding levels for policy-focused research activities have been inadequate, especially in light of the demands that have arisen from researchers in newly democratic and transition countries. A large part of funding to these countries in the 1990s has been earmarked for professional development activities, but the demand

FIGURE 1

Funding by Project Type



Source: GDN.

for funding for research itself is likely to escalate in the future as a new generation of researchers matures. Furthermore, the research agenda in the South is directly and heavily influenced by the North, often by implementing agencies or electronic networks based in the North. The vast majority of funds are tied to a specific product, typically of interest to the donors. One of GDN's alternative mechanisms for setting the agenda is by using regional, bottom-up selections of topics for the annual Regional Research Competitions, which will be described in detail later in the paper.

With regard to capacity building and quality, one of the most important conclusions of the study was that a project is more likely to succeed if it includes elements of three main categories: **adequate funding** for research; **sustained mentoring**, review, and training for professional development; and **systematic use of networking** for project preparation, implementation, and dissemination. Any of these elements in isolation does not typically yield high-quality research at standards comparable to those expected of studies produced by Northern researchers. Where feasible, all these elements should be built into the projects from the onset. Once research is completed, the committee also found that there is clearly a need for more work on both measurements of policy impact and the types and strategies of dissemination that are and are not working in different cultural, institutional, and political settings. The Bridging Research and Policy project launched by GDN in 2002 aims at addressing precisely these concerns.

The report also concluded that there is considerable concern about delivering professional development products in a cost-effective manner while simultaneously avoiding emigration or brain drain. The trend has been to move away from bringing researchers out of their countries for long periods to, instead, bringing the training programs to the regions or, more recently, delivering the program with information technology. In this regard, GDN funds only researchers who are not only citizens but also residents of developing or transition economies to avoid worsening the brain drain problem many of these places are already facing. Last but not least, the High-Level Committee found that this is still a largely uncrowded field. There are few regional and global institutions that are attempting to perform an intermediary or brokerage role between donors, research institutes, and policy makers.

Because of the priorities of the research community identified through the 1999 survey and the findings of the 2000 High-Level Committee report on the existing supply of social science research capacity building services, GDN's mission, structure, and menu of services were geared toward meeting researchers' needs by filling gaps in the supply of such services.

Experimentation, Cross-Fertilization, and Organizational Design

The difficulty of knowing exactly what instruments are most effective in building capacity and achieving policy impact suggest the benefit—indeed, the necessity—of having an organizational structure that allows experimentation and learning. Conse-

quently, GDN was set up as a global network with regional network partners spanning the entire world (table 2).

The regional network partners are legally separate entities that function independently of GDN. Some were established by GDN while others have long served their regional constituencies before becoming affiliated with the network. Even though the regional network partners are interconnected through GDN and GDN is involved in most of the regional network partners' activities, these regional organizations remain self-regulating bodies, thereby providing the environment for experimentation. Their structure and governance vary across regions. The Economic Research Forum (ERF), for instance, comprises individual researchers in the Middle East, while the East Asian Development Network (EADN) is constituted of research institutions.

GDN's network framework facilitates sharing knowledge and best practices among the affiliated regional partners, piloting experimental approaches, and fine-tuning operational models in order to adapt them to various contexts. The best illustration of this concept is the universal adoption of mid-term reviews in the Regional Research Competitions, following the positive and enthusiastic feedback the practice received in the external evaluation report by Craig and Loayza.³ AERC, EERC, and CERGE initially started implementing the mid-term review, a key capacity-building ingredient, which results in better-quality papers as well. Given the positive effect on research output produced through the Regional Research Competitions that incorporate a mid-term review, GDN decided to make it a requirement and institutionalized the procedure for all of its regional network partners in developing and transition economies.

TABLE 2

GDN's Regional Network Partners from Developing and Transition Economies

<i>Region</i>	<i>Network partner</i>	<i>Location</i>
Commonwealth of Independent States	Economics Education and Research Consortium (EERC)	Moscow, Russia
East Asia	East Asian Development Network (EADN)	Bangkok, Thailand
Eastern and Central Europe	Center for Economic Research and Graduate Education-Economics Institute (CERGE-EI)	Prague, Czech Republic
Latin America and the Caribbean	Latin American and Caribbean Economic Association (LACEA)	Buenos Aires, Argentina
Middle East and North Africa	Economic Research Forum for Arab Countries, Iran, and Turkey (ERF)	Cairo, Egypt
Oceania	Oceania Development Network (ODN)	Suva, Fiji
South Asia	South Asia Network of Economic Research Institutes (SANEI)	Islamabad, Pakistan
Sub-Saharan Africa	African Economic Research Consortium (AERC)	Nairobi, Kenya

Source: GDN.

GDN constantly fine-tunes its strategy in online and face-to-face consultations with its members. Particularly extensive contacts are maintained between the regional network partners, the Board of Directors, and the GDN Secretariat. Annual business meetings held during GDN's annual conferences provide extensive opportunities to discuss the achievements of each regional partner, summarize lessons learned from the most productive experiences, and suggest the best models of operation. This allows for horizontal learning among the networks as well as allowing the Secretariat to incorporate and address concerns that arise at the regional level.

Interregional sessions at the 2004 GDN annual conference, jointly organized by several regional network partners, should further enhance the cross-fertilization effect. Similarly, global and regional research projects involving more than one regional network partner encourage cooperation and mutually beneficial learning. The Multidisciplinary and Intermediation Research Initiative, for instance, is managed jointly by EERC and SANEI. Furthermore, the participation of senior GDN Secretariat staff as reviewers in grant competitions held by the regional network partners and their attendance at regional conferences and workshops allow for learning about best practices and their dissemination among all partners in the network through brochures and other materials. The GDN Secretariat staff members thus serve as intermediaries and repositories of valuable information, circulating their recommendations among all regional network partners and the Board of Directors. Evaluations of common activities, such as the independent evaluation of the Regional Research Competitions, pursue the same goal of sharing best practices. All of the regional network partners have their own Web sites, which are mutually connected through GDN's Web site. As a result of the sophisticated means of sharing knowledge, the regional network partners have accumulated valuable know-how on handling grant competitions as well as extensive databases of research and researcher profiles. The high intensity and frequency of formal and informal exchanges, driven by the goal of mutual enrichment, characterizes GDN as an effective networking organization. The resulting learning and experimentation at the regional level help alleviate to some extent the problems of assessing impact on capacity and of identifying the tools with greatest effect on both research capacity and policy.

The Menu Approach

Similarly, at the global level, GDN had to find ways to compensate for the difficulty of knowing exactly how to build social science research capacity and have impact on policy. Measurement problems aside, it is known that different actions emphasize and target different dimensions of capacity building. Therefore, GDN provides an array of services with different capacity-building attributes. The Regional Research Competitions, Global Research Projects and the Global Development Awards and Medals Competition form the core of GDN capacity-building efforts. GDNNet, the network's Web site, and the Annual Global Development Conference also contribute to knowledge sharing among researchers and facilitate interactions between researchers and policy makers (GDN 2004a). Each of these activities offers opportunities for

professional development and advances knowledge through the mechanisms of competition or commissioning of research. Capacity building is augmented by knowledge sharing via interactions between the grantees and reviewers/advisers as well as collaboration within research teams. By providing a menu of activities, each of which emphasizes different capacity-building elements, GDN seeks to avoid the trap of relying on a single vehicle and thereby missing critical capacity-building ingredients.

Local Ownership, Global Support

The Regional Research Competitions (RRCs) managed by GDN's regional network partners (RNPs) in developing and transition economies provide a model of how the diverse experiences of eight networks translate into best practices in capacity building. In contrast to most grant competitions, which emphasize the application stage but then leave grantees to struggle alone, the RRCs offer extensive follow-up. The RRCs are based on both competition and cooperation. Competition—selection of the brightest—is complemented by cooperation—nurturing talents and helping them thrive (GDN 2004). There is an effective system of mentoring grantees by experts, special training programs, and quality assurance mechanisms to improve research results. Reflecting an intensive learning process, the awarding of a grant is complemented by a thorough assessment of the research output. The same project is often discussed in several rounds at successive research workshops or through peer reviews. Grantees receive extensive feedback from highly qualified reviewers from around the world as well as academically advanced advisory boards at all stages of their research—from the project's inception to its completion. Some RNPs favor continuous advice from the same mentors throughout the grant period.

Although Regional Research Competition grantees are constantly helped and encouraged during the course of their research, they have the privilege of initially choosing the subject and preferred methodology of their research. In contrast to the widespread practice of following the donors' priorities, and in accordance with the recommendation of the 2000 report of the High-Level Committee that the topics of research be specified by grantees rather than by donors, GDN adopted a decentralized model for the RRCs. The regional network partners—not the donors or the GDN Secretariat—determine the competition themes for each region. Moreover, individual grantees or research teams select the topics of their projects within these broad themes and also choose the research methods. Thus, while taking advantage of external advice, the grantees enjoy a considerable degree of freedom and can also produce highly relevant studies for the particular economic and political context in their country or region (GDN 2004a).

The establishment of a reliable and effective grant-giving infrastructure constitutes yet another strength of the RRCs. Announcements for the competitions, as well as their results, are featured on each regional network's Web site. GDN requires all working papers from GDN-funded research to be posted on the Web for public access. Each of the almost 650 research proposals funded by GDN since 1999 through

the RRCs has already produced or is expected to culminate in a working paper, if not in a publication. Researchers from developing (and developed) countries can access one another's papers online, exploring new topics, alternative hypothesis and methodologies.

Interviews with RRC grantees conducted in Moscow in December 2002 and in Cairo in January 2003 (during the Cairo conference) reflected their appreciation of the program and its significant role in boosting their careers. The following statements express widely shared opinions (GDN 2003b):

“Thanks to *RRCs*, young researchers benefit from the research fraternity in the early stages of their careers.”

—Mustafizur Rahman, Research Director, Centre for Policy Dialogue,
Dhaka, Bangladesh

“The contribution of the RRC reviewers to the grantees' research is invaluable: We learn state-of-the-art methodologies from them. We get a sense of how to publish in respected scholarly journals. The advisors' guidance is very important for our professional growth.”

—Irina Tochitskaia, Senior Research Fellow, Institute of Economics,
Belarus National Academy of Sciences, Minsk, Belarus

An independent evaluation of the RRCs conducted by Barbara Craig (Oberlin College, Oberlin, Ohio, United States) and Fernando Loayza (Servicios Ambientales, La Paz, Bolivia) in May–December 2001 was favorable. Based on interviews, electronic surveys, on-site visits, and a review of the regional network partners' databases and resources, Craig and Loayza concluded that the RRCs are an effective tool for building research capacity and highlighted the standard RRC practices of competitive grant competitions as a mechanism to ensure the high quality of research and its policy relevance. The recommendations of this evaluation—to generalize the mid-term reviews, for instance, which built on the successful experiences of the various networks—have provided a vehicle for the further improvement of this grant-giving operation.

In sum, the RRCs successfully strike a middle ground between an “affirmative action” approach toward the neediest audiences and a meritocracy—awarding grants on the basis of the research proposals' methodological soundness, originality, and expected project outcomes. Capacity building involves measures to address the underrepresentation of certain countries, regions within a country, institutions, female researchers, and researchers from disciplines other than economics. The RRCs are also successful in balancing high academic standards of research with a consideration given to its policy implications. To bridge research and policy, the regional network partners have taken steps to reach out to decision makers and affect public opinion. For example, ERF has pioneered studies on governance, employment, education, and gender, which have important policy implications for addressing poverty. Policy forums organized by AERC—the GDN network partner in

Sub-Saharan Africa—have contributed to initiatives on long-term financing for development and trade negotiations within southern and eastern Africa.

Cross Fertilization

The Global Research Projects (GRPs), representing a 30 percent total share of GDN's budget, are designed and carried out by GDN to address the major challenges of development through the advancement of analytical methods and empirical global, country, and thematic studies. Thus far, four projects have been implemented—*Explaining Growth*, *Understanding Reform*, *Bridging Research and Policy*, and *The Impact of Rich Countries' Policies on Poverty: A Global View*. These projects involve research teams in many different countries, typically between 30 and 80, providing an excellent vehicle for cross-fertilization. The same researchers are also paired with experts in the field who provide mentoring and guidance through reviews of proposals, as resource persons at global workshops held in conjunction with the Annual Global Development Conference, and through ongoing involvement with the project in the case of the steering committee members.

Unlike the case of the Regional Research Competitions, the themes of the Global Research Projects have traditionally been selected by GDN. Since last year, however, the decision has been made to hold an open call for submissions of project topics in order to enable researchers from the developing world to set their own agenda and advance what they perceive to be the “hottest” global development issues of the day. The theme of the *Impact of Rich Countries' Policies on Poverty: A Global View* project was chosen through such an open call for submissions. The Global Research Projects are also typically managed by Southern experts on the selected topic, external to GDN. Autonomy of researchers and their ownership of projects is a critical ingredient for the success of capacity-building efforts.

Within GDN's first global project, *Explaining Growth*—the goal of which was to explain the growth experiences of seven regions over the past 30–50 years—researchers from developing and transition economies partnered with internationally recognized development experts to compile the most comprehensive assessment of economic growth in existence. As an example of the cross-fertilization effect, the joint EERC-CERGE *Explaining Growth* subproject in East Central Europe and the CIS created extensive opportunities for mutually beneficial cross-country learning for the two regional network partners. The 2003 independent evaluation conducted by Fernando Loayza among participants of the first phase of the *Explaining Growth* project revealed the effectiveness of partnerships between economists from developed and developing or transition economies in delivering regional thematic reviews that surveyed key regional issues on the sources and determinants of aggregate growth, the influence of markets on growth, the microeconomics of growth, and the political economy of growth. Capacity building, however, did not come at the expense of quality: the International Economics Association favorably evaluated this project's contribution to the literature on growth.

Researchers from the developing world gain valuable international exposure at the regional and global levels through their participation in GDN's Global Research Projects. They value highly this exchange of experiences and the constructive feedback received in the workshops and conferences. Indeed, the participants in *Explaining Growth* expressed their preference for the workshops and conferences over the standard peer reviews. In addition, most researchers from the developing world acknowledged that participating in the project has enhanced significantly the quality of their teaching. Research partnerships were also instrumental in enhancing the capacity-building component of the Global Research Projects. The most widespread type of partnership in the developing world involved linking a national senior researcher experienced in historical and institutional issues with a national junior researcher highly competent in modern economic analysis. The evaluation showed important levels of joint learning arising from this type of partnership. In the latest project launched in 2004, named *Impact of Rich Countries' Policies on Poverty*, junior researchers were referred to a more senior researcher with an outstanding research design on the OECD policies that affect the outflows of foreign investment from the rich countries. These partnerships between researchers in the developing world are further enhanced or complemented by support received from resource persons acting as reviewers during the course of the projects.

As part of the *Understanding Reform* project, 10 background papers were prepared on topics of general importance to understanding reform. These papers provided guidelines to the authors of the subsequent country studies by highlighting key issues, identifying unexplored themes, and suggesting ways to address yet-unresolved questions. In an interesting departure from the usual pattern, most thematic papers were prepared by teams of two or three researchers from different disciplines. For example, economists from Croatia and Macedonia worked with a political scientist from Bulgaria on the paper titled "The State, Public Goods, and Reform."

Building on the experience of the first GRP, an infrastructure for assisting the country-studies authors in revising their research and papers was instituted: GDN created an electronic library of literature on reform and negotiated a contract with J-STOR—an electronic archive of leading scholarly journals in various disciplines—to expand access to academic publications. In addition, project researchers also have access to electronic help desks, staffed by established scholars of global recognition.

All Global Research Projects share important characteristics for capacity building. They involve established researchers mentoring their younger counterparts. They provide opportunities for cross-country comparisons and sharing best practices in conducting and managing research, since researchers from all around the world are working on the same theme and under the common umbrella of GDN. Last but not least, apart from addressing academic questions, the GRPs consider the policy implications of GDN-funded research.

Unearthing New Talent

The GDN Awards and Medals Competition is a mechanism for funding research that was established in 2000 by mutual cooperation between GDN and the government

of Japan. This competition is the largest international annual contest for researchers on development. Awards for Outstanding Research on Development and Most Innovative Development Project comprise US\$75,000 cash payments to the winners and US\$10,000 to each of the two other finalists in each category. Medals carrying US\$10,000 and US\$5,000 prizes are awarded to authors of the best research papers on topics selected in accordance with the theme of each year's competition and GDN's annual conference. The theme of the competition is thus different every year, allowing researchers with different interests and specializations to participate.

The Awards and Medals Competition helps discover and promote new talent on the basis of merit alone. The competition is intense and extremely rigorous in its evaluation of the research studies or development project descriptions submitted. Although details vary for each category of the competition, typically the selection process involves a three-tiered evaluation, at the end of which the winners are chosen during the Annual Global Development Conference. Evaluators for the Most Innovative Development Project Award have consistently included prominent development practitioners such as World Bank President James Wolfensohn, Asian Development Bank President Tadao Chino, and Japan Bank for International Cooperation Institute Executive Director Kei-ichi Tango. Nobel Laureates Joseph Stiglitz and Amartya Sen have been among the evaluators for the Outstanding Research on Development Award and the Research Medals. The rigor of the selection process and the involvement of prominent scholars and institutions has ensured that the highest-quality submissions have been rewarded, while significantly enhancing the prestige of the awards. Since 2000, 2,345 scholars representing over 100 countries have participated, and approximately US\$2.5 million have been distributed in awards and travel to finalists and winners (table 3).

In general, the Awards and Medals Competition has met and exceeded its initial objectives. It has been an effective mechanism in encouraging high-quality research in developing and transition economies. The competition has succeeded in attracting researchers and development practitioners from every corner of the globe. Figure 2 provides information on the regional distribution of the competition finalists and winners between 2000 and 2003. As evident from the pie chart, GDN has been successful in attracting submissions from the entire developing world—including regions traditionally underrepresented in academia, such as Africa and the Middle East, which together account for more than 20 percent of the awardees.

The Awards and Medals Competition has rewarded and encouraged deserving, often little-known researchers, and has helped recipients attract other research funds

TABLE 3

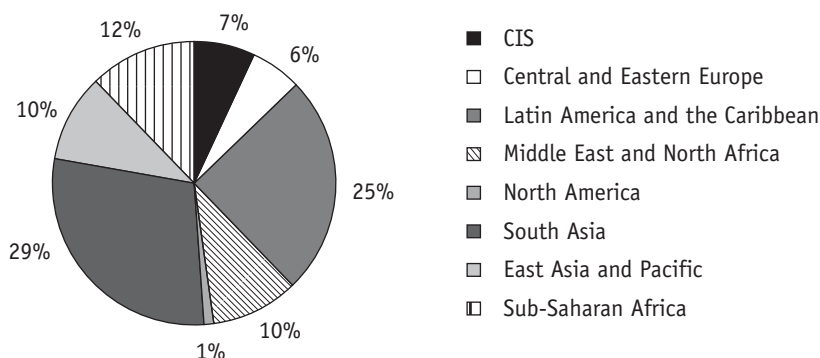
Participants in the GDN Awards and Medals Competition, 2000-04

<i>Year</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
Number of applicants	784	351	402	470	338
Number of countries represented	93	73	80	78	75

Source: GDN.

FIGURE 2

Regional Distribution of Finalists and Winners in the GDN Awards and Medals Competition, 2000-03



Source: GDN.

(GDN 2004). In addition to the cash prizes, all finalists in the Awards and Medals Competition are invited to present their work at the Annual Global Development Conference. By inviting the participants in the competition to the conference, GDN affords them the opportunity to share their research, to network with other scholars and policy makers, and in general ensure their entry into a larger research community.

There has also been wide dissemination, in many different forms, of the output of the researchers and development experts involved in the competition. In particular, award and medal winners have experienced considerable success in translating their research into policy (GDN 2004a). Most of them have presented their ideas to relevant stakeholders at seminars and workshops organized by their institutions, country governmental bureaus, and even international organizations.

These efforts have had some very concrete outcomes in terms of policy decisions and implementation, as some of the award winners have accepted government posts that directly affect development, while others have been prominently involved in legislative efforts in their home countries. For example, apart from holding an advocacy workshop, Comfort Hassan's (Nigeria) institution produced a policy brief based on her work and has started distributing 500 copies among relevant stakeholders. Jeanine Anderson's large research initiative (Peru) has published a "popular" version of the award-winning research study in the book *Leonardo Prado: su historia, su palabra* (Leonardo Prado: his history, his word), which has been widely used in meetings with government representatives, particularly from the Ministry of Women and Social Development. Joe Madiath's award-winning Gram Vikas project was invited by the government of India to be part of the core group for sector reforms in water supply and sanitation, thus enabling them to "significantly influence policies and implementation processes" (GDN 2004b: 9).

Despite differences in each year's specific topics, the underlying rationale for holding the Awards and Medals Competition is to address the imbalance in the dis-

tribution of knowledge between developed and developing countries, the nontransferability of much knowledge within the social sciences, and the relative absence of research efforts that adopt a multidisciplinary approach (GDN 2004a). Researchers have the opportunity to express their concerns and views about the issues that, after all, directly affect them. The awards and medals are also a primary vehicle for enhancing young researchers' visibility among peers around the globe and co-nationals involved in development issues.

“The GDN award was promoted in national newspapers and brought national attention to my work....The comments provided by the referees and audience at the Cairo Conference helped me revise my paper and submit it to a major international journal in education.”

—Santiago Cueto, First Place Medal Winner, 2002, *El Grupo Analisis para el Desarrollo*, Peru (GDN 2004b: 9)

In keeping with the principles that underline its foundation as outlined in the introduction, progress and further development of a winning study or project is monitored by GDN. The requirements for the winners of the large prizes in the awards category include a stipulation that they have to return and present completed research findings and project expansion outcomes at GDN's following Annual Development Conference. Thus discovering and promoting the work of new talent are the capacity-building features the Awards and Medals Competition add to the mix of services provided by GDN.

Sharing Local Knowledge Globally

GDN's Web site and annual conference are the primary vehicles for sharing the knowledge generated through the three types of activities described above. The study undertaken by the High-Level Committee in 2000 did not find many Web sites designed to support development research organizations at the global level. Most sites focus exclusively on the research output of their own organization or on a small number of issues. In a sample of 68 development research Web sites, only three were found to provide a wide range of services covering a broad number of issues at a global level, strongly suggesting that GDN's efforts in this area will provide an important service to the global research and policy community (GDN 2000). As indicated earlier, the 1999 survey of researchers had also found that there is strong interest and need among researchers in developing and transition economies for online services of knowledge generation and sharing.

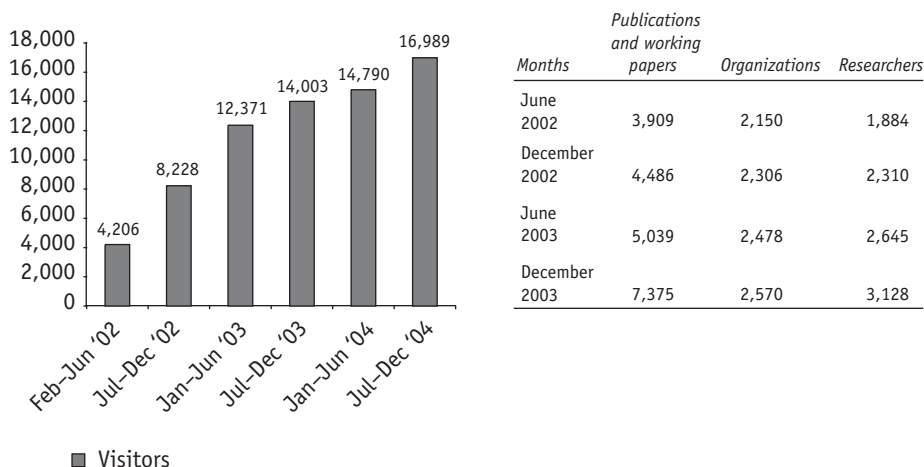
In line with GDN's mission and focus on capacity building as well as networking and bridging the research-policy gap, GDN has three primary objectives:

- To enable institutes and researchers in developing countries to communicate their knowledge more effectively to others by linking them into a global network and showcasing their work.

- To help build the dissemination capacity of research institutes by providing training, professional support, and other services to upgrade skills in knowledge management and the use of new Internet-based services.
- To provide social science researchers in developing countries with access to resources enabling them to improve their research.

GNet has become an increasingly popular and comprehensive depository of information on development issues, people, organizations, papers, and events. Traffic on the Web site has quadrupled in just over two years (figure 3) and the numbers of total working papers and profiles stored in the knowledge base (table 4) has also steadily increased.

FIGURE 3

GNet Web Site Traffic

Source: GDN.

Months	Publications and working papers	Organizations	Researchers
June 2002	3,909	2,150	1,884
December 2002	4,486	2,306	2,310
June 2003	5,039	2,478	2,645
December 2003	7,375	2,570	3,128

TABLE 4

Knowledge Base

Months	Publications and working papers	Organizations	Researchers
June 2002	3,909	2,150	1,884
December 2002	4,486	2,306	2,310
June 2003	5,039	2,478	2,645
December 2003	7,375	2,570	3,128
June 2004	7,787	2,658	3,487
December 2004	8,502	2,786	3,936

Source: GDN.

Respondents to the survey conducted by the GDN Secretariat during the annual conference in Dakar (January 2005) perceived calls for competitions/proposals as the most valuable information on GDN's Web site (mean score of 4.21 on the 5-point scale), followed by conference/workshops announcements and materials (4.20), publications and working papers made available through the Knowledge Base (4.03), the research proposal toolkit, and the *Funding Opportunities* newsletter (3.83). More than half of respondents rated both the calls for competitions/proposals and the conference/workshops announcements and materials as "extremely valuable" (5 on the 5-point scale).

In short, GDNNet serves an important function in GDN's capacity-building efforts by facilitating the sharing of knowledge among GDN's primary beneficiaries and providing researchers with some of the necessary tools to design, conduct, and disseminate their research studies.

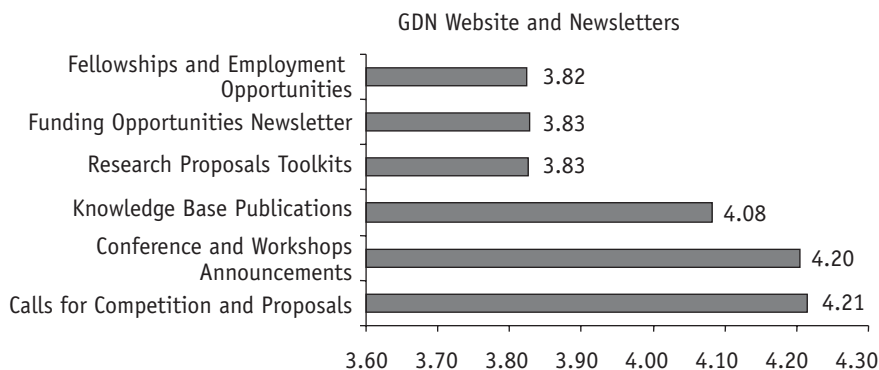
Face-to-Face Networking

The annual GDN conferences provide a global forum for exchanging ideas on sustainable development and poverty alleviation. Researchers from developing countries and transition economies have the opportunity to showcase their research in an international forum as well as to interact with other researchers and policy makers from around the world. About 500 participants annually include researchers, government officials, representatives of international organizations, and research sponsors. Six conferences have been held since GDN's inception: Bonn (1999), Tokyo (2000), Rio de Janeiro (2001), Cairo (2003), New Delhi (2004), and Dakar (2005) (see table 5).

In a survey of the Cairo conference participants, the respondents rated GDN's annual conference as the most valuable of its activities. It received a mean score of 4.5 on the 5-point scale, where 1 indicated "not valuable" and 5 "extremely valuable."

FIGURE 4

GDN's Program Ratings



Source: GDN.

TABLE 5

Annual GDN Conferences

<i>Theme</i>	<i>Date</i>	<i>Location</i>	<i>Number of participants</i>	<i>Number of countries represented</i>
Developed and Developing Worlds:				
Mutual Impact	January 2005	Dakar, Senegal	499	99
Understanding Reform	January 2004	New Delhi, India	673	102
Globalization and Equity	January 2003	Cairo, Egypt	596	104
Blending Local and Global Knowledge	December 2001	Rio de Janeiro, Brazil	400	95
Beyond Economics: Multidisciplinary Approaches to Development	December 2000	Tokyo, Japan	464	73
Bridging Knowledge and Policy	December 1999	Bonn, Germany	532	100

Source: GDN.

Excluding non-response cases, 48.7 percent of the respondents considered GDN's annual conferences "extremely valuable" and no respondent chose the option of "not valuable" (GDN 2003c) These findings of the 2003 Cairo survey were recently corroborated by the Dakar survey results, in which the annual conference received excellent marks again.

Networking is complementary to the research competitions and projects undertaken by GDN. The combined effect of all the services provided by GDN as part of its menu is likely to be greater than the individual effect of each activity taken in isolation. Overall, GDN's core activities have received positive endorsements from participants, independent evaluators and observers, its board of directors, and donor representatives. In summarizing their report, external evaluators Peter Muth and Frederick Gerlach have concluded that "GDN's programs and activities meet a clear demand of a global market for development-relevant knowledge and are designed to build research capacity in those countries where it is most needed. These programs and activities must continue" (Muth and Gerlach 2004). GDN strives to maintain the high quality of research outputs generated through its activities, enhance the capacity-building elements built into its projects and competitions, balance various constituents' demands, and continuously improve its menu of activities.

Filling Knowledge Gaps

Assessing the policy impact of research is the most onerous task of all. There is little systematic knowledge available on the topic of effectively linking researchers and policy makers, especially in the developing world. A broad survey of past and current

initiatives that examine the link between research and policy reveals that only a limited amount of work on this topic is taking place. While available resources focus on research and dissemination on the one hand, or the policy process on the other, little attention has been devoted to the link between the two. GDN's third Global Research Project, *Bridging Research and Policy*, seeks to fill gaps in the existing knowledge of the links between researchers and policy makers and the levels and methods through which the former can influence the latter.

The *Bridging Research and Policy* project has been designed by leading development researchers and policy makers from both developed and developing countries over the last two years to address three key questions: how policy makers can best use research and move toward evidence-based policy making; how researchers can best use their findings in order to influence policy; and how to improve the interaction between researchers and policy makers. The project seeks to improve understanding of the research-policy nexus in order to produce and provide valuable practical advice to both researchers and policy makers.

The main outputs of the project will be:

- increased awareness among policy makers of the value of research;
- an international coalition of policy makers, researchers, and communicators interested in collaborating to improve linkages between research and policy;
- enhanced understanding of how to improve research-policy links and impact;
- lessons, recommendations, and practical tools for researchers and policy makers; and
- a cutting-edge Web site "learning platform" for researchers and policy makers.

The three-year, US\$3.1 million project has been managed by the director of EERC, our regional network partner in CIS. Thus far, the research conducted as part of the project's first two phases revealed the major importance of the following four issues: political and institutional context, the quality of research evidence (its relevance and credibility), the nature of the relationships between researchers and policy makers, and external influences— particularly on the part of bilateral and multilateral donors. Reflecting the broad appeal of the *Bridging Research and Policy* project to development researchers, GDN's June 2003 call for proposals resulted in 367 applications. Consistent with the network's multidisciplinary agenda, this project involves scholars from all the disciplines of social science.

The most relevant and innovative aspects of the project are the capacity-building efforts, such as training programs, not just with social science researchers but also with regional policy networks and advocacy coalitions, research institutes, and policy makers in developing and transition economies. Specific training courses will be designed for each target group to enhance researchers' capacity to conduct policy-relevant studies along with policy makers' ability and inclination to call on the research community for input into the policy making process. The ongoing *Bridging Research and Policy* global project should therefore greatly facilitate the accomplishment of GDN's last objective: to apply the knowledge generated through research to development and

poverty reduction policies. The findings of the country studies and the training courses developed in the last phase of the project will likely have a much larger impact on the research-policy nexus than what has been planned as part of the project itself. Many stakeholders beyond GDN will likely find great value in the information generated.

Learning by Doing and Monitoring

The fifth and last principle guiding GDN, as mentioned in the introduction, is that ongoing monitoring and evaluation is key to successful capacity building. Even though measuring impact on capacity, and in turn on policy, is notoriously difficult, well-chosen and clearly defined quantitative indicators and subjective judgments can jointly paint a fairly accurate picture of an organization's activities.

Used properly, surveys of knowledgeable individuals can be very informative. To be truly effective, however, the sample must be chosen to ensure an appropriate balance of knowledge and independence among the respondents. Unfortunately, the most knowledgeable are typically participants in the activities they are supposed to evaluate and hence are not totally independent. GDN has used both quantitative and qualitative indicators to evaluate its progress in meeting researchers' needs, recognizing the strengths and inevitable weaknesses of both. Aside from external evaluations of various activities conducted since the inception of GDN, a comprehensive internal evaluation was completed in 2004. A systematic method of reporting at the end of the year by each regional network partner was also set in place in 2003 and implemented every year since then.

The next internal evaluation, to be conducted in 2007, will pay particular attention to GDN's progress in involving researchers from all social sciences and in supporting policy-relevant research and achieving at least moderate policy impact. These targets, however, require careful interpretation. The intention is not to pursue exclusively the broadening of the disciplinary scope of GDN-funded research and articulating its policy implications, but instead to encourage both where appropriate. Thus the disciplines represented in any team of researchers should be those best suited to address the research issue in question. Under this approach, the use of methodologies from a single discipline is not prohibited, but a triangulation of various methodologies is welcomed. It is also assumed that even if the results of the project are assessed as "policy-relevant," their translation into policy can be beyond the prerogative and the ability of researchers and may also take a long time. Moreover, targets must be realistically set with respect to GDN's starting position—in particular, with respect to the starting position of GDN's regional partners, most of which have historically emphasized economic research and academic credentials. That said, some indicators of demonstrable progress toward policy relevance of research in all social sciences are required.

Quantitative Indicators

A set of basic quantitative indicators have and will be used for all core activities to measure the following elements:

- **Reach:** the number of participants in GDN's activities.
- **Composition:** the number of participants in GDN's activities by location, discipline, gender, age, and language. These data will be used to test whether GDN is involving new participants every year or serving the same clients; whether it is encouraging research from all disciplines of social science; and whether GDN is reaching underrepresented groups, such as female researchers and researchers from the periphery institutes.
- **Quality:** the number of papers (within the Regional Research Competitions, Global Development Awards and Medals competition, Annual Global Development Conference, and GRP programs) that are subject to professional refereeing and peer review and the number of papers accepted for publication.
- **Policy influence:** the number of GDN-supported research projects and papers that are cited in government policy statements, presented in forums attended by policy makers, or published as policy briefs.

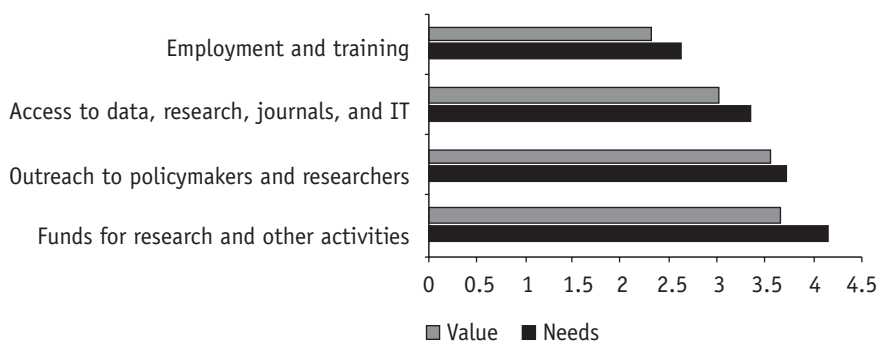
Subjective Judgments

Subjective judgments of GDN's impact and progress will be based on targeted surveys of specific aspects of performance (quality) or specific programs (GDNNet) and general surveys to obtain a broader review of GDN's performance with respect to its objectives. In the most general terms, GDN plans to broaden its regional and disciplinary scope and extend its outreach to policy makers by at least 10 percent, increase the GDNNet Knowledge Base by 50 percent, and increase involvement in GDN of researchers whose primary language is not English to around 10 percentage points.

The GDN Secretariat conducted a survey of the participants in the 2003 and 2005 annual conferences in order to monitor its beneficiaries' evolving priorities and receive their feedback on GDN's performance to date (GDN 2003c). The surveys showed that the value attributed to GDN's activities basically matched the needs of the respondents⁴ (figure 5).

FIGURE 5

Respondents' Needs and Value Attributed to GDN's Activities



Source: GDN 2003c.

The 2005 Dakar survey revealed the same general correspondence between respondents' needs and the value they attribute to GDN in helping them meet those needs. In terms of individual activities supported by GDN, the annual conference was perceived as most valuable, with a mean rating of 4.41 on the 5-point scale (it should be noted, however, that the questionnaire was conducted during one of the annual conferences). Almost 63 percent of respondents gave GDN's annual conference the highest possible rating of "extremely valuable." Global Research Projects followed with a mean rating of 4.29, and the Regional Research Competitions with 4.22 (see figure 6). It should be noted all our major activities received average ratings above 4.0 on a 5-point scale, which is indeed a remarkable achievement. Respondents thus appear to value the mix of activities provided by GDN—both the major networking event and the larger capacity-building ones.

In addition to the survey of conference participants, the GDN Secretariat conducted a similar survey of its regional network partners from transition and developing economies. The overall assessment of GDN on the part of the regional network heads was very favorable. Half of them gave GDN the highest score of 5, while the other half evaluated it as 4 on the 5-point scale, where 1 indicated "not valuable" and 5 "extremely valuable."

Lessons for the Future

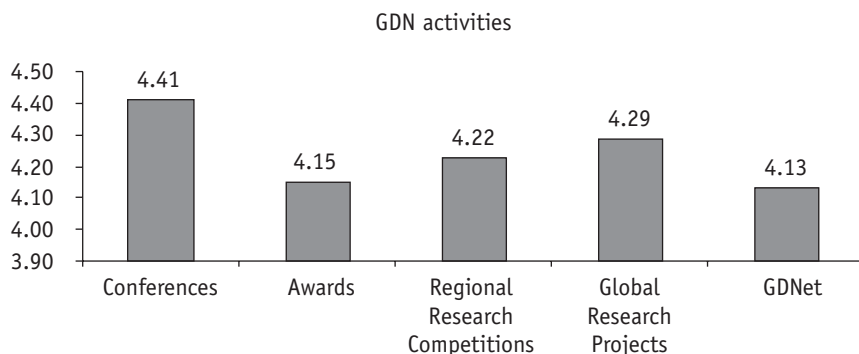
Four major lessons emerge from GDN's experience in building capacity thus far.

Lesson One: A Menu Approach

GDN has established a positively evaluated program of activities and a cost-effective delivery mechanism. Internal and external evaluations of beneficiaries have demonstrated that the menu of capacity building and networking activities provided by GDN is highly effective in meeting the self-reported needs of the research commu-

FIGURE 6

GDN Activities Rated by Conference Attendees



Source: GDN 2005.

nity in the developing world. The various activities (Regional Research Competitions, Global Development Awards and Medals, Global Research Projects, GDN, and the Annual Conference) incorporate different capacity-building elements including mentoring, cross-fertilization, and training, as well as funds and resources for writing, presenting, and publishing research. The chances of having an impact on research capacity are thereby greatly increased by the menu approach of complementary activities provided by GDN, even where needs vary or the effectiveness of individual tools is difficult to assess.

Lesson Two: The Need for Balance

If the research funded by GDN is to make valuable contributions to the literature on growth and ultimately affect policies as well, there needs to be a balance between need and meritocracy of individual researchers or institutes to which GDN allocates funds—between a focus on quality and capacity building per se. Donors and intermediary organizations such as GDN cannot and should not sacrifice the quality of the research they support and focus exclusively on capacity building. Mentoring—both from more experienced researchers in the developing countries and from experts in the North—can also help achieve the two sets of goals simultaneously.

Achieving this balance may require modifications in some of the activities set up or in the criteria laid out for participation. The ability versus need principle has guided GDN's selection of participants in the Global Research Projects and it will now also be extended to the allocation of funds among the regional network partners. Some portion of the funds for the Regional Research Competitions will likely be allocated to the regional network partners on a competitive basis starting from the 2007 fiscal year to provide a financial incentive to work actively toward achieving GDN's objectives. The balance of the funds for the regional network partners will still be a function of need for capacity building and will be allocated accordingly.

In a similar vein, GDN has made significant progress in achieving a balance between breadth and depth of reach in the research community. Although traditionally GDN has attracted submissions and participation mainly from economists, steps have been taken to target underrepresented groups among our beneficiaries: noneconomists (political scientists and sociologists), women, non-English speakers. The analysis of participants' profile in the recent annual conference in Dakar reveals that the attendance of these groups at the conference and their general involvement in GDN activities have significantly increased in the last two years.

Lesson Three: Adequate Funding

Ultimately, capacity building revolves to a large extent around the availability and use of funds. The issue of underfunding for social science policy-oriented research was apparent during the 1999 survey that preceded GDN's launch. "Funds for research" has been among the top two most urgent needs expressed by respondents to the surveys conducted in Cairo (2003) and Dakar (2005). GDN now has the administrative

mechanism and the menu of programs to serve the community of researchers in the developing world, but none of the network's objectives can be reached in the absence of adequate levels of funding.

Lesson Four: Policy Impact Is Key

The last pertinent lesson arising from GDN's experience with capacity building has been that policy impact is the goal most difficult to reach, yet crucial in importance, if contributing to economic development and poverty reduction are the ultimate aims of our work. In short, translating research into policy remains the biggest weakness and greatest need at the same time. GDN has placed the research-policy nexus at the top of its agenda and taken steps to address it. The *Bridging Research and Policy* global project and the more recent *Multidisciplinary and Intermediation Research Initiative*, which both include practical training workshops for all stakeholders, should take us some distance in narrowing the gap between the two communities of researchers and policy makers. GDN will continue to pursue this challenging goal by encouraging, and in some cases requiring, authors funded by GDN to submit nontechnical policy briefs, to network with policy makers in their countries, and to participate proactively in the process. Capacity building will indeed have the greatest impact if it ultimately translates into pro-growth and anti-poverty policies in the developing and transition economies.

Notes

1. For descriptions of GDN's early history, see Stone 2001 and Clark and Squire 2004.
2. One can safely infer that these numbers have considerably increased in the last five years, thereby enhancing the relevance and appropriateness of online services for the research community.
3. Independent evaluation of the RRCs (Regional Research Competitions) was conducted by Barbara Craig (Oberlin College, Oberlin, Ohio, United States) and Fernando Loayza (Servicios Ambientales, La Paz, Bolivia) in May-December 2001.
4. The respondents rated their needs and value of GDN's activities on the five-point Likert scale, where 1 stood for "not urgent/valuable" and 5 indicated "extremely urgent/valuable."

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The Experience of AERC in Research, Capacity Building, and the Development of Collaborative Training Programs

William Lyakurwa

African governments face the task of making informed policy choices with limited resources. To be effective, policy makers require both accurate information and the skills to apply it properly. The African Economic Research Consortium (AERC) was established in 1988 to enhance the capacity of locally based researchers to conduct policy-relevant economic inquiry, to promote the retention of such capacity, and to encourage the application of the capacity in the policy context. The approach involves three primary strategies: building capacity, contributing to knowledge, and informing policy. The key challenge is to build a network of individuals and institutions capable of tackling Africa's current problems, ultimately helping to raise its people out of poverty. The networking concept is particularly important to AERC because of its unique contribution to strengthening the economics profession in the continent. "Products" of the AERC process—the people in the network—are found in policy institutions and universities across Africa.

AERC is well regarded for its responsiveness to local conditions through its two interlinked program components: building capacity through learning by doing research and facilitating postgraduate training in economics. As suggested in external evaluations, a particular aspect of AERC's success is the esprit de corps it generates. This is evident in AERC's thematic research, which is driven by a peer review mechanism, and in the unique Joint Facility for Electives of the collaborative graduate programs. By bringing together professionals from across the continent these two activities can be considered to be among the first steps toward building a bona fide "African union."

A second critical impact has been the retention of good professionals in the region through attention to process, confidence in local expertise, and use of material and professional incentives to build the profession. A management philosophy that *authority is conferred while leadership is earned* enhances responsiveness to the network of funders, researchers, and policy makers.

This paper outlines the African Economic Research Consortium (AERC) experience in the design and implementation of an effective network for building human and institutional capacity in Africa. It should be stated at the outset that AERC intervention is limited primarily to addressing capacity building for economic policy research and graduate training in economics. The lessons learned are important, however, and perhaps this conference could look at these lessons with a view to replicating them in other areas and disciplines.

AERC's vision is of sustained development in sub-Saharan Africa, grounded in sound economic management and facilitated by well-trained, locally based professional economists.

African governments are faced with the task of making policy choices while facing limited resources. Policy makers have to make informed decisions on the basis of the sometimes conflicting flows of information from the electorate, the research community, and other sectors of the economy. To do their job effectively, they require both accurate information and the skills with which to apply it properly. AERC was established in 1988 as a public not-for-profit organization with the specific intention of developing both the information and the skills. Its purpose then and now is to advance economic policy research and training. The consortium's mandate is threefold: to enhance the capacity of locally based researchers to conduct policy-relevant economic inquiry, to promote the retention of such capacity, and to encourage its application in the policy context.

AERC's track record as a successful capacity-building endeavor was not achieved without overcoming a number of challenges along the way. Among the major puzzles is how to retain the built capacity in Africa and in African institutions for its effective involvement in both policy analysis and advice, as well as for its cascade effect whereby those people and institutions that AERC develops go on to build other capacities and thus attain a critical mass of individual researchers and institutions. If the built capacity is retained in African institutions, the next challenge is to identify the channels through which that capacity communicates to policy makers, in what we call transferring the results of research and training to policy making.

Moreover, to keep this capacity alive and active, there have to be ways to create an appropriate incentive system so that research can thrive. In sum, the task is nothing less than trying to build a network of individuals and institutions capable of tackling Africa's current problems and ultimately getting the majority of African people out of poverty. From our experience, several interesting aspects can be emphasized that keep the network alive. These derive from the interrelationship of the consortium's mission and its structure.

The mission of AERC rests on two premises. The first is that development is more likely to occur where there is sound, sustained management of the economy; the second is that such management is more likely to happen where there exists an active, well-informed group of locally based professional economists. AERC is well regarded

within the research community for its effective support of research by African economists, as it is seen to combine responsiveness to local conditions and building a community of professional economists with programmatic integrity and demonstrated prudence in resource management. Furthermore, the networks of African economists and institutions formed through its research and training programs have facilitated or spun off other useful initiatives. Among these have been the revival of national and regional professional associations and the encouragement of various research activities outside the consortium.

The organizational structure was deliberately designed to foster both the independence of the research agenda and the transparency and accountability of resource management. The structure is composed of three interlinked but independent organs: the Board of Directors, the Programme Committee, and the Secretariat. The board of directors, appointed by consortium members, approves policy directions, multi-year strategies, and annual programs of work and budget. The role of the program committee is to set the agenda and the goals of the research and training programs as well as to monitor and evaluate the programs. A small secretariat, based in Nairobi, Kenya, and headed by an executive director, manages the consortium's activities. The separation of powers of these organs, governed by the consortium's bylaws, has built a credible three-pronged structure that allows for the ownership of AERC's activities by the network of local researchers, an independent determination of the research agenda, and a program of activities that responds to local needs even as it ensures accountability to funders.

The three governing bodies support an organizational focus and network of institutions and researchers on a clearly defined mission and objective. A management philosophy that *authority is conferred while leadership is earned* enhances responsiveness to the network of funders, researchers, and policy makers. A value-for-money culture guides resource management, and the use of performance management guides program implementation.

The presence of and continuous pursuance of innovative topical issues for research maintains the research relevance to policy applications and enhances the visibility of the network. This is particularly evident in AERC's thematic research, which is driven by a peer review mechanism (and peer pressure), thereby enhancing the quality, delivery, and strength of research networking. Research networking is a key motivator, and it is also self-reinforcing, as the act of sharing research and training outputs at either the national level or across countries strengthens the desire for networking and sharing experiences. This is often considered to be among the first steps toward building a bona fide "African union" as AERC builds a community of professionals with common ideals and objectives and a strong incentive for networking.

The use of information and communications technologies (ICT) in implementing AERC's programs has grown hand in hand with the tremendous explosion of ICT worldwide. A key feature of the consortium's communications strategy is the expanded use of the AERC Web site as a dissemination tool. Besides giving the AERC network a higher profile worldwide, the Web site also serves as a channel for disseminating the products of AERC research. At present, there are over 240 AERC

publications available online, and more will continue to be uploaded for the greater ease of researchers, students, and economists worldwide.

Although the foregoing information may seem general, it offers important lessons for trying to understand how capacity building has succeeded in some instances and generally failed in several other cases in Africa. Perhaps we have less successful networks in Africa because of poor design and weak implementation, coupled with a number of prohibitive factors. A few of these prohibitive factors can be listed as a weak human and financial resource base, and the frequency of civil strife. Perhaps most commonly in Africa, there has been lack of policy receptivity, although this aspect has changed in the recent past.

This paper first presents an overview of the AERC research and training programs, then zeroes in on the details of the training component. It subsequently summarizes the experiences and challenges of the implementation of the programs, and briefly considers their impact. A glimpse into the future contemplates what the consortium will look like in five years, while the conclusion ties the pieces together.

The AERC Programs: Focus on Capacity Building

Donor governments, private foundations, and African and international organizations support the AERC capacity-building program, which has two primary components: research and postgraduate training in economics. These are described briefly in the following sections.

Building Capacity through Research

The Research Programme was the original *raison d'être* of AERC. The key elements of the research strategy are threefold. The first is to offer small grants to groups of individuals drawn from both academia and policy institutions to conduct research on topics within designated themes. The second is to establish a support system for research in the form of peer review, access to literature, and methodology workshops that aim to sharpen research skills and expose the network to relevant methodological developments. The third is to monitor and provide a peer review mechanism afforded by biannual research workshops at which research proposals and results are presented.

Within that framework, the program has four principal objectives:

- To build a credible local capacity for policy-oriented research
- To generate research results for use by policy analysts and policy makers
- To promote links between research and policy
- To encourage retention of high quality researchers

With a strong emphasis on quality and policy relevance, the program is carried out in two major ways: thematic research and collaborative research. The bulk of AERC's research support is for thematic studies undertaken by informally constituted teams with members generally drawn from academia and the policy commu-

AERC Research Themes

- Poverty, income distribution, and labor market issues
- Macroeconomic policies, investment, and growth
- Finance and micro/sectoral issues
- Trade, regional integration, and political economy

nity on the continent. Collaborative research, for its part, teams up African researchers and their counterparts in other parts of the world for research on a mutually agreed upon topic. Collaborative research has helped to sustain interest in African research outside the region, to build the competence of both African and non-African researchers through interaction, and to create self-sustaining arrangements for financing research outside of AERC.

Dissemination of the results of AERC-supported research has been targeted toward decision makers within African governments as well as toward professional economists and academics within Africa and in the diaspora. The results of all AERC thematic research, once they have been reviewed and approved by anonymous external assessors, are published as AERC Research Papers. To date, 148 Research Papers and numerous collaborative and other studies have been published and disseminated. Abstracts of Research Papers aid cataloguing by libraries, while nontechnical executive summaries—also translated into French—are targeted for use by policy makers. Studies emanating from collaborative research projects, which are more extensive, are often published in joint ventures with eminent academic presses.

AERC's thematic research cycle encompasses a number of actions, from the receipt of a proposal to the dissemination of results in various formats to professional economists, policy makers, and the informed public. Most promising research proposals are received from individual researchers, who are encouraged to find partners to ensure continuity, facilitate the involvement of younger scholars, and broaden the range of research skills and subspecialties. Where possible, academic economists are encouraged to involve professionals working for public agencies and the private sector, who may introduce different perspectives, facilitate access to data, dispel sensitivities concerning research motives, and—most importantly—offer a channel for introducing the results into the policy process. Although informal and not applied rigorously to all proposals, these guidelines are reflected in the composition of the resulting research teams of two to four economists: about a third of all AERC-supported research has involved at least one nonacademic professional economist.

The biannual research workshops, which consider work in progress and final reports as well as the initial proposals, lie at the heart of the thematic research process. These workshops foster and facilitate peer review—a process essential to the continued growth of any profession—in a region where such conditions do not exist in any single location or institution. Although the process is elaborate and total costs are significant, the workshops have proven very effective in facilitating access to a variety of resource persons and materials.

From a single session involving all researchers at the consortium's inception, the workshops have expanded to four concurrent sessions held over a four-day period. To elicit active participation by francophone economists, all four sessions offer simultaneous interpretation as well as the translation of plenary papers and abstracts in both English and French. The workshops are preceded by a one-day plenary meeting to consider commissioned studies of broader interest. The growth of the workshops reflects not only an increase in the number of presentations, but an intensification of effort along subthematic lines. A recent meeting, held in Nairobi in December 2004, featured 59 presentations of proposed research, work in progress, and final reports.

The workshops represent a major logistical effort. The December 2004 gathering involved 89 researchers among the 150 participants from sub-Saharan Africa and the rest of the world. It was the largest biannual research workshop ever convened by AERC. The secretariat staff successfully coordinated travel, insurance, accommodation, catering, interpretation, and photocopying requirements. Provision of documents, for example, entailed the production and timely distribution of 125 copies of over 50 papers of approximately 40 pages each. Smooth management of the workshop, usually interspersed with other smaller gatherings, and followed immediately by a meeting of the Programme Committee, is possible only with highly trained and dedicated staff.

In effect, most other AERC work must be put on hold for the fortnight preceding the workshop, the period of the workshop itself, and the week immediately following it. This high opportunity cost can be justified in terms of its benefits, namely a tangible improvement in the quality and relevance of economic research in a region characterized by wide variations in experience and skills. The format of four concurrent sessions over four days thus probably represents the upper limit on the size and duration of the biannual meetings and hence on the overall number of thematic grants that can be supported at any given time.

Significant efficiency gains were noted in an evaluation of the research program conducted in 2004. These included streamlining the research process, with a marked reduction in the review lag for proposals from 8 months in 1997 to 6.2 months in 2002, and for final reports from more than 19 months to 4.4 months over the same period. The overall cost of biannual research workshops, AERC's biggest event, was found to have dropped significantly—by about 25 percent—in the period 1997 to 2004 (Wuyts 2004).

The strategic focus on maximizing electronic communication to disseminate research products was heightened as AERC formally launched its revamped and relocated Web site during the May 2004 Biannual Research Workshop. The Web site has

"The thematic research programme has shown itself to be very effective in imparting technical competence to junior researchers."

Source: Wuyts (2004, 51)

been lauded for its accessibility, attested to by a total of 1.4 million “hits” or visits registered during 2004–5, translating to a monthly average of 118,000 hits. The Web site currently boasts a wide variety of AERC publications, announcements of events, and—most importantly—the availability online of research papers and other studies, which will in the long run reduce printing and publication costs significantly.

Building Capacity through Postgraduate Training

As the AERC Research Programme matured, it was evident that there were comparatively few qualified African professionals capable of undertaking rigorous, original research in economics. With the exception of Nigeria, in most countries represented in AERC’s group of researchers, there were fewer than ten—frequently fewer than five—professionals able to participate meaningfully in thematic research. Indeed, it was this sobering observation that prompted the Advisory Committee (now renamed the Programme Committee) to recommend a study of graduate training in economics for Africans. This study concluded that a sound master’s degree program comprises the essential foundation for the doctoral-level training of the next generation of researchers.

For African and external agencies anxious to strengthen economic management through research and training in economics, AERC now constitutes a proven mechanism that can use externally sourced funds in a very cost-effective manner and yet remain attuned to the needs of local professionals and academic institutions. The paucity of such agencies, in particular those with a regional mandate, became apparent to AERC itself in 1993 when it looked—without success—for an agency that might implement a collaborative MA training program on behalf of 17 public universities in 13 anglophone African countries.

It should be noted, however, that direct involvement in training was not envisaged when AERC was established in mid 1988. Support for a study of graduate training in economics was prompted by the observation that the number of qualified researchers in economics was small and possibly dropping because of the problems affecting systems of higher education in the region as well as the absence of high-quality MA degree programs.

AERC essentially played a catalytic role, facilitating a process whereby qualified and committed African professionals studied the issue, debated possible solutions, devised operational plans, and mobilized the requisite financial and human resources. This process resulted in the establishment of the Collaborative Master’s Programme for Anglophone Africa (CMAP). The decision to assume responsibility for the implementation of CMAP during an initial three- to five-year phase was made only after considerable deliberation. It was observed at the time that the absence of a suitable mechanism was not sufficient reason for transferring various responsibilities to AERC if it was not equipped to carry them out, and that it might have in the process destroyed what had been built. Nevertheless, no other option was available and AERC took charge.

It is today a credit to AERC that CMAP is run in 21 universities from 17 countries that collaborate to offer a high-quality master’s degree in economics. The pro-

gram has also led to the commencement in 2002 of a doctoral program, the Collaborative PhD Programme (CPP), based on the CMAP model. With CMAP and CPP in place, some employers, particularly central banks and university departments of economics, no longer see a need to send staff abroad to obtain postgraduate training in economics, as the CMAP programs are significantly cheaper and more attuned to local realities than those offered by overseas universities.

The experience of AERC's research process is reflected, albeit often subtly and indirectly, in the design of these two collaborative training programs. Both are locally driven and designed to strengthen the participating economics departments, rather than to remove and consolidate the programs within a few self-styled "centers of excellence." Process rather than procedure is emphasized. Less stress is placed on departments meeting various criteria for offering their degree under the program than on maintaining their status through continuous monitoring of their students' performance. The programs are also sensitive to the material and professional needs of individual academics. They offer selective material support through the engagement of guest lecturers, thesis supervisors, external examiners, and the like. Of greater importance are the professional incentives deliberately built into the programs in order to motivate and retain highly qualified staff. Among these are opportunities to develop curricula, to help teach one's subspecialty, to supervise thesis research, and to prepare instructional materials. AERC's catalytic role is also reflected in the peer review function, in this case through the respective academic boards that monitor the performance of the departments offering the degree.

How the Collaborative Training Programs Work

Several studies on postgraduate education in economics—among them Fine (1992, 1997), Fine and others (1994), and Ajayi and others (1995)—arrived at two major conclusions. The first was that graduate education in economics in sub-Saharan Africa had systemically collapsed from the impact of a combination of factors and was thereby unable to provide a steady throughput of well-trained professionals. The second was that AERC's strategic response should be the establishment of, initially, a rigorous master's-level program, and later a PhD program, to create and enforce a transparent set of standards by which African university departments of economics could reform their undergraduate courses.

The Collaborative Master's Degree Programme for Anglophone Africa

CMAP was and is designed to strengthen the MA programs of universities in sub-Saharan Africa. It was envisaged that collaboration among these programs would entail the more intensive use of then-existing ties such as external examinations, and foster new ones such as the joint teaching of elective subjects. Aside from encouraging a more efficient use of resources, in particular qualified teaching staff, the aim of CMAP was a structured exchange of people, ideas, materials, and methods that would

reduce professional isolation and stimulate a continued improvement in quality. These goals have by and large been achieved, as evaluations and review reports of the program attest.

Of the 21 universities participating in CMAP, 7 are classified as category B. They participate in all aspects of the program: curriculum development, staff exchanges, external examinations, and representation in the program's governing body, the academic board, and its various committees. These 7 universities offer their own degrees under the collaborative program. The other 14 universities are classified as category A. They send their students to the category B institutions for MA studies. The academic board, drawn from all participating universities (A and B), is largely responsible for the academic substance of the program. AERC facilitates curriculum development and joint enforcement of standards. Key elements of AERC assistance to the universities are the building of capacity of the departments, support for library and computer facilities, and the enormously successful Joint Facility for Electives (JFE).

CMAP Universities

Category B

University of Addis Ababa
 University of Botswana
 University of Dar es Salaam
 University of Ghana
 University of Malawi
 University of Nairobi
 University of Zimbabwe

Category A

University of Cape Coast, Ghana
 Kwame Nkrumah University of Science and Technology, Ghana
 University of Sierra Leone
 Makerere University, Uganda
 Egerton University, Kenya
 Moi University, Kenya
 Kenyatta University, Kenya
 University of Swaziland
 University of Namibia
 National University of Lesotho
 University of Zambia
 Eduardo Mondlane University, Mozambique
 University of Mauritius
 University of Liberia

Source: AERC.

“Participation in the CMAP has been a very positive experience for the alumni for most of whom the experience is simply transformational. Going through the CMAP opens opportunities for moving up the professional ladder and aligning the alumni with more rewarding professional tracks. The programme prepares them well for the job market, and alumni employers confirm they are competitive.”

Source: Kimuyu (2003).

The program itself comprises three components to be completed over an 18–24 month period. The first consists of core courses in microeconomics, macroeconomics, and quantitative methods, which are taught between September and June at the university awarding the degree. The students thereafter undertake elective courses that are taught on an intensive basis at a common facility (the JFE) between July and September annually. The final stage involves thesis research, which is conducted at the university offering the degree during the second year. The success of CMAP has demonstrated that an interuniversity program can work very well and give students a solid grounding in advanced theory and methods, exposure to a number of field areas, and some experience in independent and original research.

More than 1,200 MAs have graduated from CMAP, which has become established as a quality degree, with employers identifying it as a recognized product in the market. The program has expanded its outreach from the initial 17 universities to 21, with country representation increasing from 13 to 17. Student enrollment also grew from 58 in 1993 to more than 140 in 2004. The additional four universities thus increased the spread of countries and improved the participation of students from underrepresented areas. Of particular interest was the first-time participation of two previously underrepresented countries in the network, Sudan and the Democratic Republic of Congo, in the 2004 Joint Facility for Electives.

Women represented 19.5 percent of the CMAP enrollment in the period 2000–4 and 25 percent of CPP students during 2002–4. Though encouraging, these figures fluctuate annually as a result of a variety of factors beyond the consortium’s control.

The consortium maintains close links with collaborative master’s programs in Nigeria (under the umbrella of the Foundation for Economics Education, or FEE) and in francophone Africa (run by the Programme de Troisième Cycle Inter-universitaire, or PTCI). Of note is that these initiatives also stemmed from the AERC research into graduate training in the continent. The francophone program is modeled on the anglophone program, the only difference being the language of instruction.

The Collaborative PhD Programme in Economics for Sub-Saharan Africa

AERC has since its inception supported PhD thesis research to speed up the completion of doctoral studies and has been providing fellowships for doctoral studies abroad since 1993. The Collaborative PhD Programme (CPP), launched in December 2002,

was therefore a natural progression in further strengthening teaching and research capacity in sub-Saharan Africa. The CPP aims at building individual capacities in Africa through the production of high-caliber, marketable PhD degree-holders with advanced analytical skills. The program also targets the building of institutional capacities through staff development, improvement of facilities and equipment, and enhanced networking.

Even as CMAP was launched in 1993, AERC convened an international conference in the same year to discuss the need for and possible modalities for the training of African economists at the doctoral level. The conference noted the marked decline in external support and opportunities for doctoral training in Africa, both of which left large gaps for qualified staff and hindered the development of capacity for research and analysis of economic issues. Most importantly, there was a notable disjuncture between the quality and relevance of existing doctoral training and the more specific needs for skills and contextual relevance of such training in Africa.

Further, a study commissioned by the secretariat in 1995 revealed an output of 15 doctoral graduates from local and overseas universities, in contrast to a demand for over 160 PhDs annually. Local universities produced graduates of relatively inferior quality as a result of the absence of structured course work and poor thesis supervision. Overseas doctoral training, while of higher quality, was not consistent with local needs and did not deal with Africa-specific issues. The study recommended a model for PhD training in Africa akin to the model pursued at the master's level.

A feasibility study on a regional collaborative doctoral program in 1997 reconfirmed the demand and need for such a program, and more importantly the necessary support and will among African academic institutions and staff to run such a program. A review of existing collaborative models in Central and Eastern Europe and the Nordic countries was undertaken to construct an Africa-specific model that would address the main deficiencies of African universities while taking into account African imperatives. The review was conducted in the context of preparing an operational plan for a collaborative PhD program for sub-Saharan Africa modeled on the CMAP experience. The operational plan recommended a course work-based program with thesis preparation rooted in the AERC workshop modality and drawing on African empirical realities.

Deciding that four regionally based centers would alleviate professional isolation and form a basis for enhancing integration, AERC launched the Collaborative PhD Programme (CPP) in 2002 at four host universities: the University of Cape Town, the University of Dar es Salaam, the University of Yaoundé II, and the University of Ibadan. Four other participating institutions, the universities of Cocody, Nairobi, Benin (Nigeria), and Witwatersrand also award degrees in the program.

"AERC's training at masters and PhD levels is making significant contribution to development policy in Africa. Many policy ideas are now available in the continent on account of the programmes and the capacity for continued generation and application of policy ideas continues to grow with every graduating cohort."

Source: Kimuyu (2003).

The PhD program is designed as a four-year course and is expected to produce at least 400 high-caliber PhD holders over its projected 15-year life span. The innovative nature of the program lies in its combination of course work and thesis preparation and defense, with the teaching of electives at a common facility and periodic workshops that bring all the students from the universities together for experiential learning. The program thereby complements and enhances, rather than substitutes for, existing doctoral programs. The CPP academic board enforces quality control.

In line with the CMAP model, the four-month JFE residential training for second-year students brings together a high concentration of eminent economists to provide a broader scope of electives and research materials than would be available at any single university. The facility enables access to a wide range of lecturers from all over the world with diverse experiences and competencies, providing high-quality instruction. The high caliber of the CPP students was manifested in the results of the 2004 African Development Bank Essay Competition, which awarded the top prize to a CPP student, Mr. Sheshangai Kaniki, a Tanzanian national at the University of Cape Town.

Currently 70 students are participating in the CPP. It is noteworthy that the program design forecast a total of 32 students in the first two years of the CPP, thus demand for the program has resulted in student admissions that have far surpassed this target. The 70 students span 18 nationalities, with 22 from eastern Africa, 15 from anglophone western Africa, 18 from francophone Africa, and 15 from southern Africa. Sixty-one of the students are fully sponsored by AERC; one has a partial sponsorship, and nine are privately sponsored.

CPP students are required to present work related to their theses at three workshops: one to review thesis proposals (the PhD thesis proposal workshop), one to review work in progress, and another to review draft theses. Each workshop is attended by the students, their supervisors, and resource persons in various areas. The inaugural PhD thesis proposal workshop was held in Nairobi in December 2004, immediately after the AERC biannual research workshop. The 18 pioneer students presented their proposals in the presence of their thesis supervisors, resource persons, and AERC researchers. Not only did the students gain from comments by the supervisors and resource persons on their presentations, but they also benefited from the researchers and other participants at the biannual research workshop. At the workshop, the synergy between the research network and support for graduate training was evident. The enthusiasm of the students as they looked forward to joining the network as researchers was evident from their expressions and those of their supervisors (one of whom said, "I wish I had the opportunity to go through this myself!").

As the training program matures, synergies are growing between it and the research program, and between the CPP and CMAP. The 2004 JFE accommodated students from both training programs for the first time, bringing together 131 CMAP and 25 CPP students, along with a combined teaching team of about 40 lecturers. The training facility was reserved for exclusive use by the students, providing a favorable atmosphere for maximum concentration, synergy, and collegiality between master's and doctoral students. The combined group is perhaps the best concentration of

graduate training in economics in SSA today, and significant savings are expected in the convening of joint CMAP and CPP activities.

Experiences in Implementation

Capacity building through learning by doing research and graduate training were innovative ventures when AERC embarked on them back in 1988. That innovation has grown and matured in response to the challenges of a changing environment and in anticipation of change. One outcome has been a body of economists with the capability to undertake research that has international recognition. In addition, through its support for graduate training in economics, AERC has created a cadre of economists who are capable of training future economists, who in turn can contribute effectively to policy debate in the continent. These and other results of the AERC experience are delineated below.

A Growing Pool of Able Researchers

To date (2005), AERC has supported more than 450 thematic research projects involving over 1,000 researchers. The number of participating researchers has grown from 40 in 1988 to some 60–80 per year, while the number of participants at biannual research workshops has increased from 60 in 1988 to over 150 at the present. The geographic coverage expanded from 7 countries to the current 21 involving three linguistic groups—anglophone, francophone, and lusophone. More than 150 researchers have participated in technical workshops in the last five years, on topics including time series econometrics, survey methodology, economic modeling, and methodologies for poverty analysis. Top scholars in their respective fields are engaged to run these workshops, which are another means AERC uses to build research capacity.

Of great significance has been the impact of thematic research on the quality and relevance of AERC-supported research. Peer pressure, expressed by accolades or opprobrium, has proven extremely effective in stimulating good research and its timely presentation. This pressure has allowed the research director to devote proportionately more time to weaker but promising professionals, and to provide strategic leadership to the group as a whole. Objectivity in reviewing proposals is ensured without a competition or recourse to a committee that must necessarily operate at arm's length from the community of researchers. An evaluation of the AERC Research Programme in 2004 cited as one of the most noticeable and commendable achievements of AERC its ability to create a network—or, better still, a community—of African economic researchers across the continent, including across the language divide.

The biannual research workshops are characterized by an atmosphere of professional camaraderie, where work is assessed primarily in terms of the potential of the researchers. This situation provides considerable latitude for gradually raising norms for performance in line with improvements in researchers' knowledge, skills, and self-

“Thematic Research participants enumerated a number of direct benefits, including their personal advancement in conducting research and the value of interacting with economists from other African countries and beyond. Increased self-confidence and improved presentation skills were also listed.”

Source: Hassan and Rempel (2004, 3).

confidence. Francophone economists are well catered to through simultaneous interpretation and translation of plenary papers and abstracts in both French and English. The equivalent of 40 new grants per year are currently handled by one research grants administrator. Substantive monitoring occurs in a transparent manner through the presentation of an interim and then a final report at predetermined, six-month intervals.

Nonetheless, most attention has been directed toward what may be termed “professional” incentives, including opportunities to engage in intellectually attractive research, to interact regularly with peers, and to publish research results in appropriate scientific formats. The generally positive assessment of AERC’s activities, in terms of both their cost-effectiveness and their contribution to the profession’s stature and morale in the region, have inevitably aroused interest in an expanded thematic coverage within economics and, more generally, the applicability of the approach to other disciplines and policy issues.

Contributions to International Issues

The advent of greater political pluralism has led to growing responsibility on the part of local professionals to inform discussions on economic issues conducted by other groups within civil society, including parliamentarians, women, trade unions, chambers of commerce, and professional associations. This trend suggests an emerging role for AERC in facilitating effective communication by local researchers of their findings to these groups as well as to decision makers in government.

As a result of various research projects on global trading systems, AERC network members were well placed to contribute to the conference of African Trade Ministers in Abuja (September 2001), which deliberated on a set of common African positions for the 4th Ministerial Conference of the World Trade Organization (WTO) held in Doha in 2001. Similar workshops in Mauritius (October 2001, November 2001), in Oslo (June 2002), and in Geneva (September 2002) provided the opportunity to present and discuss some of the project results with African trade negotiators and policy makers. A set of five background papers was prepared to assist African countries to prepare for the 5th WTO Ministerial Conference in Cancun, Mexico, in September 2003. Dissemination workshops were held in seven countries to share the results of the research.

Similarly, it is no exaggeration to state that without the AERC Collaborative Research Project on Poverty, Income Distribution and Labour Markets (the Poverty

“Collaborative projects provide an important ‘outlet’ for senior and experienced researchers to become involved in policy-relevant quality research.”

Source: Wuyts (2004, 4)

Project), African countries would not—without significant external help—have been in a position to prepare the poverty reduction strategy papers increasingly required by the donor community. The project built an indigenous capacity to prepare these plans as it aimed to build general analytical capacity in poverty analysis in Africa. Among other collaborative research projects that address evolving policy are the projects on Managing the Transition to Less Aid Dependence in Sub-Saharan Africa, Africa and the World Trading System, African Imperatives in the New World Trade Order, and Explaining African Economic Growth Performance.

Policy Support

During the last five years policy makers themselves were directly targeted for capacity building through three short-term courses conducted in partnership with the World Bank Institute: Strategic Poverty Analysis, Basic Poverty Measurement and Diagnostics, and Advanced Poverty Analysis for Trainers. Participants were drawn from 16 countries in total and included policy analysts and government officers involved in the development of poverty reduction strategy papers in their respective countries. Some AERC researchers also took part, to nurture the research–policy nexus.

A particular feature of the research and training programs, rooted in a series of evaluations of AERC activities, has been enhanced outreach to policy makers and underrepresented groups. The aim is to sharpen the tools AERC uses for outreach and policy relevance in order to make them more valuable to policy makers and more accessible to the wider society. Among these tools are AERC Senior Policy Seminars, which provide a forum for the discussion of policy-oriented syntheses of AERC research and for obtaining feedback from policy makers on the AERC research agenda.

There have been seven such seminars to date: *Exchange Rates, Fiscal and Financial Policy* (Nairobi, Kenya, 1995); *Financial Sector Reform* (Abidjan, Côte d’Ivoire, 1996); *Fiscal Policy* (Accra, Ghana, 1997); *Revenue Mobilization in Sub-Saharan Africa* (Gaborone, Botswana, 2000); *Poverty Reduction and Macroeconomic Management in Africa* (Dar es Salaam, Tanzania, 2002); *Mobilization of Resources for Financing Pro-Poor Growth in Africa* (Kampala, Uganda, 2004); and *Growth, Poverty and Institutions* (Cape Town, South Africa, 2005). Typically, 25–40 African financial policy makers, researchers, and individuals from the private sector and academia participate, engaging in frank exchanges on the latest research findings, their application to individual country contexts, and the specific experiences of the different countries. It is significant that the last three seminars have related to poverty reduction, which is directly responsive to a policy issue that confronts the continent.

AERC-supported national economic policy workshops are also useful tools for promoting policy dialogue. In some countries these have become permanent annual national events and are largely self-financed. Internationally, the network increasingly serves as a sounding board for major policy considerations by the multilateral financial institutions—for example, the World Bank and International Monetary Fund (IMF), and more recently the United Kingdom's Commission for Africa. AERC researchers have to date been invited as witnesses to four hearings before the U.S. Congress on matters pertaining to African development and the operations of the international financial institutions affecting it.

Maintaining the Focus on Quality

AERC research and training programs are consistently lauded for the quality of their output as well as the effectiveness and efficiency of the process. CMAP, for example, is widely recognized for its high quality; and the program's history of very positive reports from external examiners and high-grade achievements in the courses formed part of the rationale for establishing the collaborative PhD program. The regional interaction among students and teachers at the JFE sets the stage for future collaboration not only among the participating universities but also—and perhaps more importantly—among future policy makers and policy-making institutions.

AERC is also building an electronic network among the universities participating in the collaborative PhD and MA programs. This is aimed at facilitating information sharing and improved access to world resource centers. It should almost go without saying that the impact of the AERC network of researchers and institutions depends crucially on the continued strengthening of its professional stature, the members' enhanced credibility with policy makers, and their active, professional involvement in their respective countries.

Proficient Management of Resources

The consortium has generally been successful in mobilizing resources. At its inception it raised an income of US\$1,126,279 during the 1988–9 financial year and expended US\$654,366 in the same year. For fiscal year 2004–5, AERC annual income had reached US\$10.5 million against an annual expenditure of US\$10.9 million (with the deficit financed by carryover funds). In a show of increasing confidence in AERC's activities, a number of donors increased funding over the 2000–5 strategic planning period, while the French government came on board as a new donor.

Implementation Challenges

We noted earlier that the success of the AERC program was not achieved without meeting—and to a large extent overcoming—a variety of challenges. Beyond the simple fact of how to go about setting up an effective network, the day-to-day chal-

lenges highlighted here include dissemination issues and the sustainable management of the training component.

Research and Dissemination Activities

AERC's intensive and highly specialized approach toward research inevitably limits thematic coverage as well as the overall number of projects and researchers that can be accommodated at any given time. An additional challenge is the coordination of external peer reviews of final thematic research papers, including requested revisions by the authors. Some authors fail to follow through to meet peer review requirements. A successfully completed research report may not necessarily be in a form suitable for publication in a journal or book. Therefore, the existing process is only partially successful in generating one aspect of the preferred outcome—an expanded publication record for network members in recognized journals.

Management of the Training Program

The program continues to face difficulties in attracting quality instructors for the JFE, given the opportunity cost for such individuals. This has been the case for CMAP for some time, but it is now especially true for CPP, because of its longer time spans and intensity. Some universities also face constraints in recruiting lecturers to teach core courses; such constraints are likely to persist until the program generates enough graduates to boost the teaching of the courses in future. The joint CMAP and CPP JFE sessions also presented a challenge in coordinating the different cohorts of students and diverse profiles of trainers. As the number of CPP students continues to grow, it is anticipated that the supervision of PhD theses will become difficult as well—particularly for subjects such as health economics and financial economics, in which there are not many senior academicians teaching and researching on the continent.

The demand for the CPP has thus far outstripped the supply of available scholarships from AERC, with more than 80 qualified students applying annually for the 21 scholarships AERC is able to provide for the whole continent. To target the best students with these limited resources, all the participating universities are required to advertise widely the availability of the scholarships and the stringent selection criteria. It is encouraging to report, however, that nine applicants—four in 2003 and five in 2004—successfully sourced for external funding and are thus able to participate in the CPP. Some universities in the region (Botswana, Makerere, and Malawi) and a number of organizations are also sponsoring students to the program, thereby alleviating some of the pressure.

Although the CPP thesis review workshops are a significant aspect of the synergy between training and research, holding them concurrently with the biannual research workshops as originally planned will prove to be a major challenge as the program matures because of the increasing numbers of students. There are now more than 70 students at various stages, which means that more than 70 supervisors and over 10 resource persons will be required at thesis workshops—eventually totalling nearly 200 participants, which is the equivalent of an entire biannual function. The PhD academic board and the secretariat are working to design the PhD thesis workshop

modality to maximize the synergy between training and research without overwhelming AERC resource persons and the biannual research workshop.

What Is the Impact?

Building capacity is only part of the equation—and perhaps the easier part at that. AERC’s mandate insists that, once built, the capacity must be retained in positions and areas that contribute to the economic management of the continent. That this is happening can be seen from a few selected examples.

Members of the AERC network occupy high-level positions in governments and regional bodies across sub-Saharan Africa. In Côte d’Ivoire, for example, the minister of finance, the permanent secretary in the ministry of finance, and the economic advisers to both the president and the prime minister are all products of the AERC system. So are the governors of the central banks of Nigeria and Kenya and the general manager of the Bank of Mozambique. Recognizing the quality, cost-effectiveness, and Africa relevance of AERC training programs, the Bank of Tanzania and the Bank of Uganda routinely send staff members to the Collaborative MA Programme and the Collaborative PhD Programme for studies rather than sending them abroad.

In Kenya, the chief economist and the permanent secretary in the ministry of finance are both AERC people; while in South Africa the same is true of the deputy director of budget in the ministry of finance, the economic adviser to the government of Kwazulu-Natal, and the director general of North West Province. The commissioner for economic affairs at the African Union is a member of the AERC network, and so are the director, Economic and Social Policy Division—who is a former AERC research director—and the senior economist at the United Nations Economic Commission for Africa.

Two AERC people are senior economists at the African Development Bank, another is the manager of the African Capacity Building Foundation’s new thrust on knowledge management, and still others—including a former AERC executive director and another former research director—occupy senior positions at the World Bank. The IMF has AERC network members, also including a former executive director, who are advisers to its African executive directors. In Mali, Cameroon, Kenya, Tanzania, Ethiopia, and Chad, AERC researchers have been leaders in the development of their respective countries’ poverty reduction strategy papers.

A number of other governments involve AERC senior researchers as advisers instead of bringing in personnel from outside. Indeed, the international financial institutions underwrite the salaries of some of these advisers, rather than imposing

“A majority of the research alumni in seven countries expressed confidence that their ideas and their research findings were becoming evident in policy documents and policy decisions in their respective countries.”

Source: Hassan and Rempel (2005, 39).

“Professors in universities and research institutes, directors of research in central banks, and other senior economists gave credit to their earlier thematic research involvement for setting them on a research career within the economics profession to their current positions.”

Source: Hassan and Rempel (2005, 3).

their own staff, which itself is a tribute to the quality AERC has helped to make available on the continent.

Capacity building is more than training, and AERC’s effort to build institutional capacity goes beyond training teachers. The training program helps to build a satisfying working environment with access to computers, the latest journals, and other amenities that were previously unknown on participating campuses. Many university departments of economics would in fact have collapsed without AERC support, but with that assistance and the culture of accountability engendered by the association with AERC, they have been able to attract resources from elsewhere that contribute to their sustainability and allow them to maintain an attractive professional milieu.

The AERC network stretches beyond the continent to reach members of the African diaspora wherever they are. Since the very beginning, it has been the policy of the consortium to seek out African scholars as resource persons to advise young researchers at the biannual research workshops and to participate on collaborative research projects. Members of the diaspora are routinely engaged as lecturers for both CMAP and CPP, as well as being engaged as external examiners, curriculum developers, and reviewers of AERC research reports.

AERC has thus contributed to a professional esprit de corps that did not exist before. The biannual research workshops, the Joint Facility for Electives, the Senior Policy Seminars, and other AERC activities bring economists together from across the continent to exchange views and explore common problems. Research grants available to network members afford the opportunity to make a contribution to knowledge and to share professional camaraderie. The training program challenges people to stay involved, providing opportunities in high-quality academic programs as lecturers, examiners, and curriculum developers. Over 98 percent of CMAP graduates, many of whom worked for policy-making bodies before their studies and returned to their posts afterward, remain in Africa; some who have gone abroad have mostly done so for PhD studies (before the advent of CPP), but only a few have remained overseas. As a result of participation in either the research or the training program, network members are distinguished by the quality that marks AERC, and thus have access to international consulting opportunities. In all these ways, the association with AERC means that participants are able to apply their expertise as economists—and to make a living doing so. This alone contributes to professional pride and independence.

Whether the product of AERC activities has yet reached the critical mass necessary for improved economic management is not yet clear. But it is certainly an impressive beginning, and the changes in countries across the continent indicate a

growing acknowledgment of the importance of sound economic expertise and research. In the coming strategic planning period, AERC will redouble its efforts to ensure the retention of built capacity and its involvement in the policy process in sub-Saharan Africa.

Future Directions

One mark of AERC's maturity is the implicit recognition in its strategic plan for 2005–10 that the consortium has moved beyond “phases” and has evolved into an institution. Over the coming period, it is expected that the pace of activities will be fine-tuned to meet the growing demand for AERC programs in a region that remains in dire need of well-trained, locally based professional economists to facilitate sound economic management. The consortium is poised to meet this challenge with a well-structured implementation strategy backed by a supportive board of directors and a continentwide network of experienced economists.

Continuity and Innovation

Building on past experiences, new approaches to AERC's traditional capacity-building activities have been adopted. The reorganization of thematic groups in the period 2005–10 will enable the research program to keep abreast of changing demands and anticipate policy needs—as well as to attract hitherto underrepresented groups, such as women. To enhance the currency of policy-relevant research as a framework for capacity building, the management of collaborative research projects will be revised with a view to providing more concrete contributions to policy debate. In line with steps to improve efficiency, the training program will revise the CMAP governing structure with a view to streamlining and enhancing the operations of this key element.

AERC will go a step further in the period 2005–10 with two new strategic directions aimed at engaging new frontiers in the rapidly changing environment. The first is an emphasis on institutional partnerships in response to the need to enhance greater application of research results in the policy context. The second is a recognition of the need to apply sound marketing principles to the consortium's operations in response to advances in ICT and the competitiveness of resource mobilization.

AERC's experience with building the capacity of individual researchers and of university departments of economics has clearly shown that the latter activity is one of the preconditions for the success of the former. This experience yielded the following strategic objective: fully incorporate economic policy research institutions and university departments of economics into the AERC network. This objective renews emphasis on enhanced support for and networking with national policy research institutes, university departments of economics, and government research institutes as vehicles for cooperative ventures during the period 2005–10. This concurs with the results of recent AERC studies that point to the critical role of institu-

2005–10 Strategic Objectives

- Scale up the development of African capacity to conduct policy relevant economic research in a rapidly changing environment
- Fully incorporate economic policy research institutions and university departments of economics into the AERC network through innovative partnerships and support
- Consolidate CPP and dovetail CMAP into it to enhance synergy between the research and training programs
- Foster recognition of “Brand AERC” in Africa and beyond

Source: AERC.

tions in economic growth. The objective will also, to a lesser extent, harmonize support for institutional activities, thereby reducing duplication and enhancing synergy between these institutions and the AERC.

Resource allocation worldwide is increasingly skewed to respond to geopolitical and security considerations, with a marked bias in recent times favoring Pan-African institutions. Leading foundations supporting development activities in Africa are much more engaged, sophisticated, and networked, thus increasing competition for resources and, by implication, increasing the need for greater awareness of AERC and its products. This need is implicit in the objective to foster recognition of brand AERC in Africa and beyond, which recognizes the importance of building on the consortium’s reputation for excellence, quality research, and graduate training as a resource mobilization tool. The objective will, more importantly, promote formal recognition of AERC and its products.

What Will AERC Look Like in 2010?

AERC is inspired by a long-term vision of a future in which all populations live in a state of dignity and well-being. In Africa, AERC anticipates that struggling economies will steadily progress toward breaking the bonds of poverty and low growth, assisted by the adoption of diverse, sound economic policies that are grounded in frontier research results.

In the short term, however, AERC will adopt a two-pronged approach toward the achievement of that vision—both the deepening and the broadening of its research and training programs. The network concept links individuals and institutions in a knowledge-sharing, experience-sharing framework, and it will remain the key strategic instrument for implementing AERC’s activities and creating professional esprit de corps.

In the period 2005–10, AERC research and training programs will be deepened: quality in all aspects will be significantly enhanced as the consortium consolidates the gains achieved since its inception and accelerates progress toward its goal of strengthening local capacity. The consortium, by 2010, will also have expanded the research and training programs to be broader in outreach and coverage in terms of

the linguistic and other divides that govern the African continent, thereby spanning more countries and featuring more-balanced gender participation.

Over these five years AERC will have awarded approximately 160 more thematic research grants to budding economic researchers, and supported 180 more senior researchers in other projects. The quality of research will become significantly higher, having continuously been enforced through the biannual research workshop and external review modalities. Enhanced quality of research implies that in the dissemination of research output, a larger number of final reports will find outlets in international journals. The tandem effect will be a higher caliber of researchers, renowned for their output, with a larger number of them posted to senior government positions or working with African governments and regional bodies. Many will continue growing in the AERC network, “graduating” to become resource persons and a few to become program committee members. The most visible impact will be that a majority of resource persons will be senior African researchers, a major achievement from the consortium’s initial operations that will naturally have a positive impact on the “African-ness” of research direction, thereby increasing the policy relevance of AERC research in providing unique solutions to the continent’s endemic economic problems.

The quality of training will be enhanced through the continued rigorous screening of students joining the collaborative graduate programs, particularly as demand trends continue to far outstrip allocated resources for the program. It is noteworthy that between 2005 and 2010, CMAP plans to have trained approximately 800 graduates. CPP, spanning the four regions of the continent, will, by 2010, have supported at least 100 graduates of the program and will have another 80 students in the pipeline, while a target of 60 graduates will have succeeded through support for PhD thesis research grants. This will directly and indirectly affect the quality of training for similar initiatives at the MA level in francophone countries, in South Africa, and in Nigeria that are based on the AERC concept, with the anticipated result that by 2010, the format of AERC collaborative graduate programs will have been adopted by the majority of universities in sub-Saharan Africa. A key anticipated outcome of these high-quality collaborative training programs is a rejuvenated culture of research in African universities, with enhanced linkages to policy research institutes.

Outreach activities, particularly on the African continent, will be accelerated in the short term for both research and training programs, with the expected end result of a larger number of policy makers participating in the AERC network, thus precipitating greater formal and informal interactions between researchers and policy makers. It is further anticipated that by 2010 the AERC Web site will be the preferred tool for access to and dissemination of information on economics, as well as for communication on developments in economic research and graduate training in Africa.

These outreach initiatives will have one major impact—a better-known AERC in the continent and beyond. The resulting benefit is a larger number of African economic researchers and policy makers being aware of and attracted to the consortium’s products and services. In 2010, it is expected that there will be heightened

interest and larger numbers of African policy makers contributing to the policy debate who will be better informed by research results.

The synergies between the research and training programs will be further strengthened as senior researchers and resource persons participate as teaching faculty in the CPP, thereby boosting the numbers of thesis supervisors, external examiners, and policy practitioners. The collaborative training programs will continue to produce first-class researchers, policy professionals, and academics, who will simultaneously participate in the research program activities.

The programs will in the period 2005–10 be supported by a keen, performance-based management team. Well before 2010, the team will be leading a coherent and professional workforce with clear lines of succession in place. The anticipated result, after years of careful nurturing and guidance, is a motivated, high-performance staff complement, with each member striving to achieve his or her fullest potential. Following management's focus on diversity and enhancement of resources in the period, a modest increase in African government and private sector contributions to the consortium is expected by 2010. The end result is a focus on supporting more under-represented countries in the network, with proportionately less support for the more amply endowed countries.

In the longer term, AERC, with its increasingly solid reputation as the premier economics research and training network in the region and possibly internationally, will evolve into the "think-net" for the African Union (AU) and the New Partnership for Africa's Development (NEPAD). It is additionally expected that the demand for AERC's products and services will, more and more, elicit greater demand internationally from multilateral institutions, which will in turn support AERC activities.

The global view of AERC in 2010 is of resolute, configured synergy between the consortium's research and training programs, with all outputs feeding into and supporting one another. With AERC's continued efforts toward its vision of the collective, concerted action of informed policy makers and researchers, it is expected that the full potential of Africa's resources will be harnessed to contribute to poverty eradication.

Conclusions

AERC's support for research as well as its huge involvement in graduate training comprise a significant contribution toward strengthening the economics profession in sub-Saharan Africa. As suggested in external evaluations of AERC, the most tangible indication of the consortium's impact has been the retention of good professionals in the region. Much of the evidence is anecdotal insofar as individuals have indicated that the AERC has played a significant role in inducing them to persist in teaching and research under very trying circumstances. Although the consortium itself can provide only limited financial support through token honorariums for research and prospective emoluments for various activities relating to graduate teaching under the CMAP and CPP, it facilitates access to other remunerative activities, in particular consultancies financed by local and external agencies.

“A proven track record in both capacity building and research provides AERC with credibility. Increasingly, this experience and reputation is being drawn upon, both within African countries and in international forums.”

Source: Hassan and Rempel (2005).

Assigning primacy to process requires an inductive and heuristic approach as opposed to the deductive and determinist thinking typifying recent attempts at “capacity building.” Estimating the volume of “output” is less important than setting in motion the processes needed to achieve it.

In the case of AERC, for example, the collaborative graduate programs are conditioned by one overwhelming fact: they are limited interventions that must somehow overcome constraints primarily systemic in origin. It is this basic consideration that has shaped these programs—specifically the efforts to exploit potential externalities and scale economies, to insulate the activity from political and economic vicissitudes, and to introduce and sustain pecuniary and professional incentives. Of lesser importance is the prior determination of quantitative targets, be they graduates or institutions. Such targets cannot be ascertained precisely and will undoubtedly change substantially over time. They are also less essential for a successful outcome than a clear grasp of the institutional topography that conditions the strategy and the processes the strategy sets in motion. Indeed, processes centering on peer review and the promotion of excellence will probably prove to be the program’s most durable and important outcome.

Attention to process, confidence in local professionals, and the use of material and professional incentives to foster institutional reform are key elements of the success of AERC’s approach to its three primary activities: building capacity, contributing to knowledge, and informing policy.

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The Economics Education and Research Consortium

Robert Campbell

The Economics Education and Research Consortium has conducted two programs aimed at building capacity in modern economics in the former Soviet Union. A two-year economics program in Kiev, Ukraine, taught in English—mostly by visiting faculty from abroad and using English-language texts—has graduated some 300 MAs with an education in modern economics. About 60 percent of the graduates of the program have gone directly to jobs in Ukraine; the others have gone abroad to further their education at the PHD level. The challenge now is to “Ukrainianize” the program, by shifting instruction to newly trained PhDs returning to Ukraine, and by transferring responsibility for administration and financing to local institutions and sources. This process is well under way, though serious challenges remain. The second program, based in Moscow, has supported the development of research skills and projects, first in Russia, then in other countries of the former Soviet Union as well. Some 400 persons have received support through participation in methodological and mentoring workshops and through grants for individual research projects. The next step for this program is to institutionalize it and to integrate its resources with those of other foci of excellence in economics in the Commonwealth of Independent States. To this end, it is evolving into a system providing networking and information and dissemination services for economic research in addition to research support. These programs, now in their 10th year, have earned a reputation for quality and have demonstrated that the model works. The paper describes some lessons learned in the process regarding the requisites for quality and some pitfalls to be avoided. It also offers suggestions for extending similar programs to new areas and to a broader clientele.

THE PURPOSE OF THIS PAPER IS TO DESCRIBE THE WORK OF THE ECONOMICS EDUCATION and RESEARCH CONSORTIUM (EERC) in building capacity for economics training and research in the former Soviet Union. It also summarizes some lessons learned about what does and does not work as we contemplate building on the base already created to achieve additional results and extend these capacity-building efforts to other institutions and countries.

Origins of EERC

EERC began in the mid 1990s as the result of extensive discussions among people at the World Bank and at the Eurasia Foundation about the need for improving economics education and research in Ukraine and Russia.¹ The proposed program responded to different needs in Russia and in Ukraine. Ukraine offered a virgin field for some form of improved economics education at the graduate level, but there was little in the way of resources there on which to base support of modern economic research. In Russia an economics MA program was already in operation in the form of the New Economic School (NES), which suggested a model for a similar program in Ukraine. And in fact many of the features of the EERC program in Ukraine were based on the NES model. But there was not in Russia any institution or program for incubating a modern research capability in economics. The EERC program thus envisaged an economics MA program in Ukraine and a program to stimulate economics research in Russia. I will review these two efforts in turn.

The MA Program: Ukraine

The long-range goal guiding the design of the MA program in Ukraine was “to create a new generation of economists for Ukraine.” It was well understood this would be a long process. The first step would be to establish a two-year MA program meeting international quality standards. It was envisaged that its graduates would follow two kinds of paths. Some would put their skills to work immediately in Ukraine, and some would go abroad to continue their study and earn PhDs. The program would assist in placing students going abroad for more advanced work, but—in addition to gaining admission to PhD programs abroad—these students had to win financing as well. The vision was that ultimately these newly trained economists would return to Ukraine, providing a skeleton resource base for a broader transformation of economics education and research.

The program began in 1996. It was financed by an international consortium of donors that originally included the Eurasia Foundation (with money ultimately from AID), George Soros’s Open Society Institute (OSI), the Starr Foundation, and the World Bank). Responsibility for managing the program was assigned to the Eurasia Foundation, reporting to a governing board representing the donors. Eurasia also established an international advisory board for the program with responsibility for overseeing its academic quality.² It was thought best to find a host university with which to partner rather than to try to set up a completely new institution. A team from EERC looked at several candidates, and in the end chose the National University of Kyiv Mohyla Academy (NaUKMA), a new postcommunist university that shared our goals of modern, internationally oriented education, and was prepared to provide some resources. Designing and administering the program was put in the hands of a resident director, and I was recruited for this job in the spring of 1996. I went on the payroll in May 1996, set out to design a curriculum, recruit administrative and teaching staff, buy textbooks, recruit the first cohort of students, and so on. It was a hurried process, but we were able to inaugurate the program in September of that year.

Having settled on NaUKMA as our partner institution, we negotiated an agreement with the university administration that, in retrospect, was quite foresighted. The agreement gave EERC the degree of freedom and control that permitted us to design a high-quality program. The university agreed to be responsible for obtaining certification and accreditation for the program from the Ukraine ministry of education. Such approval is important since it means our graduates receive state diplomas. An important provision was the university's agreement not to have a competing MA program of its own. It provided some resources in kind—that is, facilities for offices, classrooms, and dormitory space, and some faculty. From the beginning it provided significant input into the process of selecting students for the program, though the final choice remained in the hands of the EERC director.

The administrative structure of the program was as follows: the Eurasia Foundation was the overall manager, a resident academic director was responsible for managing the program and maintaining quality, overseen by an international advisory board, meeting semiannually. The director was assisted by a program assistant and several local staff persons for such functions as academic record keeping, accounting, admissions, public relations, computer and Internet facilities, the library, and so on. A person was designated by NaUKMA to serve as liaison between the program and the university.

The academic year, running from the beginning of September to the end of June, is divided into five 8-week miniterms. This arrangement allows for considerable flexibility in hiring and in curricular offerings. It has enabled us to take advantage of the differences in academic years in various countries in recruiting faculty. Some visitors have come for a single miniterm, others for longer periods. Many of them have been repeaters. Overall we have had gratifying success in finding excellent faculty, though we have had a few disappointments.

Since this conference is intended partly as a “how-to” report for new initiatives in areas where such programs are still to be established, it may be appropriate to provide more detail about nuts and bolts than might otherwise interest a casual reader. In setting up a more or less autonomous program it is necessary to take responsibility for many details that in a normal university would be taken care of by existing infrastructure, procedures, and traditions. A short checklist of the main considerations to be kept in mind may be useful.

The main ingredients for a successful program are

- talented students,
- an able faculty thoroughly conversant with their fields and committed to good teaching,
- quality and rigor in curriculum and instruction, and
- creation of an appropriate student culture.

Let me say something about each of these.

Students

With a very large pool of newly graduated BAs in Ukraine from which to draw we have found it easy to select good students. The size and quality of the applicant pool

has varied, but we have managed to recruit a very able group each year. A few drop out of each cohort before graduation, some for personal reasons, a relatively few for inadequate performance. The admissions process involves exams in English and Ukrainian languages, mathematics, and economics, plus an interview. In the beginning our main goal was to admit talented students with adequate English and math abilities. Many of these applicants had backgrounds in fields other than economics, but we concerned ourselves less with how much economics they knew than with their general “smarts.” As undergraduate economics education has improved in Ukraine, more of the applicants have an economics specialization, and the economics exam has become more important in the selection process.

Each year’s admission cohort was about 50 people. Since there is normally some attrition over the two-year period of the program, there are something under 100 students in residence. It is necessary to be about this large to keep the cost per graduate down. Operating the program with significantly fewer students would not be economical. This scale was also consistent with the size of our two markets—the pool of highly talented candidates we might attract to such a program, and the number of graduates we could expect to place in jobs that utilized their training.

We subsequently broadened the regional reach of the program to include Belarus, Moldova, and (beginning in 2004) the Caucasus. Applicants from these areas go through the regular admission process, including Ukrainian language exams, but have been given some assistance in meeting that requirement in the form of a two-week intensive preparatory course in Ukrainian, and some forbearance on the timetable for meeting the requirement. The preparatory course in Ukrainian is important not only for applicants from countries outside Ukraine, but also for those Ukrainians whose native language is Russian. The decision to include other countries was taken partly at the request of donors—the Swedish and Norwegian governments have provided special funding for this aspect of the program. Our experience with non-Ukrainians has been spotty. The Belarus students have generally performed excellently, the Moldovans somewhat less so. This year’s first-time experiment with students from the Caucasus has been disappointing.

Curriculum

Ours is a two-year program, taught in English, using international textbooks and literature. In the earlier years we provided students with the necessary textbooks and let them retain the texts for their personal use, but that decision is very expensive. As time has gone on, we have been less generous in this area, and have relied more on articles and other readings that we reproduce for students’ use. The first year of work consists of year-long sequences in the core subjects and skills—microeconomics, macroeconomics, statistics/econometrics, and mathematics for economists. Help in English has also been offered for those who require it. In the beginning the faculty consisted basically of visitors from abroad, though the course in mathematics for economists has been taught from the beginning by a NaUKMA faculty member using a standard English-language textbook.

The second year consists of more applied courses—in international trade, banking and finance, public finance, labor economics, and so on. We have added some electives and the possibility for a student to specialize to some extent. In the second year something like a quarter of each student's time is devoted to participation in a research workshop and the preparation of a thesis. At first the thesis requirement seemed to be a very daunting task. No graduate program in the United States that I know of would attempt to generate, supervise, and evaluate 40 or so MA theses each year with a staff of four full-time equivalent faculty. But after some experimentation we developed a system of workshops and a procedure for supervision that has worked out well. The quality of the theses has improved over time, and each year there are a few that the examiners consider publishable pieces of work. The thesis process has also become an important experience for helping students develop presentation skills.

Curriculum issues have been handed over increasingly to the faculty, which now has a curriculum committee working under the academic director.

Faculty

Until recently (see below regarding indigenization) most teaching was done by visiting faculty from abroad. Over the years we have had more than 50 visiting faculty members teaching in the program. They have come from 11 different countries, including Poland and Czechoslovakia, with the majority from the United States and Canada. They have come from a variety of backgrounds. There is a surprisingly large number of people who make a career of teaching abroad, but for the most part we sought visitors who held or had held regular appointments in universities and were active in the graduate programs of their institutions. This helps recreate the atmosphere of a university environment. Our goal has been to have at least some teachers from well-known institutions and with established reputations. But we always considered good teaching an indispensable requirement, and effectiveness of teaching was an important consideration in whether a person was invited back as a repeater. For the most part faculty members have found the experience very rewarding, and they especially appreciated the ability and enthusiasm of the students. On the whole they had no trouble putting up with the rather Spartan living conditions that were all we could offer in the first years. In offering advice to anyone starting a new program of this kind, however, I would emphasize that an adequate level of comfort in living accommodations is not to be neglected.

Culture and Standards

The effectiveness of the program depends importantly on developing a sense of identity for the students, a feeling that they are participating in a unique opportunity that deserves their best effort. In our experience, the students found the requirements of the program quite demanding—they had not previously experienced the degree of commitment and the rigor of standards to which we aspired.

In the climate of bribery for grades and admissions and rampant cheating that often exist in the local university world, special attention has to be given to creating a commitment to academic honesty. We established our own grading system (though it was reasonably assimilable to the system used in the host university) and set rules for continuing in the program in the form of a cumulative GPA. We have succeeded in maintaining this standard and have dropped students who did not meet it, though with some flexibility in the form of probation. The rules against plagiarism are carefully spelled out in the student code of conduct, and some students have been dropped for plagiarism. Maintaining normal standards of academic integrity in a society that is riddled with corruption in higher education is a question that any such effort as ours must face, and it has been a great help in maintaining those academic standards to have NaUKMA as a host that is adamant against corruption in admissions and grading.

From the beginning we have taken as one of our givens that the students must become members of the international community of economists. They need to be able to communicate in English, to be acquainted with world economics literature, to be in touch with the international community through the Internet, and so on. Having graduates of the program now studying abroad facilitates this sense of involvement, and our students and alumni form a close-knit community.

The program started off with virtually nothing in the way of a library. We had only a few computers to start with, essential for the statistics/econometrics courses, but no good Internet connection. Since then both the library and the computer facilities have been continuously improved. There are now plenty of computers and an excellent Internet connection. The Web is an essential complement or even substitute for library resources; and we have not made a particularly large investment in books and journals. A fast and reliable Internet connection is both a source for teaching and research material and a means for making our students feel themselves part of the worldwide economics community.

Ancillary Activities

In addition to their work in the classroom, we have sought to give most of our students some practical work experience in apprenticeships, and have placed them in a variety of such positions—in the private sector, often with foreign firms, in banks, some in government agencies, and some in parliament. It turned out to be quite difficult to find paid apprenticeships, and so program funds were used to provide stipends for some, and we have sought other sources for financing such stipends. The apprenticeship program serves several important purposes. It helps students form connections that may lead to employment on graduation, it showcases the skills of our students to the public, and at times it may lead to research topics that can become the subject of a thesis.

The program undertakes to assist our graduates both in finding jobs locally and in gaining admission to programs abroad. By now we have a good set of connections for finding jobs in the Ukrainian market, through alumni, apprenticeships, and so on.

We had wondered at one time if that market might not become saturated, but employer satisfaction with our graduates helps support it, and the overturn of the old system with the “orange revolution” seems certain to mean a general opening up of employment opportunities for people with the skills of our graduates, in both the private and public sectors.

Application to PhD programs at Western universities involves considerable expense—GRE exams, application fees, and so on, and we have helped finance those costs. The director and faculty members have made an intensive effort to counsel students about their best chances for getting accepted and have written innumerable supporting letters.

Another ancillary activity has been annual student research conferences. These are designed to showcase our own students, to engage with students from other institutions, and to give our students added incentives for professional development and practice in public presentations. The conferences have been very successful in all these dimensions. The students have come to show quite a professional degree of polish in making their presentations. Over the years we have been inviting more participants from other Commonwealth of Independent States (CIS) countries.

We have now finished nine years of the program. Over the first eight years we produced 262 graduates, and will add another 40 or so in June 2005.³ Of these about 40 percent have gone abroad to do further graduate work. They have generally been placed in top-quality institutions in North American and Western Europe, though it took us several years before we began to get them placed in the highest ranked (top 10) institutions. The rest are working in Ukraine, mostly in jobs that put to work the skills they learned in the program. Of those who went abroad about 10 have completed PhDs, and another large group will finish over the next couple of years. It is a source of pride to us and a measure of success that only three graduates have been dropped from their PhD programs for one reason or another.

To sum up, I believe it is fair to say that the proximate goals of creating a model program, establishing a reputation for quality, producing a cadre of students with good educations in modern economics, and demonstrating that our students can compete worldwide has been achieved. But with that work behind us, we are now seeking to move on toward the longer-range goals of the original vision. We want to entice back the new PhDs, to enlist them in teaching in our program and to disseminate modern concepts of economics and its teaching to other institutions in Ukraine as well. We want to see our new PhDs combining research with teaching in the traditional Western pattern. We want to see them assume the role of inculcating modern economics education and research in Ukraine that has up to now depended on outside initiative.

Indigenization

From the beginning the expectation was that responsibility for the MA program would ultimately be transferred to a Ukrainian institution. The donors did not envisage financing the MA program indefinitely, and hoped that it would sooner or later

become self-sustaining, with the responsibility for its continuance shifting to local institutions. At the inception of the program, however, we had no set timetable.

EERC has now begun the process of this shift in earnest. Ukrainianization has involved two steps: moving the administration of EERC from Washington to Kyiv and gradually transferring responsibility for its operation to Ukrainians.

Moving the administration of the program from Washington to Ukraine reduces costs, gives Ukrainian staff experience in administration, and helps overcome the impression that EERC is an alien institution. This move is now complete. EERC is now set up as a nonprofit U.S. corporation (EERC, Inc.), but its main embodiment is a representative office in Ukraine that administers the program. Though based in Kyiv, EERC, Inc. is also responsible for the EERC–Russia program. It has a board of trustees, whose members are William Maynes and Anders Aslund (co-chairs); Francois Bourguignon, World Bank; Vyacheslav Briukhovetsky, President of NaUKMA; Robert Campbell, Indiana University; Ulrich Hewer, World Bank; George Logush, Kraft Foods, Ukraine; Sten Luthman, Swedish government; Volodymyr Moronets, NaUKMA; William Newton-Smith, ISU; Victor Pinchuk; Lyn Squire, Global Development Network (GDN); and Yuriy Yekhanurov, prime minister of Ukraine.

Down the road, as indigenization proceeds and administration of the program shifts to NaUKMA, EERC, Inc. will probably be turned into a charitable foundation. At that point EERC's function will be to raise money for the program and to continue some degree of oversight though sharing a board of trustees with the new Kyiv School of Economics (see below). Choosing a form for incorporation is a tricky business that creators of new programs need to investigate thoroughly. It involves the specific laws of any given country, and is something that has to be carefully studied and negotiated in each specific instance.

From the beginning the expectation was that in time responsibility and control for the MA program would be fully transferred to NaUKMA, the host institution. It would have responsibility for all aspects of the program but would work closely with a rump EERC in whatever form we manage to incorporate it for purposes of fund-raising and oversight.

Though our explicit indigenization effort got underway only in the last couple of years, there has been some effort from the beginning to involve NaUKMA in the program. The mathematics-for-economists sequence of the first year program has been taught by Ukrainian faculty from NaUKMA from the beginning. We also used teachers from NaUKMA to teach English and Ukrainian. From fairly early on we hoped to recruit local faculty who could meet our teaching standards through "certification," and established a procedure for certifying Ukrainian faculty to teach in the program. Requirements for certification included teaching experience, together with exposure to Western teaching practices and an ability to teach in English, a record of research and publication, and so on. Two members of the NaUKMA faculty (Larisa Krasnikova and Irina Lukyanenko) have gone through a process of apprenticeship to receive certification as regular faculty members. Early on, the program supported their attendance at a summer course at Boulder, Colorado, in the United States. They then went on to team teaching with regular faculty in the pro-

gram. A third person has recently been certified as well. Once certified, Ukrainian faculty members are eligible to be considered on the same basis as expat faculty for teaching courses in their specific field.

Indigenization began intensively in the 2003–4 academic year, under a three-year business plan approved by the donors for shifting responsibility to NaUKMA. This was bound to be a difficult process. From the point of view of EERC, it is difficult to relinquish autonomy in matters that seem crucial to maintaining quality, such as library management, control of the computer and Internet facilities, and policy on grading and retention. From the other side, the university administration is not especially eager to take on the burden of fund-raising and of absorbing into their own structure a program that excites envy for the resources it has enjoyed. But because of the reluctance of the donors to continue support of the program without an endpoint in sight, and because we had accomplished the possibility for handing teaching over to Ukrainians, it seemed that the time had come.

When the program began, we knew that the university's economics faculty as it then existed would not be capable of taking responsibility for this program. We had hoped that the university might be able to upgrade the personnel and leadership of the economics faculty to qualify it to do so. We sponsored visits to institutions in the West to familiarize the university administration with what would need to be done in this regard, but we were not successful in that effort. The strategy we are now following is to create a new unit in the university—the Kyiv Mohyla School of Economics—to provide a home for the program and other graduate training and research in economics. The university has approved the creation of such a school, and some of the steps for making it operational have been taken. The problem now is to find a director for the school, a daunting challenge.

One of the prerequisites for the indigenization process is to find Ukrainian economists who can staff the new school and maintain the quality standards of the program. We have had some success in finding locals whom we could certify as qualified to teach in the program, but that approach cannot be the main solution. The only way to meet this requirement is to recruit Ukrainians with western PhDs, and those will mostly be graduates of our program who went on to earn PhDs abroad.

There has always been great deal of concern about whether those students could be enticed back. By and large, newly graduating Ukrainian PhDs have career opportunities abroad equal to those of other new Western PhDs entering the job market. There is a terrible disparity between the two situations, both financial and professional. It is difficult to turn down starting salaries of, say, US\$70,000 in the West to teach in a Ukrainian university where professors are paid US\$100 per month. Both among the outside financial sponsors of the program and among Ukrainian policymakers, there was a strong fear that sending EERC graduates abroad to earn PhDs would do more to promote brain drain than to create a new generation of economists who would devote themselves to participating in the modernization of Ukraine.

This issue is now being tested, and we have had encouraging success so far. We hired the first Ukrainian with a new Western PhD (though not a graduate of the

EERC program) in the 2003–4 academic year. In the academic year 2004–5, there were 14 Ukrainians teaching, not including the NaUKMA faculty. They accounted for over 80 percent of the total of 87 courses taught. No one has yet returned to teach in another Ukrainian institution. And so far only one returnee seems to have really committed to making a permanent career in Ukraine. Some are clearly only testing the waters and are not taking permanent jobs. One approach to attracting them back has been the system of Alumni Fellows, through which we bring back our graduates now at the ABD stage in Western universities to teach mostly first-year courses. Though some see using such junior persons as a dilution of faculty quality compared with relying primarily on seasoned foreign visitors, it is our assessment that they do a fine job. They are much less expensive than regular faculty, they provide useful role models for students currently studying in the program, and it is our hope that some of them will find a satisfaction that will lead later to their return.

There are many motivations for the new Ukrainian PhDs to teach in our program. We try to palliate the financial sacrifice—they are paid less than they could get in the North American or European market, but still they are paid well above usual Ukrainian levels. The cost of living in Ukraine is obviously much lower than it is abroad. Also we try to make it possible for them to have the kind of professional life in Kyiv they would expect if they had remained abroad to make a career. We give time off for research, provide research assistance, finance travel to international conferences, and so on. For some, family ties and the desire to raise their children in a Ukrainian environment are important. We have found a few who see the advantages of being early entrants in what now promises to become a market that will value their skills highly. It is our great good fortune that just at the time many are emerging from the pipeline, a great transformation is occurring in Ukraine: serious reforms can be expected to create openings for our graduates in government, in a thriving private sector, and in university teaching. Serendipity is validating the chutzpah of the original faith that we would be able to attract them back.

It should be no surprise that this experiment in skill and knowledge transfer has worked. It worked for many nations after World War II. It worked for the New Economic School in Russia. And it is a process with deep historical roots—this is not the first time modern economics has been introduced into this region. I have been working on a history of economics in Russia (in its changing form as an empire, the USSR, and now as a collection of successor states). At the end of the nineteenth century Russia went from being a backwater in world economics to a country with a fully respectable economics establishment by the Western European standards of the time. It could boast of a number of figures of renown, such as M. I. Tugan-Baranovskii. The process by which this transformation took place was that Russians (and Ukrainians) went abroad for the advanced study of economics at the main centers of Western Europe, and came back to apply their skills in Russia. The Russian economist who most often gets mentioned in Western textbooks—Evgenii Slutskii—followed this pattern. Moreover, some of these returning economists went on to found or teach in new institutions that provided instruction at what was then the international standard. Examples are the economics division of the St. Petersburg

Polytechnic Institute, the Moscow Commercial Institute (which later became the Plekhanov Institute), and the Kiev Commercial Institute. These institutions began to turn out a homebred generation of economists who gained world-class reputations and made important contributions to world economic science—N. D. Kondratiev (a student of Tugan-Baranovskii), V. K. Dmitriev (who studied at the St. Petersburg Polytechnic Institute), V. V. Novozhilov (who studied under Slutskii), A. A. Konius, among others. Unfortunately, Stalinist repression put an end to this achievement, turning economics in the former Soviet Union into a wasteland.

Now a century later, the process of transferring world economic science to Russia and its successor states is recurring; and we should expect the same result—the creation of a highly talented generation of economists of a new kind. We see it already in the youngest generation of economists. There seems something historically natural and inevitable about the process, but with our help it is proceeding much more rapidly this time round. Tugan-Baranovskii started working in the British museum in 1892, but his student Kondrat'ev emerged as a major contributor to economics only three decades later, in the 1920s.

Indigenization is the most difficult part of the transfer process. Since the new relationship between EERC and NaUKMA is still under negotiation, I have to leave the details of issues and solutions somewhat vague. There is sincere agreement between EERC and NaUKMA on the desirability and general outline of the transition, but the devil is in the details. Our program really is an alien transplant in the structure of the university, which operates under all kinds of bureaucratic rules imposed on it by the ministries of finance and of education, and of its own making. The university has less strict rules for dropping a student for poor performance than we have thought necessary. It faces numerous restrictions on how money can be spent. The task is going to be to preserve some degree of exceptionalism for the program within the university, even when the university comes to own it. Disputes over these matters are the flip side of the independence in the start-up stages that enabled us to establish a reputation for quality.

One of the most serious obstacles to indigenization lies in the disparity between the existing salary levels within universities in the region and the salary level required to attract the able and well-trained faculty needed to maintain an international level of quality. This is true whether we are talking about returning PhDs or the leavening of visiting faculty that it would be desirable to continue for several years. This is certainly true in the EERC case, and it will plague all efforts at indigenization. This disparity presents not only a problem of continued subsidization, but it also creates tension and ill will within the host institution. Such tensions make it hard to gain acceptance for the program among the rest of the faculty, and thus making it difficult for a university administration to support it. This is true not just for salaries but also for other kinds of resources as well, such as libraries and Internet connectivity.

Lessons Learned, Tradeoffs, and Pitfalls

What can we learn from EERC's experience regarding the ingredients necessary for success, pitfalls to be avoided, and guidelines for extending it to more institutions

within each country and to more countries? I remind you that this conference is a revisitation of the issue of capacity building in former communist countries, echoing a discussion at a meeting of the Association for Comparative Economic Systems (ACES) in December 1999.⁴ At that point it seemed that several things were already perfectly clear, and I summarized the lessons that I saw in that experience in six points.

1. To meet the hoped-for quality goals, there needs to be a high degree of program autonomy in establishing curriculum, course content, and standards of instruction.
2. The basic strategy aiming at ultimate self-replication must be seen as a sustained effort with clear goals and a commitment to be in business for a decade or more.
3. A greenfield approach in which the sponsors work with or set up new institutions as a venue for the effort is best.
4. Implanting modern economics is a kind of technology transfer; and it is important that the new knowledge be embodied not just in curriculum, materials, and so on, but also in people as an active agent—in this case in foreign faculty.
5. Instruction must be in English
6. To create a significant pool of PhDs, the assistance of Western universities is needed to accept them for PhD work and support them financially. This can happen only by building a very strong reputation for quality .

With the benefit of more experience I would stick with these points, but add a few more to round the list out to a kind of “10 commandments” for a successful program.

7. A fast and reliable Internet connection is indispensable.
8. It is important to have a dedicated academic advisory board or council whose members are committed to the success of the program and are willing to put in some effort on its behalf.
9. Managing these programs needs strong leadership. It is crucial to recruit a good director, and give him or her a lot of freedom.
10. It is important to keep the indigenization goal in mind from the beginning, and let that task influence all decisions as you go along.

It is more difficult to elaborate a systematic list of “don’ts, but I will note some issues and tradeoffs, on which others might want to make choices different from those we made.

- There is a tradeoff between stability and maintaining diversity in teaching staff. It takes about four full-time faculty to staff a program of four offerings in each of the first and second years of the program. When electives are added, and the second-year cohort is divided into smaller-sized groups for the workshop experience, the total rises to maybe five or six full-time faculty members. The staffing strategy can vary between (1) relying mainly on a changing cast of

short-term visitors (present for one or two miniterms) and (2) going for more full-year hires and repeaters. Variant (1) means an increase in recruiting effort, fewer chances to keep those who turn out to be effective, and more supervision by the director to keep the course sequences coherent. Variant (2) eases those problems, but at the possible cost of getting stuck in a rut and creating a situation where the faculty members or a group of them may come to think they own the program. Some turnover is useful to keep things fresh. We had some difficulty with balancing these two approaches.

- There is a tricky balance between guidance from headquarters and relying on the initiative of the resident director and local faculty. As Henry Rosovsky famously said of Harvard—the students are there for four years, the faculty for a career, but Harvard goes on forever. The EERC program got into trouble on a couple of occasions in trying to sustain a broad vision in the face of local concerns. Directors can misunderstand their mandate and take initiatives that are inconsistent with program goals. And at one point we had a semipermanent cadre of visiting faculty who came to feel that they owned the program and resented any direction from above.
- Is the program to involve full-time study or is there room for part-time study? In our program all students are expected to give full time to their studies. All are required to take a full load, and classes are scheduled only in the daytime. It quickly became part of the student consciousness that the demands of the program required full-time effort. This of course is much different than most graduate training in the region, where postgraduate (*aspirantura*) students typically study and work on their *kandidat* dissertations only part time while supporting themselves with an outside job. To ease the pressure, we have given students a stipend during most of the history of the program, though we have gradually become less generous in that regard. But the pressure for our students to earn outside income is still strong. Some of them provide partial support to their families. The pressure is even greater now that many of them have to pay tuition. We waffled on this issue of outside work, allowing students to work part time but in jobs that were related to their training, such as apprenticeships or assistantships, and with a limit of 20 hours per week. This practice was aided by the fact that all classes were scheduled for Monday, Wednesday, and Friday.
- It is a recurring point of debate whether to design a terminal MA program that prepares graduates to go to work in the local economy, or to set the content and rigor of the curriculum to prepare graduates for PhD study abroad. Differences on this point are often associated with the fear that the PhD recipients will not return, and that local employers don't want people who are too theoretical. Our line has generally been that both purposes are served by essentially the same curriculum, and we have strongly resisted suggestions that we introduce more business-oriented content into the curriculum. Our experience has been that our students are valued for the skills that the economics-oriented training gives them. Their skills in analyzing problems, in bringing broad perspectives to bear on an issue, in writing, and in using English comfortably are

rare and much appreciated. And if modern economics education is ever to make its way in the society, it will have to get into the curriculum as a discipline distinct from the old Soviet concept of “economics,” which was overburdened with highly applied subjects. Moreover, designing the curriculum with an eye to preparing students to be able to compete for admission to the best foreign programs provides a rigorous test of the quality of both the students and the program. Unless some of them actually have to pass that test, you don’t really know whether you are meeting world-quality standards.

- Given the importance of reputation to the success of the program, some redundancy in quality review is not out of order. In addition to the semiannual reviews by the international advisory board, the program commissioned an outside review in the third year, the World Bank did its own periodic review of program quality when it considered renewing its support, and the Swedish government asked for a review when it was considering an extension of support for indigenization.
- Choices have to be made about how much outreach to attempt, how open to be to the rest of the system. In the early years of the EERC MA program we were too intent on trying to establish a quality MA program to give much attention to outreach.
- I think we might well have made more of an effort to build coalitions with other institutions for improved curricula, to create some kind of associates program, to offer other institutions some access to our resources (as in using our library, attending classes, and sharing our syllabi), to involve other institutions in research conferences, and to find local faculty who we could certify to teach in the program. Also we did not make a persistent enough effort to enlist more allies in our host university—especially among the personnel of the economics faculty. Part of the reason for this is that it was not a very inviting environment for eliciting such cooperation. But I believe that as efforts are made to introduce such graduate programs elsewhere, more outreach should be incorporated in the effort from the beginning.
- The issue of tuition payments is now on the table in a way that it was not when we started. There is a clearer-headed understanding that these programs are not worth doing unless they can be sustained, and donors now insist on planning for greater reliance on tuition than they did when we started. Introducing tuition raises the issue of student quality versus ability to pay. There is the threat to quality of relaxing standards to fill the incoming cohorts. There is also the danger of freezing out some very high-quality candidates who cannot pay tuition. The details of how tuition will figure in financing in specific situations is complex and changing. It depends on such factors as how the rules about free tuition versus contract study works in each country, and it depends also on whether one is talking about state or private institutions. The general prospect is that tuition payments will grow in importance in financing such programs, while ability of students and their families to pay will lag behind. The obvious

need is for some more general program of providing fellowships for tuition. Various proposals for subsidized loans or revolving funds have been mooted, but a system for meeting this need does not yet exist. This is one of the most urgent problems that needs to be tackled in thinking about “scaling up.”

- There is an issue of how much to be dependent on a host, versus keeping options open. Establishing a program or institution without a local partner is a formidable task, so most efforts have chosen to go the partnership route. (American University in Armenia and the American University in Central Asia [AUCA] are exceptions.) Unfortunately there is an inherent difference between the perspective of outside sponsors and the perspective of a host institution. These programs are an intrusion into the normal functioning of institutions of higher education, even progressive ones. It is one thing for a host institution to sponsor such a program as a kind of adjunct activity, for which the university has no responsibility but can gain some reputation by association. The closer a program moves to indigenization, the more this balance of burden and benefit shifts in the eyes of the host toward the burden, and toward reluctance to accept exceptionalism for the program. The only way to keep from being captive is to keep open the possibility of changing partners or setting up independently.
- Be wary of overburdening the resident director—it is a high-pressure job, subject to burnout. In the nine years of the EERC-Ukraine’s operation, we have exhausted five directors. A program has to be carried out on a broad enough scale to tap synergies between teaching and research and engagement with institutions of the society. But it is important to provide clear priorities when the director is faced with more desirable opportunities to follow up than are possible to manage.

Research: Russia

EERC-Russia began operations in 1996, through an office in Moscow, directed by Erik Livny. In managing the program he has the help of an advisory board.⁵

Description of the Program

The EERC’s program in Russia for supporting research has evolved over time, but from the beginning its core has been a competitive grant-making program for individual research projects. It was discovered early that the passive approach of selecting and financing projects that came in over the transom was not enough. Hence the grant-making program is supported by a variety of efforts to build professional research skills among its potential clientele and to use highly qualified outside economists to mentor the development and execution of research projects.

The centerpiece of the system for financing research is a system of semiannual competitions and workshops that work as follows. Four priority research areas have been identified for support: enterprises and goods markets, labor markets and social

policy, macroeconomics and financial markets, and economics of the public sector. The competition is conducted twice yearly. Applicants—either as individuals or small teams of researchers—submit a research proposal according to a well-defined set of guidelines.

The proposals are given a preliminary screening, and those meeting the guidelines are reviewed by specialists on the research advisory committee, with feedback to the applicants for revising and improving the proposals. The applicants are then brought together with the outside specialists in a set of workshops for each of the main subject areas. The resource persons evaluate the projects within each group and make recommendations for funding. In the last step, the recommendations from the various workshops are reviewed and combined to make a final selection. Successful applicants receive research grants within the range of US\$8,000 to US\$15,000. Some applicants whose proposals do not win approval for regular funding may be given a development grant to do the work needed to strengthen their proposal. Projects that are funded are monitored as they progress, with the researchers coming back at a later workshop for midcourse review and suggestions. In addition to funding, network members are provided with ample opportunities for professional growth through participation in international research workshops, conferences, and methodological seminars.

The grant competition is supplemented by a set of research skill-building activities for the less-experienced scholars from the Russian periphery and other CIS countries. In particular, a special research development program was launched in 2001 to integrate capacity-building activities into a year-long cycle of summer schools, methodological seminars, and research internships at the leading academic institutes in the region—NES, CEFIR, and EERC-Kyiv.

A third block of EERC networking activities provides access to scholarly resources. Through its Library Online, EERC offers network members free access to valuable databases of full-text academic publications such as JSTOR, ScienceDirect (more than 70 Elsevier journals in economics), and a large and growing collection of discussion papers, including those of the National Bureau of Economic Research (NBER) and the Centre for Economic Policy Research (CEPR). The library includes a search engine for the entire collection of working papers. Negotiations are currently underway with the Interuniversity Consortium for Political and Social Research (ICPSR) at the University of Michigan regarding members' access to data held in the largest social-science data archives in the world. Through the GDN Web site, EERC network members already have access to the World Bank's World Development Indicators database.

A third element in the program is a dissemination process for publishing the results of the research done under EERC grants. Dissemination tools include a twice-annual Russian-language newsletter *Economics Education and Research in the CIS* (jointly published with NES and CEFIR), a bilingual working paper series published on the Web site (www.eerc.ru), and several e-bulletins:

- “Focus on Policy” (publishes policy briefs based on results of funded research in English and Russian; holds policy roundtables)
- “New EERC Projects” (abstracts of new studies undertaken with EERC support)

- “Research News” (abstracts and links to full texts of papers published in the EERC, NES, and CEFIR Web sites)

In recent years EERC has made a consistent effort to develop the capacity of academic researchers to address policy questions and deliver their findings in a user-friendly and nontechnical format. Special “Focus on Policy” awards were established in 2004 to create incentives for scholars who complete a full cycle of research to provide their results and policy recommendations for the general public and policy makers. EERC also organizes policy roundtables to facilitate professional exchange and policy dialog among policy makers and network members who have developed expertise in areas that are relevant for current policy concerns in Russia.

The program has been extended geographically. The grant-making competition has long accepted applications from people not only in Russia but in other Russian Federation countries as well. In fact, however, potential participants in its research program were heavily concentrated in Moscow and St. Petersburg, with other areas showing much less response and capability. So EERC has made a point of spreading its influence further afield within Russia and across the CIS. Since 2004 geographic expansion is following the “network of networks” approach whereby EERC either transfers its networking know-how to partner organizations in individual CIS countries and regions (for example, the EROC center in Kyiv and the Caucasus Research Resource Center [CRRRC] in the Caucasus) or establishes a subregional network with the support of a local consortium of donors and implementing agencies (such as the Applied Research Network–Central Asia).

Beginning in 2000 EERC took on the role of regional representative of the World Bank–sponsored GDN, serving as the regional representative in Russia and the successor countries. In this role it has extended its core activities to all the CIS countries and it now functions as a CIS-wide research network. As a GDN institution it has participated in a number of global research projects in areas such as “explaining growth,” health care, understanding reforms, and the impact of rich country policies on poverty in developing and transition countries. EERC is currently managing one of these global projects: “Bridging Research and Policy.”

With these changes the program has come to see itself as having an important networking function as well as a research support function. As explained on its Web site, EERC “has created a vital professional network that enables young economists to produce sound, policy-oriented research and connects them to a network of their peers and an audience of policy makers. Originally founded as a research network for Russian economists, EERC’s network now includes economists from across the NIS, and works to incubate centers of excellence in economic research and higher education throughout the region.”

Evaluation

At the end of nine years of operation, it is useful to look back and review the accomplishments of EERC–Russia’s program and consider what has been learned about the requirements for an effective program of stimulating research. EERC’s accomplishments can be summarized as follows:

- The program has supported more than 300 researcher teams, comprising more than 400 individual researchers.
- Approximately 450 original research projects have been involved in the the EERC research program.
- It has created a permanent cadre of international “resource persons” who participate in the review process, serving as faculty at the research workshops and collaborating with program alumni in joint research projects.
- It has provided professional development opportunities to more than 300 CIS economists through research workshops, methodological seminars, and summer schools.
- It has inaugurated a series of targeted methodological seminars to bolster the analytical skills of CIS economists involved in policy-oriented research.
- It has launched a range of bilingual professional publications, including a semi-annual newsletter and a working paper series, delivering results of sponsored research for economists and policy makers both within and outside the region.
- It has initiated a series of policy seminars to reach out to the CIS policy-making community.

As we did above for MA training, we summarize some lessons learned that are relevant for initiating new efforts at capacity building in economic research, consolidating the capacity EERC-Moscow has created, and leveraging those resources to deepen and extend its impact.

- It does not work just to elicit proposals and finance those that are the most promising. It takes a more proactive approach with a hands-on effort to generate proposals and guide research.
- It is necessary to develop research skills if one expects to be presented with proposals that are methodologically sophisticated. That is, it is necessary to train people do to research, which means teaching them in classes, workshops, and mentoring sessions.
- It is not easy to reach the policy research bodies and a government audience.
- As with MA training, the GDN faces the problem of how to institutionalize the research effort for sustainability. The network has gone through a series of proposals to integrate it with a larger, more complex institution that can achieve scope and synergy for its activities.
- At one point the goal was to create, on the basis of the GDN Secretariat, a *Dom Ekonomiki*, (house of economics)—that is, an umbrella organization for the New Economic School (NES) and the Center for Financial and Economic Research (CEFIR)—two Moscow-based centers of excellence. According to this initial vision, *Dom Ekonomiki* was to serve as a networking nexus for economists engaged in research and be in charge of fund-raising and outreach.
- A later suggestion was to merge the GDN Secretariat within the unified NES/CEFIR structure, but this approach was too difficult to negotiate; in

mid-summer 2005, the parties went back to the Dom Ekonomiki scenario of integration. The goal is to co-found an independent Russian NGO that is in charge of networking, capacity building, and research support on behalf of EERC, NES, and CEFIR for the benefit of social scientists and economists based in the outlying regions of Russia and CIS. According to this scenario EERC, Inc., will maintain its representative office in Moscow, which will work in close cooperation with the new Russian organization so as to preserve tax and legal benefits related to grant making, facilitate business administration outside Russia (in CIS and globally), conduct fund-raising in the United States, and coordinate with other centers of excellence in the CIS region, in particular the Kyiv MA program.

Research: Ukraine

As indicated earlier, EERC's work in Ukraine was originally focused on training rather than research. But there has been a modest attention to developing research skills and producing research via the thesis element of the MA program. Also, from its very first year, EERC sponsored a student research conference. As time went on this conference became more extensive, involving more ambitious papers, more senior researchers, and more effort to connect the conference to important public policy issues.

In 1996 EERC received some special funds from USAID that were earmarked to begin a research and outreach effort. Unfortunately, that first effort did not lead to serious results. We lacked a strategy, adequate leadership, and enough money to accomplish much, and the resources got frittered away.

Subsequently a substantial three-year grant of about US\$900 thousand from the World Bank (coinciding more or less with the beginning of the 2003–4 AY) has permitted us to make a serious start on a program of research and outreach. To manage the use of this grant we set up a Research and Outreach Center (EROC) within EERC. As an early step in indigenization, EROC was also established as a structure within NaUKMA. We were fortunate to recruit an excellent person to direct the center—Tom Coupe. The center has its own research advisory committee, separate from the international advisory board of the MA program.⁶

Description of the Program

On the research side, EROC has a multidirectional program. One direction is support for multiperson research projects. We were very fortunate in being able to collaborate in financing and staffing one such project—a household survey (the Ukrainian Longitudinal Monitoring Survey or ULMS), under a former EERC faculty member, Hartmut Lehmann, who brought financing from outside. This project has spawned a number of individual projects, some of them involving EERC students and graduates. EROC's contribution has been to help finance the survey, clean the database, support individual projects using it, and help with conferences. An anal-

ogous venture under John Earle and J. David Brown deals with “Enterprise Behavior and Economic Reforms in Ukraine.” This project uses the data from the ULMS together with an enterprise database.

A second direction in EROC’s activity is financing time off for research for returning PhDs. A potential recruit for the teaching staff might be offered a miniterm off without teaching, the help of research assistant, funds to attend a conference abroad, and so on. This can let the prospective recruit feel that she or he is still in contact, work on publication of thesis research, help develop a research agenda that extends thesis work to a Ukrainian application, and so on. It is an important incentive.

A third direction is an open competition for individual research support. Here we work closely with the EERC-Russia program, essentially as a partner in its grant-competition program, described above. EROC puts some effort into encouraging the development of projects to be submitted to the general competition, does some prementoring, and preselection of projects to be submitted to the general competition. In addition, members of the EROC research advisory committee participate in the workshop process described earlier. There is some division of responsibility in funding the successful projects. The summer 2004 meeting of the workshop was held at in Kyiv at EERC’s premises, as the summer 2005 session was as well. The cooperation has worked smoothly, in part because Ukraine has been able to contribute some good applicants and projects for the competition, many of them from among our MA graduates.

Outreach

The major vehicle for EERC’s outreach function so far has been conferences engaging teachers of economics in a dialog with EERC personnel and with each other on issues of improving economics courses and curricula, teaching materials, and teaching methods.⁷

Under the World Bank grant, EROC has organized two conferences—on “Economic Theory, Innovative Instruction and Research-Based Teaching”—in spring 2004 and spring 2005. Some 40 people participated in the first conference, from Ukraine, Belarus, and Moldova. Over 50 attended the second, including participants from Georgia. As part of the agenda the conferences provided participants with general information of professional interest—descriptions of research resources on the Web, examples of syllabi and other teaching materials (including CDs of testbank materials), educational opportunities abroad, manuals on how to teach economics (such as relevant chapters of the Saunders/Walstad book on *Teaching Undergraduate Economics* translated into Ukrainian), and so on. But most of the time was spent in demonstrations and discussions of teaching methods—case studies, classroom games, incorporation of research projects into course work—and discussions of curriculum content. An important goal of the conferences has been to generate active participation by the attendees. In effect, the price of admission was a contribution in the form of a paper at a session, a syllabus, or other such contribution. Participants had a chance to familiarize themselves with the resources of EERC’s library. Another

rationale for the conference was to identify institutions and individuals with whom we might work more closely on a continuing basis.

The conferences demonstrated an encouraging potential for improving economics instruction in Ukraine. There is a large audience for such efforts, eager to share ideas and experience. Participants were pleased with what they got out of the conferences, and generally took home ideas they want to put into practice. Unfortunately, judging from the list of attendees, we have so far been more successful in engaging individual teachers than deans and heads of economics departments, who in the end will be the ones to preside over curriculum change.

The conferences are a strong stimulus to networking—participants find others with similar interests, trade e-mail addresses, and so on. They thus help build a community of those who are interested in new approaches to teaching economics and will work at it on their own. At one time there was an Association of Ukrainian Economists, which had gone moribund. It has now been revived, and will be an important vehicle for networking among those interested in improving economics education and research. EERC is playing a leading role in reviving the association, and its 2005 meeting was held back-to-back with EERC's April research conference.

The work of the two conferences held so far will be continued through a three-year sequence of seminars financed by the Higher Education Support Program (HESP). The first took place in the summer of 2005. As participants, we invited a group of young economists whom we identified as demonstrating an active interest in modernizing their teaching and research qualifications. The theme of the seminar was the "economics of the firm," but the approach was to apply to this theme new methods of study and teaching—case studies in industrial organization, experiments, computer-based analytical techniques, and so on. It was taught by EERC faculty and outside resource persons. Through this program of conferences and workshops we hope to maintain a focus on a core of individuals and institutions open to improvement, and to sustain the effort for long enough to have a serious impact.

The other main dimension in outreach is to act as a kind of curriculum information center. Through the EERC library, we are assembling curriculum materials—such as reading lists, materials on how to teach economics, syllabi of the courses taught at EERC and elsewhere, and so on—that we make available to anyone interested.

To conclude, EROC is compiling an impressive record of research and publication along with a productive effort in outreach that we expect will justify a request for renewal of funding from the World Bank when the current three-year grant runs out.

In the meantime, the cause of stimulating research in Ukraine has received a significant boost from a substantial investment that the Swedish government is making in research in Russia and Ukraine via the Stockholm Institute of Transition Economics (SITE). This new initiative is outside the EERC framework as it now exists, but both sides are well attuned to the need for cooperation to get the synergy from this enlarged base. Just how the collaboration will work is still being discussed, but it is clear already that the new effort will make substantial use of EERC graduates in its research program, and may provide some staffing resources for the EERC MA program.

Scaling Up

There is an ironic point in this experience—that is, the success of programs to build capacity in economics education and research implies not a need to cut them loose, but rather to expand the effort to exploit the base they have built. What kind of ideas can one garner from this experience that will help in going on to the next step of scaling it up across the countries in which we already work, across the region, and across the world?

I reiterate my belief that the EERC's MA in Ukraine program has been an outstanding success in terms of its goal of creating a center of excellence in economics education in Ukraine and in setting a standard for future efforts. These goals had been achieved even earlier for the New Economic School in Moscow. But one has to see that this is only a drop in the bucket. We have grown and harvested seed for "a new generation of economists for the Ukraine," but this is only the tiniest start. Against the background of the general status of economics education, discussion, and research in Ukraine, or against the research and policy analysis on Russia and Ukraine carried out by outsiders, what we have created is barely discernable. We now need to reach out in a serious way to help upgrade economics education, research, and policy dialog in the country as a whole.

Economics Education within Ukraine

It seems clear that it is not possible simply to replicate a program like the EERC's MA program on a larger scale. It is too expensive. Rather we should leverage the resources and capabilities already created for a larger impact.

Consider first improving economics education at the undergraduate level. Economics is widely taught in Ukrainian higher education, generally badly. The strategy I see for scaling up in this area is for EERC (or its indigenized successor institution at NaUKMA) to build a constituency of economics faculty and officials at other major universities who want to improve what their institutions are doing, and then to work with them to modernize curricula and instructional materials. EROC has been doing some of this with help from the World Bank grant and the Soros Higher Education Support Program (HESP). But that effort is underfunded, too small, and always in competition with EROC's research effort and with EERC's main goal of maintaining its own MA program at a high level of quality.

We are at a point where over the next few years EERC could expand these activities, absorb some more staff, reach out to more institutions. There is a much bigger potential than we have been able to tap so far. I recently spent some time looking over the kind of instructional materials produced by local authors in Ukraine. There are now available significant resources of Ukrainian textbook material, in Ukrainian, at the introductory level in micro, macro, money and banking, international economics, and a few other subjects. This material is much better than what was available when I first looked at the field nine years ago. These textbooks are somewhat schematic, virtually unsupported with Ukrainian cases and illustrations. The macro books I looked at, for instance, never cite actual Ukrainian macro data. We need to

encourage Ukrainian authors to produce the kind of instructional materials that enables students to see the relevance of the course material to Ukrainian economic issues. But the point is that, to the extent that these textbooks reflect what some economics teachers are doing in their courses, there is a widespread effort to teach modern economics. The situation at the level of the economics *curriculum* is less encouraging. There is still a great deal to be done to complete the differentiation of the economics curriculum from the business skills curriculum.

It is less clear what ought to be done at the level of graduate education. There is a serious dilemma here. In my view anyone who emerges from higher education into Ukrainian society claiming an advanced degree in economics (whether *kandidat*, master, or doctor of economics) ought to be oriented to the international community of economists. They should have some exposure to the world economics literature (most of which is in English), be able to feel at ease with that community in terms of conceptual and methodological approaches, and be able to communicate effectively in English or some European language. The graduates of the EERC MA program meet that standard very well, but it is unrealistic to think of replicating the EERC MA model as a program taught in English and based on English-language literature in very many institutions. We will see what happens to the degree system as the program of the new government unfolds, but it seems likely that many institutions and departments will stick with the system of aspirantura leading to a *kandidat* degree as their form of graduate training. Whether the situation evolves this way or toward an MA, we need to find some kind of upgrading model that relies more on existing domestic personnel and institutions. And inevitably such a model will rely more on instruction in Ukrainian, and on domestically produced textbooks.

A second desideratum is that anyone seeking credentials as a graduate-degree economist must conduct a serious research and writing exercise, subject to some element of methodological vetting by highly qualified economists. When possible this exercise should be written in English.

Those elements can hardly be universal, but there should be some assistance for institutions that aspire to these standards. Right now aspirants do not get good professional guidance and training. For one thing they do not work at aspirantura full time. Where aspirantura and the *kandidat* system is retained, or where domestic MA programs are started, there could be things such as a panel of foreign experts to be called on for committee work, financing for aspirants to spend some time in research workshops, and for time off to do research. The whole mind-set of foreign-sponsored programs has been to work outside the system (until now strongly controlled by a ministry of education), but it is conceivable that in the new Ukrainian conditions there will be a reform of higher education that might permit the external community to work directly with ministry officials to change degree systems, curricula, and degree and staffing requirements for graduate economics education nationwide.

A big issue in consolidating and extending this effort is whether we should now move on to try to establish domestic PhD programs. In Eastern Europe, PhD programs have been a part of the effort for quite a few years, for example, at CERGE.

Pressure for such a move in Russia is bound to come—if for no other reason than that the newly trained economists will want to take this step. EERC's host NaUKMA has proposed creation of a PhD program in economics within the next five years. In Kazakhstan some institutions have been tasked by the ministry of education to proceed to develop PhD programs in economics. I think the outsider community ought to be very cautious about taking on the creation of PhD programs as the next step.

Extending Efforts to Other Countries of the Region

There are still parts of the former Soviet Union that have scarcely been touched by serious efforts at modernizing economics education. Some, such as Moldova and Belarus, are not very promising venues, and the strategy so far has been to try to deal with them by letting their citizens participate in MA programs in Russia or Ukraine. In the CIS, two areas barely touched thus far by this kind of effort are the five countries of Central Asia and the three countries of the Caucasus. Initiatives are now under way for establishing graduate economics programs in these regions.

What have we learned from experience so far that will help in designing approaches that can work in these countries? My experience is only with Ukraine, but I suspect that the experiences of the other CIS countries suggest more or less the same conclusions.

First, it is impossible just to replicate the NES/EERC model there. One problem is the issue of scale—all the countries of Central Asia and the Caucasus have much smaller populations than Ukraine's 50 million, not to mention Russia's 144 million. The populations are as follows: Armenia: 3 million; Azerbaijan: 8 million; Georgia: 5 million; Kazakhstan: 15 million; Kyrgyzstan: 5 million; Turkmenistan: 5 million; Tajikistan: 6 million; and Uzbekistan: 25 million.

Most of these countries are just too small to support an MA program that admits 50 new students each year. Kazakhstan and Uzbekistan may be large enough. It is unlikely even there, however, that one could recruit a talented class of 50 students, and it is difficult to imagine that those economies could absorb anything like 40 to 50 new graduates each year. But on a scale much smaller than that, the effort becomes uneconomical.

Nor is an identical formula likely to be applicable to all of these areas. It needs to be adapted to the situation in specific regions. There are important differences in country size, the human resource base, availability of local partners, the stance of the ministry of education, and so on.

A possible solution is some kind of regional program, serving several countries in a region and drawing on several potential candidate pools. That approach raises difficult issues. Without mutual recognition of degrees across country borders, which is likely to be difficult to accomplish, there will be a disincentive for students to get an MA in another country. There are issues of regional enmity and turf consciousness. In the Caucasus it would be very difficult to have a program serving both Armenians and Azerbaijanis, whichever of the two countries hosted it. In Central Asia, Kazakhstan and Uzbekistan each fancies itself in a leadership role, and it would be difficult to persuade either to cede that role to the other.

One possible way is to have a consortium of partnered institutions, with a division of the courses offered at each and some visiting of students and faculty between institutions. Distance learning might be part of the program. A simpler model might be a more lopsided arrangement that did not aim for a full-fledged regional program, but rather chose a lead institution in one country with “affiliates” elsewhere, each of which has varying degrees of participation. At the end of this spectrum is an arrangement in which you pick an institution considered to have prospects for making it and establish a program there, open to students from the other countries and with an aggressive recruiting effort in several countries. As the program began to build a reputation its graduates could probably find jobs in their own countries even without having local state diplomas. Remember that NES does not give a state diploma. Issues such as mutual recognition of degrees would need to be worked on as you went along.

I am still of the opinion that one of the essential ingredients of success in the earlier models is independence and considerable control over admissions, faculty, curriculum, and quality control. And that would be hard to achieve in any proposed partnership arrangements.

Research

It seems unnecessary to say much about scaling up the research effort. The main directions for expanding the research program of the EERC-Russia program and its partner EROC are already set—geographic extension, facilitating access to data, and enhancing policy relevance and impact. What is needed now is more of the same.

In Ukraine the main thing we would like to do is to follow through on a hope, heretofore disappointed, that EROC could initiate partnership research projects with government bodies combining personnel, data resources, and policy access from the two sides.

Changing Environment

In thinking about increasing impact in countries already served and about extending this impact to other countries, we ought not to be too bound by the lessons of the past. The environment may be changing. As of 2005 in most of these countries one would be creating such a program in an inhospitable environment. There would be hostility from the ministry of education, little help from the tax authorities, resentment by other institutions of higher education, and so on. This environment would probably be more hostile in Central Asia than it was in Ukraine. In some ways the the EERC program in Ukraine survived because it was flying below the radar and was too insignificant to excite effective enmity.

But the recent transformations in Ukraine, Georgia, and Kyrgyzstan suggest that the environment can change to one much more welcoming to modernizing economics education and research. Recognition of the worth of such models will increase, educational reform may make it easier for the non-state sector in education,

the dead hand of the ministry of education on issues of curriculum and certification may be lifted, and so on. There is thus a trade-off here between over emphasis on the lessons of the past and an opportunistic willingness to try something new as the environment changes.

Finance

In thinking about scaling up we need to keep financing in mind. What has it cost to operate one of these programs? The budget for EERC-Russia started out at three-quarters of a million U.S. dollars, but grew and stabilized at about 1 million U.S. dollars per year. The MA program started at US\$850,000 dollars in the first year, grew as enrollment increased, and peaked at a little over US\$1.5 million dollars in 1999–2000, when we were investing significantly in rehabilitation of premises. It has since fallen to about US\$1 million. These figures do not include the overhead administrative costs in Washington, which have declined sharply in the last couple of years as a result of moving the management out of Eurasia in Washington and setting it up locally in Kyiv. Costs depend partly on how much must be invested in space. In the case of EERC-Ukraine we had significant extra expenses for investment in facilities. The space the university was able to provide us for classrooms and offices was quite skimpy, and we were ultimately able to get adequate space and suitable classroom facilities only by a sizable investment in rehabilitation. The costs for other programs will be comparable. Anyone contemplating replicating these kinds of programs elsewhere should think in terms of about a million dollars per year, plus the administrative costs of whatever management structure is set up.

These outlays are quite small if we compare them with the total of the many piecemeal efforts that have been made to improve economics education in the region, or if we compare them with total budgets of aid organizations operating in the area. But they are large amounts for a typical foundation or program, and have been covered only by tapping a whole set of organizations—private foundations, the World Bank, governmental economic assistance organs, and so on.

On the one hand, we have developed an approach to upgrading the capability of economics education and research that has proved successful in achieving its goals, with a relatively small absolute cost and a high benefit-cost ratio. On the other hand, this model requires a long-term commitment, amounts that are large for any individual organization, and follow-on efforts to realize the full benefit from the foundation that has been laid.

So we need two things. First, we need a communitywide understanding that the programs are valuable and that this is an experiment that has worked. For EERC there was a formal consortium, and for the group as a whole a more informal community in which various organizations participated in supporting a group of programs and institutions that were identified as having solid potential. This history shows that financing needs to tap into as wide a circle of sources as possible, and the circle of donors needs to be continually renewed. Now is an opportune time to widen this circle. In the climate of hope for progress spawned by the Georgian and

Ukrainian revolutions, the prospects are greatly improved for programs to succeed in places where earlier there seemed little hope.

Second, the community should understand that success requires a long-term commitment—it is no use pretending that the job will be done in five years, or ten years. Programs will not have to be financed indefinitely, as our success in indigenization is beginning to show. But despite the progress that has been made in indigenization, keeping programs going and scaling up the effort still requires substantial funding from outside. In none of these countries are state support of education, the institutions of philanthropy, or the capacity for paying tuition adequate to finance quality education.

The development banks should probably play a significant role in this. They have generally shied away from financing higher education, preferring loans and investment in more material projects. But a strong case can be made for assistance to higher education as well, because of its relevance to creating the cadres for a market economy and long-term growth. Economics education is especially important in this respect. A recent study by the World Bank's Task Force on Higher Education and Society, *Higher Education in Developing Countries: Peril and Promise* (2005) notes that on the basis of some studies of the return to education at different levels, the World Bank at some early point drew the conclusion that its lending strategy should emphasize primary education, relegating higher education to a relatively minor place on the development agenda (p. 39). The study, however, disputes that conclusion as based on faulty calculation, and suggests that arguments for a higher priority for higher education in development programs are gaining acceptance. And, especially since we are talking about Central Asia, in my view a serious effort should be made to get the Asian Development Bank (ADB) involved. So far as I know, the ADB has not made assistance to higher education an element in its strategy for any Central Asian country. Indeed, the ADB may be able to make a distinctive contribution in the Central Asian region since one aspect of its activity is encouraging regional cooperation.

Finally, it is probably time to try to build some ties among these programs and educational institutions abroad. Once indigenized, they will still benefit from interactions with economics departments abroad for an outside perspective on issues of curriculum and quality, a place to send professors and graduate students for research in a stimulating environment, apprentice roles for their graduate students, and a source of visiting faculty. Universities are in a better position to play this role than are the aid institutions that have been the major donors and sponsors so far. During the years since the breakup of the Soviet bloc many exchanges and ties among economics departments of universities abroad and CIS institutions have occurred. It is my impression, however, that these have often been too short-lived and one-sided to have much impact on the CIS institution or to benefit the Western partner. Once centers of modern economics training and research become established at the level of quality for which we are aiming, however, they become weightier partners who can offer substantial benefits to institutions abroad.

Notes

1. A detailed history of the EERC program and its origins is still to be written, and this is not the place to attempt it. One source for the beginning of EERC is an article by Gregory Ingram (1999). I should note here, however, that a crucial turning point was the drafting of a “Proposed Strategy to Address Critical Economics Education and Research Needs in Russia and Ukraine,” (Ingram et al. 2000) presented in the name of the World Bank and the Eurasia Foundation, in Washington, DC, in March of 1995. The proposal had been preceded by extensive discussions with potential funders and experts knowledgeable about the situation of economics education and research in the area. It laid out the rationale for the program and strategy for carrying it out. Boris Pleskovic of the World Bank took the lead in drafting the proposal, and William Bader of the Eurasia Foundation worked on recruiting additional members of a consortium to finance it. The creation of EERC followed closely the blueprint laid out in the proposal.

2. Current members of the International Advisory Board are Robert Campbell, Indiana University, Chairperson; Anders Aslund, Carnegie Endowment for International Peace; Robert Baldwin, University of Wisconsin; Charles Becker, Duke University; John Earle, Upjohn Institute; Paul Gregory, University of Houston; Peter Kennedy, Simon Fraser University; Larysa Krasnikova, NaUKMA; Josef Pelzman, George Washington University; Adonis Yatchew, University of Toronto. Though the board members have shown remarkable dedication to the program, they are busy people with many commitments, and we need a moderately large board to succeed in getting a group of adequate size together for twice-a-year meetings.

3. A list of EERC graduates and their current positions may be found on the EERC Web site.

4. Association for Comparative Economic Systems (2000).

5. Members of the advisory board are: Richard Ericson (Columbia University), Chair; Erik Bergloef (Stockholm Institute of Transition Economics); Wojciech W. Charemza (University of Leicester); Viktor Polterovich (Central Mathematics and Economics Institute, RAS, Moscow); Vladimir Popov (Carleton University, Ottawa, and New Economic School, Moscow); Mark Shaffer (Heriot-Watt University, Edinburgh); Judith Thornton (University of Washington, Seattle); Shlomo Weber (Richard B. Johnson Center for Economic Studies, Southern Methodist University, Dallas). In addition to overseeing the program, most of these advisory board members serve as “resource persons” for the workshop process. They are supplemented in that function by additional experts, both international and Russian, who have included over the years a long list of distinguished economists too numerous to name here.

6. The committee consists of Iryna Akimova (UNDP-Ukraine); Roy Gardner (Indiana University); Erik Pentecost (University of Loughborough); Chris Waller (Notre Dame); and Diana Weinhold (London School of Economics).

7. Since most of what EROC has done in outreach is a common-sense, almost banal, set of activities, I will focus only on the highlights. It is perhaps more to the point to emphasize that success in any of these endeavors turns crucially on getting a good person to carry out common-sense ideas. We were fortunate to be able to recruit Professor Joyce Gleason to organize these conferences. She has long been active in improving economics education, has extensive experience in Ukraine, and has a personal dedication to this mission.

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Comment on Lyakurwa, Angelescu and Squire, and Campbell

Tom Coupé

THE THREE PAPERS PRESENTED IN THIS SESSION HAVE ALL BEEN WRITTEN BY, AND present the view of, people who administer the programs that were established to improve economics education and research—Ramona Angelescu and Lyn Squire as representatives of the Global Development Network (GDN), William Lyakurwa as executive director of the African Economic Research Consortium (AERC), and Robert Campbell as president of the international advisory board of the Economics Education and Research Consortium (EERC). My discussion is written from the other side: most of my comments are based on my three years as assistant professor at EERC-Ukraine. Some of my comments are based on my experience as a participant in the research competitions of GDN. I will also refer to what I think we can learn from the African experience described by Dr. Lyakurwa

Despite the fact that it is now almost 15 years since the Soviet Union collapsed and Ukraine became independent, and despite the fact that EERC-Ukraine has now existed for almost 10 years, the state of economics education and research in Ukraine is still far from what it should be. Every year during the admission exams we see that many students of the so-called economics departments have no clue about what economics really is. They still confuse economics with marketing, accounting, and management. The few who have had econometrics have often studied some theoretical concepts but never had any practical exercises. And students still think that cheating on exams is acceptable and that you write a research paper by copying and pasting from material available on the Internet.

The above-mentioned problems are structural problems that are unlikely to be solved quickly. Two examples will illustrate this: I proctored an exam for undergraduate economics students at a university that enjoys the reputation of being one of the best universities in Ukraine. Despite this, the professor was did not intervene when students were talking or looking at their neighbors' papers. Even more striking, students were allowed to leave the classroom during the exam in groups, to have a smoke in the corridor. Second, a "candidate NAUK" (the local version of a PhD)

told me that during the defense of her thesis, one of the jury members told her that she should not report the standard errors of her regression estimates. Both examples point to the core of the problem: the average professor has neither the skills nor the attitudes that one would expect and require at a Western university. As a consequence, the young aspirants have bad role models and old problems linger on.

MA programs such as those at NES and EERC-Kyiv are successful in training their students in modern economics and in changing, to a large extent, their attitudes toward cheating and unprofessional behavior. In that way, these MA programs have some influence on the business environment where their graduates work. They have been very successful in influencing the think tanks in Kyiv, which are dominated by EERC graduates. To what extent the think tanks have been able to influence the policy makers, however, is more difficult to determine. Another way that EERC graduates influence policy is through their jobs at the offices of international institutions such as the World Bank and the International Monetary Fund (IMF). Direct influence through graduates working for the politicians in parliament or in the government is the exception, not least because of the low pay in the public sector. But even those who—for patriotic reasons—decide to work for the government are unlikely to use the more advanced methods they study during the course of their MA programs. Government ministers so far don't require regressions; summary statistics will do as well for them.

The low pay for public-sector workers also affects the success of the MA programs in placing their graduates as teachers at local universities. Of the students who graduated from EERC-Kyiv and decided not to study for a PhD abroad, five at most are teaching at a local university. For those who do decide to go on to get their PhDs, the only place in Ukraine to go to when they have the advanced degree is EERC-Kyiv, because all the other economics departments pay their faculty members only a few hundred dollars a month.

The low salaries paid by the universities make the existence of grant competitions such as that of GDN or EERC crucial. One of our alumni told me he would quit his job at a university if he had not been successful in a grant competition. Thanks to a grant that our EROC research center obtained in the framework of the GDN Global Research Project "*The Impact of Rich Countries' Policies on Poverty*" we were also able to employ two recent MA graduates—each rejected a place in a PhD program offered by a Western university, preferring to stay in Ukraine and work as a researcher.

Grant competitions are thus important for maintaining capacity. They are also important for increasing capacity once one exists—the review by senior economists of the draft papers stimulates further development of many young economists. I think, however, that grant competitions and "basic capacity building" should be separated as much as possible. If we have a regional competition, quality should be the only factor to determine who gets and who does not get a grant—it is not a good idea to give a grant to a mediocre proposal of a citizen of country A, a country that has no capacity, when there's a better proposal written by a citizen of country B, even when that country already has some capacity built up. Such a policy creates anger,

discontent, and a feeling of unfairness among the participants of the grant competition. If one wants to build capacity in country A, I believe it's better to organize extra training sessions for country A's researcher so as to make them competitive in grant competitions. One specific way to build capacity is through master's programs: alumni from the master's programs in Kyiv and Moscow typically do very well in the grant competitions.

Because of the low number of MA graduates opting for a career in academia, the MA programs probably have had much more impact on their countries' economics education through their outreach efforts than through their graduates. Student conferences, outreach conferences, seminars, and summer schools have an impact on those who have already self-selected into the profession of teachers and are likely to continue teaching. In contrast, MA graduates who are interested in teaching go to the West for a PhD. Therefore, one should not expect that creating a local PhD program will lead to a substantial improvement in the level of economics education in a country. Indeed, if the level of such a local PhD program were of the same quality as programs in the West, its graduates would compete with Western graduates for Western jobs and Western pay. Just like the MAs graduates, they would not become low-paid professors at local universities.

What would be the advantages of a local Western-style PhD? It would strengthen the research environment; professors would have an opportunity to teach more advanced courses, and the graduates of MA programs would have an opportunity to get a good PhD degree in their own country. But if these people want to work in academia after obtaining their PhD, going abroad would still be the most likely option. Rather than starting a Western-style PhD program with PhD courses I am more in favor of upgrading the existing *aspirantura* education. The "Joint Facility for Electives" of the AERC seems to me an excellent example, bringing aspirants from different regional universities together and teaching them up-to-date contents and techniques. Combined with research workshops where thesis proposals are presented, progress is monitored, and theses are defended—again as in the African model—you get a model that will revolutionize the level of educators. That there is a demand from local educators to increase their knowledge can be illustrated by the application statistics for two summer schools we will organize in July, together with EERC-Moscow and the European Economic Association. For each available place, we had almost three applicants.

Rather than starting up a PhD program some might consider scaling up the efforts to build capacity in economics education and research by opening more MA programs in other regions. Here are some thoughts on this.

First, the existing MA programs have been successful in creating centers of excellence in economics education and research in Ukraine and Russia. Without doubt similar centers of excellence can be created in other countries. However, none of the existing centers in the former Soviet Union have reached the stage where they are sustainable without the help of foreign donors. EERC-Ukraine has been successful in obtaining some funds from local oligarchs. The ironic thing here is that the oligarchs that now support EERC are the oligarchs who were opposed to the Orange

Revolution. The orange government, in contrast, so far has not shown any interest in funding graduate education and research in economics.

The local funds so far, however, are not enough to sustain the program: for the next two years, about a third of EERC-Kyiv's budget will come from local donors. If, in order to support the new centers, the existing donors decide to shift money from existing centers to the new ones, I fear that we will get more economics education and research in, say, Georgia and Kyrgyzstan but (much) less in Ukraine and Russia.

Second, if the donors decide to create new centers, they should seriously consider giving endowments to these centers rather than providing them with yearly, three-year, or even five-year grants. None of the existing centers in the CIS has been able to grow out of donor support and it would be very optimistic to hope that new centers would do better. In Europe, master's programs are mainly financed through government support; in the United States, mainly through government support or through endowments. The Central European University (CEU) in Hungary has an endowment from Soros; the Center for Economic Research and Graduate Education (CERGE) gets quite a bit of government support. Nobody, however, expects much financial support for graduate education from governments in the CIS in the near future, and philanthropy is still scarce and very random—definitely not something one would want to count on.¹

The only way for donors to be sure to have a long-lasting impact is by providing an endowment to these institutions. Such an endowment would focus life at these centers on quality and growth rather than on survival. The annually returning question of “do we have enough money for the next two years so we can enroll a new class rather than start shutting down the program?” could then be replaced by the question “how do we improve the quality of our teaching and our research?” Focus on the second question would make it much easier to attract, retain, and motivate faculty and staff.

I wonder why donors are so reluctant to provide endowments. They seem to be convinced that the problems they help to alleviate are temporary, that the projects they start will solve the problems quickly, or they hope somebody else will take over. I really would like to see some statistics on the survival chances of donor-funded projects that have been started without an endowment. Recently, USAID and the Soros Foundation gave US\$15 million to establish an endowment for the American University of Central Asia. I hope this is a first sign that donors understand the importance of endowments for educational programs.

Endowments would make it easier to retain faculty members, which is especially crucial since the faculty members are the ones who have to build the new institution. People who come for just a single year have little incentive to invest time and effort in the improvement of the program—by the time they know the program and see how it can be improved, they are already thinking about their next job. And why would they write grant proposals to get additional funding for teaching, research, or outreach? By the time the grants gets approved, the applicant will already have left the program. Longer-term stays indeed lead to a feeling of “ownership”—the faculty

members become residual claimants, hence they have interest in strengthening the program.

If donors prefer not to give an endowment, I recommend that the new centers start as “cheaply” as possible—that is, combine some Western-educated PhDs with “upgraded” local teachers. The latter, while not attaining the level of the Western PhDs, can still provide a reasonable level of quality education. They can be paid a wage that is high relative to local standards but low relative to international standards, which makes long-run sustainability much easier to achieve. Moreover, donors should be flexible in terms of how fast the money they give should be spent. Often money has to be spent within a given period, which is the best excuse to waste money.

To summarize: in my opinion, the efforts of donors to stimulate economics education and research in the CIS have been successful. In Ukraine, for example, there is now a pool of properly qualified economists available, who can supply government and business with advice based on sound analysis. What remains to be done (besides making the centers sustainable) is to put more effort into getting business and government to realize the importance of such advice and to try to increase the impact that both donors and MA programs have on education at local universities.

Note

1. The support of the Kazakh government for an economics PhD seems to be an exception.

Comment on Lyakurwa, Angelescu and Squire, and Campbell

Alan Gelb

I WOULD LIKE TO FIRST TALK ABOUT THE AFRICAN ECONOMIC RESEARCH CONSORTIUM (AERC) and the Economics Education and Research Consortium (EERC), then about the Global Development Network (GDN), then raise the question of what next. But first, a comment on the issue of capacity. We have had a lot of debate in the World Bank about what exactly is capacity, this rather existential concept everybody talks about, and how to understand it. I think opinion is swinging around to the view that it makes no sense to talk about capacity in the abstract; one has to talk about capacity for doing something specific—for delivering health services, for example, or for managing public finances. We have to define what the outputs are so that we can understand whether we are making progress. This is why it is important to be clear on what these organizations are trying to do. And there are differences between them—the concept of success is not always the same for all.

Considering the AERC and the EERC, the main thing that strikes me is their similarity. Both of these institutions have an active engagement in research. Their work is not mechanical; it is not hands-off. It has to do with a very people-intensive mentoring process. Both institutions emphasize the quality of technical and professional expertise, or professional development, within the discipline of economics. The focus on quality is important for the credibility of these institutions, both with their funders and with their partner institutions abroad.

Keeping this level of professional expertise and quality is absolutely essential for the credibility of the institutions. This means that, to some degree, they are elitist programs. I have heard that criticism from a number of quarters about the AERC, for example. And my response has been, “Well then, what are you really saying? That there shouldn’t be any ‘world-class’ or ‘respectable’ or respected economists in Africa?” That strikes me as really quite unsupportable. And if you agree with me, you have no choice but to insist on a program with high standards. That usually quiets the critics.

The implications of this approach is that one is trying to develop good people with good skills who will then be absorbed into government and perhaps into the

private sector. Exactly what research they do is less important; research is a tool to build the capacity of people. If this is the approach, you do not measure the outputs by whether the research is directly relevant to policy. From this perspective, it is less important what the subjects of the AERC thematic research are than the fact that the research is being carried out. The question is whether, seven or eight years later, the products of the AERC process are your counterparts, in the ministry of finance, in the PRSP process, in the central bank. Are they raising the quality of analysis and policy making in their countries? If they are, then the program is successful in influencing the economic management of countries in Africa. One has to think about the criteria for success very carefully.

As one measure of success, there is now a lot of interest from other disciplines in our capacity-building ventures. I have spoken with people working in business and in some of the sciences and mathematics about this model, and to what extent it is widely applicable. Mathematics seems to be more difficult because mathematicians don't work in groups—no one quite understands what networking would be about in mathematics.

On the teaching side, there are again some interesting parallels. Things seem straightforward at the MA level. With a good MA program and the right people, students will come, and they will later be absorbed by the country and used. They may not be absorbed exactly where you want them of course, but that is a secondary problem. At the PhD level it becomes more complex, because there is the issue of what happens to students once they have PhDs. There may not be an effective demand in these students' countries of origin for experts at that level.

One major difference seems to be the nature of the environment, in particular, the essentially hostile environment that the EERC faces in many of its countries. The old system is threatened by this new methodology and approach; far more than it is for the AERC, the EERC seems to be an "alien body" in the middle of the system. There is a question of whether the transplant will be rejected or accepted. That is not the problem of the AERC, which is helping countries move in directions in which most of the university departments would want to evolve.

Now to the GDN. The GDN is different from the other institutions in a number of respects. It is a network of networks, first of all. It is very new, and its impact is going to be difficult to assess because the counterfactual is the networks without the GDN versus the networks with the GDN, whereas the scenario for the AERC, for example, is what happens if you don't have it at all. Being one removed from the frontline organizations complicates assessment and brings in the issue of subsidiarity. What should be done at the global level, what should be done at the regional or the local level, and where exactly do you get the capacity-building impact? These are the issues that we will be struggling with as we think about the global architecture of capacity building.

The GDN differs in focus and objectives in at least two respects. The first is its more direct emphasis on the policy applicability of research. For the AERC and the EERC, that comes later down the road when students move into the right positions, although no one will, of course, argue against policy-relevant research. The second is

the issue of multidisciplinary. Here I differ a little from what Janos Kornai said in the early session. None of us would argue against multidisciplinary. But for better or worse we are organized in professional groups; and professional communities—whether they are in economics or sociology or anthropology—happen to be structured along disciplinary lines. If you are not credible in at least some of those professional disciplines, you can be as multidisciplinary as you like but, frankly, no one will take much notice of your work. This raises a tradeoff regarding the professional standards that you are trying to maintain for the credibility of your organization and of the graduates. I worry that an excessive focus on multidisciplinary may be asking some parts of the world to run before they can walk.

Now, briefly, on the way forward. Clearly, there is a funding issue. The AERC has been going for 17 years. It will need at least another 17, even with good leadership, to become self-sustaining. The longer-term funding problem arises because every donor seems to view itself as catalytic. This is true for us and it is true for many of the foundations. But in this area, *catalytic* requires a far longer engagement than two, three, or four years. The World Bank's ability to support capacity building is limited and sometimes misunderstood. We cannot use our regular budget for independent capacity-building activities—we have in fact tried to do this and it has not been possible, except with an extremely tiny part of our budget—the “external research support budget”—whose main job is supporting research and not capacity building.

What more can we do? One area that could perhaps be developed is through our financing. I was very interested to read the paper on East Asia, which set out some of the higher education reforms that the Bank has been supporting and funding. The pendulum is swinging back, away from a focus on purely primary education toward higher education. Using the financing vehicle depends, of course, on whether the countries involved are going to endorse this approach. We are not going to be able to fund research on capacity building through Bank programs if the countries are indifferent. Public relations efforts within the countries are therefore important.

We can also do a much better job in stimulating the demand for capacity in the countries. There is no shortage of money for technical and professional services related to development. In Africa alone, there is US\$3 billion to US\$4 billion being spent every year on technical assistance. These funds are supporting a variety of activities, very few of which are actually performed by Africans. We need to work with countries, to see how some of this effort can be turned around, and to create longer-term research agendas for domestic researchers. Such a longer-term agenda will help to deal with the demand problem.

Thank you.

Comment on Lyakurwa, Angelescu and Squire, and Campbell

Sergei Guriev

DISCUSSING THIS CONFERENCE'S PAPERS IS A CHALLENGE NOT ONLY BECAUSE EVERY author has done a perfect job in presenting his or her case but also because each paper represents the author's life project. Every paper describes a true quest guided by the author's deeply felt vision and principles. Moreover, there is a selection bias: by definition, the conference includes only success stories. The approaches to capacity building have been very different in all cases, and each case is different from the one I know best—the case of the New Economic School. The differences between these visions and their degree of success may be explained by different missions and by different external factors. Yet I believe one can benefit from discussing these experiences in a unified framework (which will inevitably be driven by my own convictions on capacity building in economics).

It is also hard to discuss the three papers in this session as they describe the broadest range of capacity-building models: EERC is a school, AERC is a network, and GDN is a network of networks. Also, I have a very different level of ex ante awareness of each of the three projects. I have only attended an AERC conference once. I have attended many GDN conferences, won two gold medals in GDN competitions, and participated in GDN's very first Global Project. I have also completed numerous questionnaires for GDN's internal and external evaluations, discussed in the paper. And I probably know almost everything about EERC-Kyiv, as it is essentially a sister institution of NES; I have also grown up in Kyiv and went to the same high school as many EERC students and faculty members.

Given all these caveats, I will proceed with my comments as follows. I start with presenting a framework describing my understanding of the economic rationale for capacity building and then provide comments on each case in turn. I will conclude by summarizing the lessons we learn from comparing these excellent projects.

Why Capacity Building?

Building centers of excellence in economics has to do with the most fundamental questions in our profession: Why are some countries rich and other countries poor? Why have some poor countries managed to catch up with rich countries within one lifetime, and others have been lagging behind even more? As Nobel Prize winner Robert Lucas once wrote, “The consequences for human welfare involved in questions like these are simply staggering. Once one starts to think about them, it is hard to think about anything else” (Lucas 1988). In recent decades, many great economists have invested a lot of effort to answer these questions. However, the state of the field is best summarized by the telling title of a recent book by one of the leading researchers: *The Elusive Quest for Growth* (Easterly 2001).

Modern development economics research has produced many important results; we know a lot more about non-OECD countries than we did just a decade ago. Still, intellectual honesty makes us recognize that development economics has not yet produced a universal panacea for growth and development. In particular, there seems to be a consensus now that the previously praised Washington Consensus has not met the expectations (Stiglitz 2002). Although one should acknowledge that the problem has mostly been with selective implementation of the Washington Consensus checklist rather than with the Consensus per se (Williamson 2002), the fundamental question is why the implementation was selective. I strongly believe that the answer has to do with the resident capacity in economics.

Development economics has proven that the basic (neoclassical) economics paradigm “incentives matter” is as applicable (or even more applicable) to developing economies as it is to established market economies. Protection of property rights, contract enforcement, market competition, and sound fiscal and monetary policies are crucial for development and growth. However, it is less clear how, in developing countries, to implement these first-order economic principles. The development and transition economies start their quest from a point where multiple market failures and government failures are a rule rather than exception. Moreover, missing and failing markets as well as incompetent or corrupt governments decrease returns to institutional change, both at the level of an individual firm or worker and at the level of policy makers.

One can therefore argue that designing a politically implementable reform package is the most important challenge in economic development. In doing this, one needs a deep knowledge of both the state-of-the-art economics research and the specifics of the particular country’s institutional environment. The former is crucial for understanding linkages among parts of the reform package and the characteristics of the quest’s destination. The latter is vital for understanding the relative importance of different market and government failures for the implementation of the plan and incentives, both at the micro level and at the level of policy makers. This message emerges strongly from Dani Rodrik’s recent paper “Growth Strategies” (2005) and the book *In Search of Prosperity* (2003). These contributions argue that successful growth policies are exactly the ones that implemented the “first-order principles of

neoclassical economics” listed above. On the other hand, there is no one-size-fits-all solution: the feasibility of policy packages crucially depends on an initial set of institutions. Hence it is inevitable that different countries should pursue different policies to promote growth and development.

This argument emphasizes the vital need for economics capacity building. There is no other way to ensure the design and adoption of adequate policies than to create a resident economics profession whose members will be part of the global economics community, and who will be permanently based in the country so they would have a first-hand knowledge of their country’s institutions and incentives to promote its economic welfare. The latter point directly follows from the discussion above, so let me elaborate on that discussion.

Academic quality and involvement in first-class economics research is important because development economics is a rapidly growing field. A major lesson from recent research is that successful policy packages have to be comprehensive (to ensure political feasibility), hence capacity building cannot be limited to a field of development economics, or to transition economics. Growth-promoting policies need first-class capacity in political economy, public economics, labor economics, macroeconomics, industrial organization, financial economics, international economics, and so forth. The greatest mistake would be to exclude economic theory, or at least applied theory. Good economic theorists can provide a broader view of how incentives interact in an environment different from ones where the other disciplines have originated (that is, different from the institutional framework that is present in OECD countries), and they can extend the standard models wherever needed.

Integration in the global economics profession also provides a crucial ingredient of the resident economists’ incentives: career concerns. This is especially valuable in the environments where interest groups reign unconstrained. Career concerns and the respect of foreign colleagues will ensure independence of research and policy advice, and will prevent the cooptation or buyout by the vested interests.

Integration into global academia also insures local economists from downside risks. Given the economic and political volatility in developing countries, it is not impossible that the economists will have to exercise their outside option and leave the country. Although this is unfortunate *ex post*, such insurance is crucial for *ex ante* incentives to move to the country.

AERC

Among other capacity-building projects, AERC stands out as an undertaking with the greatest challenges but also with the highest returns. As Sub-Saharan Africa has lagged behind the world economy for decades, the value of good economic policy in that region is much higher than it is in other countries. And AERC’s achievements to date are great, especially given the short time span since its beginnings.

It is truly amazing that AERC has managed to launch a research competition, a master’s program, and even a PhD program—and that it did so as a cooperative effort among several universities crossing national borders in a continent where borders still

matter a lot. Yet the very same strategy raises concerns for the issue of a critical mass, which I see to be crucial for the next step. Indeed, full integration into global economics would require not only retention of a cadre, but a two-way mobility: sending best talent to Western PhD programs and bringing them back to work in the master's and PhD programs. In order to create centers of excellence that would include world-class faculty, one should create a department or departments with 20 to 30 academic economists who have Western PhDs and publish in journals outside Africa. It is much harder to do this without focusing on one or two universities. Even in most countries in continental Europe, each country can only afford one or two centers like that.

GDN

GDN is the youngest of these three organizations, and yet it is also the largest. Being a unique global network of networks, GDN is pursuing many activities and constantly trying to design new ones as it becomes clear what can benefit researchers in the developing countries. Unfortunately, the format of these comments does not allow praising the multiple contributions of GDN to local knowledge generation, so I will inevitably focus on areas for improvement. My major problem is that GDN is more focused on retention rather than on reversing the brain drain. Although these issues sound similar, the implications for capacity-building strategy are often different. To retain existing researchers, the capacity builders should equip them with analytical tools, data, contacts, and pecuniary rewards for relevant research. To reverse the brain drain, one should provide the returning PhDs with adequate long-term funding, create a critical mass of colleagues, and ensure that what matters is the quality of research rather than topic. Mostly these are the same—access to data and journals and travel funding are very valuable in both cases. However, occasionally these approaches do not coincide. For example, research competitions with predefined topics provide researchers with occasional but uncertain rewards, while risk-averse returnees would rather have multiyear tenure-track-type contracts. Given the economic and political instability in their home countries, one cannot blame them for being too cautious.

GDN has made multiple attempts to learn what activities should reverse the brain drain, but by definition it has surveyed retained rather than returning economists. Being in the shoes of a returning economist, I would suggest that one should provide tenure-track-type contracts for Western PhDs returning to non-OECD countries. This would greatly facilitate the development of the struggling individual centers of excellence, most of which are being discussed in this conference: CCER, CERGE-EI, CEU, EERC-Kyiv, and NES.

The research competition example that I know best—EERC Russia, GDN's representative in CIS—has been highly successful for almost a decade. However, once one evaluates the outcome of this project in terms of capacity building, one sees that most of its participants have never made it to the level of international publications. The only exceptions, who did publish and stay in Russia, are affiliated with NES; there are also a handful of others who eventually went to the United States and pub-

lished when they left Russia. Even with very devoted staff and resource people from all over the world, there is a limit to what a research competition can do. At this stage, a world-class department of economics can emerge only through two-way mobility—sending people abroad and hiring back Western PhDs—and this requires a focused approach and building a critical mass in the way the above-mentioned centers of excellence do.

EERC-Kyiv

EERC-Kyiv has been a great success. It was created in 1996, four years after NES, and since then has been followed the very same path only few years later. It has established a high-quality master's program, sent graduates to PhD programs in the West, and even started to hire them back in the international job market. EERC has also been successful in placing graduates in professional economist positions in Ukraine's public and private sector.

Because I strongly believe in the NES model, I can express concern only about two important deviations from this model. First, it is a model unlikely to establish financial sustainability without resident faculty in place. Both foreign and local donors are hesitant to provide capital funding to a school that does not yet have faculty. Only with faculty in place does the school acquire identity and can therefore present a very specific case to prospective donors. Once the faculty is in place, EERC-Kyiv will also be able to provide Ukraine with all the benefits of modern economics: policy advice for the public sector and consulting for the private sector, which will further advance visibility and fund-raising potential. Therefore it is crucial to provide tenure-track and tenure contracts to the faculty rather than the one-year contracts that have so far been the case in Kyiv.

The resident faculty are especially important for tackling my second concern: EERC's indigenization strategy. As EERC was transforming into Kyiv School of Economics (KSE) within a large public university, there were many obvious risks. Even though this university is a new and progressive organization, it is hard to imagine how it will be able to commit to KSE's independence and autonomy, especially given that the university already has an economics department. NES has undertaken multiple attempts to integrate with many Russian state universities, including some very similar to EERC's partner, yet we have always backtracked because the benefits never seemed to justify the risks. The major risk of integrating into the large university is the risk of losing the program's quality and overall mission. However, these risks are not there for good. Once the strong resident faculty is in place, the situation may be quite different because mature faculty will be able to withstand external pressure.

One thing that Bob Campbell's paper does not mention is the Orange Revolution of 2004. It has opened up a new window of opportunity for EERC in terms of external funding, excellent visitors, and impact on economic policy in Ukraine. Even the fact that the prime minister in place seems to pursue very unorthodox policies may actually help to stimulate further the demand for good economic advice from

the business community. I would recommend jumping on this opportunity and establishing a policy research center.

Conclusions

The three papers provide a very good insight into the economics capacity building universe: from a basic unit of economic department (EERC) to a network of such departments (AERC), on to a network of such networks (GDN). All three institutions have done a great job in a very short period of time. Yet much more is to be done to make irreversible progress in building world-class economics capacity in these countries.

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Regional Perspectives

Accelerating Poverty Reduction in South Asia by Scaling Up Economics Education and Policy Research

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South Asia is enjoying the fastest growth in its history and making modest, if uneven, gains in human development. The difference between continuing at this pace and reaching some of the Millennium Development Goals, and attaining even faster growth— thus making significant gains in human development—lies in second-generation reforms. South Asian countries are democracies, so the second-generation reforms will have to emerge from a domestic political consensus. To build this consensus, the reforms will have to be tailored to local circumstances and developed and debated by domestic actors, and they will have to be underpinned by credible economic policy research that shows what works and what doesn't in those local circumstances. The paper reviews the situation in Sri Lanka and Pakistan, and then describes SANDEE, a small but successful regional research network with the explicit goal of enhancing capacity in the region to undertake research on the linkages between environment and development economics and to strengthen teaching in environment and natural resource economics. SANDEE's experience suggests that regional networks are not inexpensive, but they are cost-effective.

A program of policy research in South Asia can be scaled up by (1) building or strengthening research institutes in underserved countries and regions within countries, and (2) research that will provide the foundations for second-generation reforms. The authors propose several country-specific and regional initiatives needed for scaling up. The recommendation at the country level is for building new economic policy research institutes in some of the countries of the region, while strengthening existing institutes in others. For instance, in Pakistan there is a clear need and potential for a new institute dedicated to research that supports second-generation reforms; in Bangladesh, we would recommend instead that an existing institution—for example, the virtual network called the Economic Research Group—be strengthened.

This paper proposes several initiatives at the country and regional level to scale up economic policy research and education in South Asia. First is the proposal to hold a South-Asia-wide workshop to go into greater depth about possible approaches to scaling up economic policy research and education in the region. The second initiative is based on the sizeable South-Asian diaspora, who have sent home remittances to the tune of US\$24 billion a year over the past three years. Establishing a South Asia Policy Research Foundation could pool the funds donated by these individuals, and then allocate them, based on transparent and competitive criteria, to research institutes and networks in the region. The orientation, organization, housing, research priorities, and outreach of this foundation could be explored further at the proposed South Asia workshop.

Such scaling up can promote sound policy making, accelerate growth and the delivery of basic services to poor people, and help realize the dream of eliminating poverty in South Asia in our lifetimes. Given where the region is currently in its growth and poverty-reduction prospects, investments in economic policy research and teaching in South Asia can have extremely high payoffs relative to similar investments in other parts of the world.

AMONG LOW-INCOME REGIONS, SOUTH ASIA HAS THE BEST CHANCE OF MEETING THE UN Millennium Development Goals (MDGs) of moving the world substantially closer to eradicating poverty. But it also has a good chance of *not* meeting the goals. The difference between the two outcomes will depend on whether the region can increase and sustain its GDP growth rate from around 5 percent to 8 percent per year, and improve the delivery of basic services to poor people—in health, education, water and sanitation, and other infrastructure—so that sustained higher growth translates into better human development outcomes.

The potential is massive—as is the challenge. On current trends, the region is off-track on the MDG goals of primary education, child and maternal health, gender equality, and preventing the spread of communicable diseases. And this aggregate picture hides the sharp—in some cases widening—disparities between and within South Asian countries.

To meet the challenge, this paper argues that the countries of South Asia should scale up economic policy research and upstream economics education so that the policies required for such growth will be based on more solid foundations. The first section discusses why the nature and depth of economic reforms that are now being pursued require greater capacity for policy research in South Asia than is now available. It also notes that the current environment of relatively rapid growth, greater openness, and a large and active diaspora represent a historic opportunity to scale up economics education and policy research in South Asia. The next section describes some of the existing cross-country and national capacity-building efforts, illustrating both their potential and their problems, and the large payoff that can be expected in South Asia from such scaling up. The following section discusses possible candidates for the type of capacity-building efforts that could be pursued in the region as part of any scaling up. For example, it proposes and provides the rationale for holding a regional workshop in South Asia—similar to the June 2005 global conference in Budapest for which this paper was written—that would allow

a more in-depth discussion of the issues specific to South Asia and agreements on next steps.

Why Scale Up Economic Policy Research in South Asia?

To meet South Asia's development challenge, economic knowledge and policy research are critical—in stimulating public opinion and action, as a catalyst for change, in understanding what works and what doesn't, and in benchmarking that makes policy makers accountable for performance. South Asia is considered by many to be the cradle of development economics. Yet many would hold that sound economic policy research in South Asia—whether domestically sponsored or supported by donors—does not make the same contribution to policy making as it does, say, in Latin America. In a region with a long and rich tradition of knowledge creation, and one where—for some countries at least—donors' financial resources are a drop in the bucket; external assistance strategies must be underpinned by a creative, rigorous, and results-oriented approach to knowledge assistance and helping build the domestic capacity for such knowledge generation and sharing.

The need for greater evidence-based policy making and policy research in South Asia stems from the nature of the reforms. Most of the countries of South Asia are attempting second-generation reforms, strengthening public expenditures, and public-private partnerships that complement such reforms. These reforms—aimed, for example, at improving the delivery of basic services in health and education or improving the investment climate—are far more complex and time consuming than the stroke-of-the-pen, first-generation reforms South Asian countries have implemented with reasonable success. Second-generation reforms attempt to shift institutional incentives to bring about greater accountability in service delivery, such as by separating the policy maker and the provider of such services. Focusing on strengthening the institutional accountability for services delivered by an urban water utility—by introducing management contracts and similar public-private partnerships, economic pricing of water, and institutional changes needed to underpin 24-7 water availability—is substantively different from simply laying more pipes, building more pumping stations, hiring more engineers, or opening a complaints cell. Policy making based on evidence, and economics education and research that produce people capable of gathering such evidence and making sense of it, are essential ingredients in sustaining long sequences of reforms and avoiding costly mistakes. They are also vital for building political support for such reforms.

These kinds of second-generation reforms require firmer domestic ownership and deeper local knowledge. They require political leaders to think through how they must prepare the ground for such reforms, which is often contentious; how they sequence them; and how they evaluate them so as to be able to allow voters to judge performance at the next elections. Knowledge of what works and what doesn't, and why, is crucial for making these judgments. For instance, it is important to understand whether and to what extent forestry reforms in one of the poorest countries in the region, Nepal, have contributed to poverty reduction. What may be a binding

constraint in one setting may not be a binding constraint in another, and politicians are particularly sensitive to wasting scarce political capital (or incurring expensive political debts) on reforms that do not address genuine constraints to faster growth or better service delivery. Bangladesh, for example, has grown consistently and at increasingly faster rates, despite the general presence of factors such as poor governance and high levels of corruption. Sound economic research that helps sort out what works and what doesn't can be immensely powerful in this one-size-does-not-fit-all world

Second-generation reforms need a great deal of knowledge specific to local conditions, requiring economic policy analysis to be carried out at the local level rather than just at the national one. This is particularly important in South Asia for three reasons. First, irrespective of the form of government, the region has some of the largest countries in the world in terms of population size, as well as the largest concentrations of poor people. These are not homogenous populations by any stretch of imagination. They require specific solutions to specific problems such as, for example, in the delivery of education services or management of local watersheds.

Second, the federal nature of government in India and Pakistan, the largest countries in the region, shifts the locus of decision making and budgeting for many of these second-generation reforms to state and provincial tiers of government below the federal level. But these subnational tiers of government are precisely where the capacity gap for economic policy analysis and informed policy debate can be large.

Third, several countries of the region are decentralizing to local governments to increase the accountability of government to their citizens. This puts a premium on knowing what works and what doesn't in terms of the investment climate and service delivery, for example, at levels of local urban and rural government where on the face of it the capacity for design, implementation, monitoring, and evaluation may be the weakest.

The politics surrounding second-generation reforms are far more involved than first-generation, stroke-of-the-pen reforms, and go beyond a simple matter of sorting out winners and losers. For one thing, second-generation reforms take much longer than their predecessors to show results. For another, they are extremely contentious. Credible, objective policy research can play a large role in informing the public and the media about the impact of reforms. Properly disseminated, such research can help in bringing about greater alignment between narrow political interests that are focused on patronage and clientelism and the broader development objectives of providing services to the general public, particularly to poor people whose voice may be the weakest. Objective research can also contribute productively to the contestability of policy directions and allow a better sorting out of equity issues across time and space. Building greater political awareness into economic policy research programs remains a major challenge. Without such awareness, policy analysts can miss the political calculation (even if that calculation is self-serving and narrow) that may underlie apparent policy blunders, as in the case of power subsidies for farmers in India. When such political calculation is systematically ignored, policy advice, whether donor driven or domestic, has poor traction.

Finally, the economics profession is slowly rising to the realization that the policies it advocated in the 1980s and 1990s—stabilize prices, liberalize trade, privatize industries—may have mattered less than the institutions that stand behind those policies. Knowledge about how these institutions work and can be reformed is best located in domestic capacity to undertake economic and political analyses. Whether as a legacy of their colonial past or the historical continuity of their traditional cultural and social institutions, countries in South Asia have been more reluctant to cede ground to outsiders in reforming their institutions. In such places, successful reforms are likely to come only from a broad consensus that is based on *domestic* analysis and debate.

Besides the need for scaling up policy research and the upstream economics education that feeds such research, South Asia has many characteristics that promise a high payoff from such scaling up. As already noted, the region has a strong and long-standing tradition of policy research on development, particularly in statistical systems and in poverty and multigenerational investment analysis. There is a strong legacy of development planning in each country in the form of national planning commissions; these commissions still command respect in the national dialogue and possess some of the strongest pools of analytical talent within government, even though some of them do not have as clear a mandate, orientation, and technical strength as they used to.

In almost all countries of the region, but particularly in the larger ones, the diaspora is a strong source of independent interest in economic policy analysis that can and should be tapped. Members of the South Asian diaspora remain fully engaged in researching and periodically spending extended periods of time in their countries of origin. These visits are often facilitated by local policy think tanks, which themselves gain by their associations with visiting scholars and which provide a gateway for the diaspora into the wider debate on policy issues carried out in the media and in public discourse. This process is helped as well by the relatively free and vibrant press in the countries of the region, including in the vernacular press, which is far more important in carrying the debate to people bypassed by the English press. Finally, increasing access to the Internet and its rapidly widening use in South Asia, combined with the region's relative strengths in information technology, make for a greater impact of policy research. The relative technological strength experienced by people at lower levels of income allow for readier access to information on policy analysis, readier sharing of information around which coalitions on important policy issues can be built, and capacity-multiplying solutions, such as e-governance, that combine transactions efficiency with greater accountability.

National and Cross-National Policy Research Initiatives in South Asia

In light of the need for economic policy research in South Asia, a natural question to ask is: Who is filling this need? What types of economic research organizations are

there today? In this section, we briefly review the situation in Sri Lanka and Pakistan, and then describe a small but successful regional research network.

Sri Lanka

There are few truly independent centers for economic analysis and research in Sri Lanka. The most reputable universities (Colombo and Peradeniya) and the most reputable think tank (the Institute of Policy Studies, IPS) depend heavily on government funding and support. The IPS, established in 1988, is Sri Lanka's leading economic policy research institute and the publisher of the annual *Sri Lanka State of the Economy Report*. As the coordinator of the South Asian Association for Regional Cooperation (SAARC) network of researchers, the Institute was also instrumental in launching the *South Asia Economic Journal* in 2000 under the aegis of the SAARC Secretariat. There are no private universities. In a highly politicized environment, dependence on government support undermines the independence of these institutions.

Pakistan

Pakistan has been unable to hold on to the majority of its trained economists, let alone encourage the return of the large diaspora of highly trained economists back to Pakistan. Partly this is the result of the succession of economic and political crises over the past two decades, along with the rise of religious fundamentalism. Surprisingly, there is little high-quality research on the relationship of monetary and fiscal economics and policy, the financial sector, fiscal federalism, and the sources of Pakistan's past chronic instability. Research programs and economic analysis with a longer time frame are even scarcer. Pakistan's crises have shortened the time horizon of those engaged in policy making, and thus also in economics teaching and research. As a result, many of Pakistan's highly trained economists either go to the private sector in Pakistan, or have successful careers abroad in the International Monetary Fund (IMF), the World Bank, UN agencies, universities, or think tanks.

Because economic policy in Pakistan does not rely sufficiently on rigorous economic analysis, there is limited demand for highly skilled economists. Pakistan's most prestigious universities (Karachi's Institute of Business Administration and Lahore's University of Management Sciences) focus on business administration rather than on basic economic theory and public policy. Pakistan's few think tanks—for example, the Social Policy and Development Center in Karachi and the Pakistan Institute of Development Economics in Islamabad—depend heavily on government funding. These think tanks also conduct surveys and produce applied economic research for donors, but they tend to focus only on macroeconomic issues to the exclusion of other problems. There are no think tanks of any stature that are truly independent of Pakistan's ruling elites, whether these elites are the military or the government, or the political and economic elites of Punjab and Sindh.

Research Networks

Although South Asian policy research institutes enjoy differing levels of success, two recent networks created specifically to build capacity in economics need further mention. The two networks are SANDEE (the South Asian Network for Development and Environmental Economics, <http://www.sandeeonline.org>) and SANEI (the South Asia Network of Economic Research Institutes, <http://www.saneinetwork.net>). We discuss SANDEE below to showcase how networks can contribute to the policy research infrastructure in the region.

In South Asia in particular, but in many poor countries, the interconnections among poverty, economic growth, and environmental change have long been ignored. Development policy reforms in the past paid little attention to the resource dependency of poor people and the impact of pollution and degradation on the health and productivity of the poor. Second-generation reforms often need to focus on institutional changes that may influence the way poor people use natural resources. We also need to understand better how growth-enhancing environmental policies can be made more effective, given South Asia's frail institutions and weak enforcement capacity. SANDEE was founded five years ago to fill this gap in policy research. It was started with the explicit goal of enhancing capacity in the region to undertake research on the linkages between environment and development economics and to strengthen teaching in environment and natural resource economics.

South Asian countries share common local, regional, and international environmental problems. Yet these countries differ tremendously in their capacity to teach, to undertake research on environmental concerns, and to influence policy formulation. India, with its vast educational infrastructure, has an entire community of teachers and scholars who work together. At the other end of the spectrum is Nepal, with limited access to international knowledge, difficult language problems, and very few educational institutes that can offer high-quality training. Bhutan is a case of reliance on India for higher education—the only college in Bhutan, Sherbutse College, follows Delhi University curricula and engages faculty from India. The commonalities among the problems faced and the obvious differences in capacity to manage these problems present an opportunity for regional, cost-effective, capacity-building research and teaching programs. SANDEE was created to take advantage of this opportunity.

SANDEE undertakes a portfolio of capacity-strengthening activities to enable South Asians to learn from each other and to exploit economies of scale in knowledge development and dissemination. Its specific objectives are to:

1. strengthen the ability of researchers in South Asia to undertake policy-relevant research on the economics of environmental and natural resource problems;
2. support the growth of rigorous policy-relevant literature on economic development, poverty, and environmental change;
3. support the development of environmental and natural resource economics in teaching and research institutes and think tanks; and

4. facilitate dialogue among economists, other social and natural science thinkers, practitioners, and policy makers on environment and natural resource concerns.

In order to meet these objectives SANDEE provides research funding and technical support, operates a training program, and ensures that research is widely disseminated to the policy and academic communities. SANDEE's research support starts with a biannual research competition that is widely advertised in Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka. After a rigorous process of peer reviewing and commenting, a selected number of researchers are invited to share their proposals with peers and SANDEE advisers at a research workshop. These workshops, which are held every six months, bring together researchers in the region with senior scholars from around the world. Rigorous peer review is one part of the research infrastructure that tends to be rather weak in South Asia. Thus, these research workshops serve as a mechanism to evaluate proposals, to provide ongoing guidance and mentorship to local researchers, and to monitor research progress. They are also important for creating a vigorous South Asian professional community of researchers.

SANDEE supports research that is primarily empirical and builds on the use of household surveys. As we argue in this paper, second-generation reforms require local, long-term, evidence-based analysis. To promote this type of research SANDEE is now attempting to create a database of the information collected by researchers with the goal of supporting repeat surveys in the future.

SANDEE's teaching programs include introductory courses in environmental and resource economics, methods-based workshops, policy discussions, and so on. Country-specific workshops introduce colleagues to simple issues such as "how to write a research proposal"; more advanced regional workshops focus on topics such as computable general equilibrium models. Environment and natural resource economics is a new subject to many South Asian countries. Many universities in Bangladesh and Nepal now teach this subject, but with teachers who have had no prior training and who are simply unaware of the existing literature. Thus, SANDEE is attempting to train at least one faculty member from each university that offers environment and natural resource economics so that he or she is equipped with up-to-date information and teaching tools.

Limited resources for research in South Asia essentially means that many researchers do not have the luxury of spending years learning how to do policy analysis and then figuring out how to inform the policy community. Consequently, SANDEE also provides a "dissemination service" to researchers. Researchers contribute policy news to SANDEE's newsletter and they learn to field questions about the policy implications of their work throughout the research process. SANDEE then uses professional journalists to convert academic research papers into brief policy notes that are widely disseminated.

SANDEE's experience suggests that regional networks are not inexpensive, but they are cost-effective. For a vast region such as South Asia, which has diverse research capacity, there are economies of scale in bringing professionals from several similar

countries together to think jointly through the research needs for many second-generation policy problems. Further, networks can facilitate research competition and peer interaction and learning without large investments in infrastructure. Networks are not substitutes for research institutes in underserved regions. However, in the absence of local research institutes, networks can create opportunities for teachers and researchers in peripheral areas by linking them to the rest of their country, region, and the world.

Scaling Up Economics Policy Research and Education in South Asia

Given South Asia's need for, and payoffs from, scaled-up policy research and upstream economics education, it is clear that the existing initiatives described in the previous section, even if they were doubled or tripled in size, will fall short of meeting the challenge. Most existing initiatives are focused on a few countries and in too few regions of those countries. Furthermore, most research institutes concentrate on the federal government, whereas—as pointed out in the first section—many of the next generation of policy reforms will take place at the state or provincial level in India and Pakistan, and even possibly in Bangladesh, Sri Lanka, and Nepal.

In addition, most of the existing institutes in the region have been dedicated to research on first-generation reforms, such as trade and fiscal policy. The second-generation reforms that South Asia needs to accelerate poverty reduction—such as those in the public sector, including public-private partnerships, decentralization, environmental management, and service delivery reform—will require a very different research orientation to provide them with a solid base. The research will be long term, very often involving analyzing household surveys (done usually only once every few years) and rigorous impact evaluations. It will require strong participation of stakeholders for several reasons: to tailor reform design to the local situation; to use the information it yields more effectively; and to build distributional coalitions, since these reforms are intensely political. Finally, because of the highly contested nature of these reforms, it is essential that the research be credible and therefore that it be conducted by scholars and institutes with a reputation for independence.

Taking all this together, we see at least two dimensions along which a program of policy research in South Asia can be scaled up. First, there is a clear need for building or strengthening research institutes in underserved countries and regions within countries. For instance, there is currently no research institute in Pakistan that meets the criteria spelled out above to support that country's quest for accelerated growth and poverty reduction. Similarly, the smaller countries in South Asia—Nepal and Sri Lanka—lack a domestic tradition of evidence-based policy making. In India, where there is a long tradition of policy research, there are still major gaps in this area in some of the states—particularly the poorer ones such as Bihar and Uttar Pradesh—even though most of the responsibility for social service delivery has been devolved to the states and lower tiers of government. The challenge here, as in the smaller countries, will be twofold: to bring in and retain accomplished researchers and to

sustain the independence and financial health of any newly created or strengthened research institutes.

Second, there is a need for research that will provide the foundations for second-generation reforms. The research issues to inform these reforms are different. The research involves the study of incentives in public organizations—such as the effect of outcome-based bonuses on teachers—and the political economy of reform. The research methods are also different. Results of household, investment-climate, and public-expenditure-tracking surveys are examples of the kind of data used for this research. The research may also be multidisciplinary, as, for example, for tracking the economic implications of climate change in Bangladesh. And the governance of research may be different, with a need for greater collaboration with local stakeholders and more reliance on rigorous impact evaluations, both to know what works and what doesn't and to build political support behind those reforms that do work.

How can policy research and economics education in South Asia be scaled up along these dimensions? Given the heterogeneous nature of the countries in the region, we see several country-specific and at least two regional initiatives needed for scaling up. At the country level we would recommend building new economic policy research institutes in some of the countries of the region, while strengthening existing institutes in others. For instance, in Pakistan there is a clear need and potential for a new institute dedicated to research that supports second-generation reforms. This institute should be financially independent of the government and—importantly—of multilateral and bilateral donors, requiring endowment support and some revenue sources of its own. The institute would have a small core of dedicated staff, but would also be a focal point for locally based and expatriate Pakistanis, who would cycle through on a regular basis to provide fresh ideas and stimulation. Such a new institute in Pakistan should be part of a network, so that it receives peer support and capacity-building advice. This network participation is particularly important to ensure sustainability.

In Bangladesh, building a new institute may largely end up drawing talent from existing research institutes. We would recommend instead that in Bangladesh an existing institution—for example, the virtual network called the Economic Research Group—be strengthened. Many, if not most, Bangladeshi economists are already members of this network, but it is not now equipped to undertake long-term research. In India, we would recommend focusing on two or three poorer states, such as Bihar, Uttar Pradesh, and Orissa, and design the appropriate interventions only after further analysis of existing institutes. We would propose a similar approach in Nepal and Sri Lanka, both of which are underserved, and where the need is at least as great as in the poorer Indian states.

So far, we have emphasized policy research. Economics education is at least as important to providing a sound basis for policy making. And in South Asia, the quality of this education—except at a few elite universities—leaves much to be desired. The challenge, however, is choosing the right entry point. Capacity and resources can be major constraints, and both are unfortunately tied to deeper problems of fac-

ulty incentives, the funding of higher education, and university autonomy. Universities are often highly politicized, and attempts to strengthen the curriculum to make it more policy-relevant, say, are met with strong resistance. These complex problems of university education need attention. Any attempts to promote economics education cannot bypass them. Although it will take time to address these systemic issues, we believe that progress is possible as we scale up economics research. We would recommend using the research institutes that would be built or strengthened as the platform for developing a program of improving economics education. For instance, the research institutes could begin by offering to teach a course at the local university in policy economics.

Starting in this low-key manner, we would recommend garnering support for greater collaboration between universities and research institutes. Such collaboration should enhance the quality of both research and teaching. Stronger, more policy-oriented research institutes working on local issues with local survey and other data can become attractive destinations for visiting overseas researchers and faculty. As part of their visiting arrangements, these visitors can also provide short-term, world-class training in policy analysis for both advanced students and faculty. Such short but intense policy workshops can help set up research partnerships between overseas and local researchers, partnerships that can have a significant impact on the research output and career development of the latter.

At the regional level, at least two initiatives are worth pursuing. First, to explore and work out the details of which institutes would work in which settings, we would propose to hold a South-Asia-wide workshop, similar to the global conference held in Budapest in June 2005, to go into greater depth about possible approaches to scaling up economic policy research and education in the region. The conference could be held in 2006, with a view towards launching the initiatives as soon as possible thereafter. The conference would explore the relative merits of building new research institutes versus strengthening existing ones, including strengthening existing research networks such as SANDEE or SANEI.

The second initiative arises from another set of common characteristics of the South Asia region. The region is the world's largest recipient of remittances, to the tune of \$24 billion a year over the past three years. These are financed by the sizeable South-Asian diaspora, many of whom are now successful professionals in their new countries. These professionals in turn are often looking for ways of leveraging their remittances to help improve the policy environment for reducing poverty in their countries of origin. As we said earlier, accelerating growth and improving service delivery based on second-generation reforms are powerful ways of reducing poverty. We would propose that the collective-action problem of these individuals who are anxious to contribute to their countries but lack the ability to coordinate their actions, can be addressed by establishing a South Asia Policy Research Foundation that would pool the funds donated by these individuals, and then allocate them, based on transparent and competitive criteria, to research institutes and networks in the region. In this way, the public money devoted to policy research and economics education could be leveraged with private money, much like the Ford, Rockefeller,

and other foundations began doing in the twentieth century. The orientation, organization, housing, research priorities, and outreach of this foundation could be explored further at the proposed South Asia workshop.

Concluding Remarks

South Asia is at a crossroads. After several decades of stagnation, the region is enjoying the fastest growth in its history, and making modest, if uneven, gains in human development. It can continue at this pace, and reach some, but by no means all, of the Millennium Development Goals. Or it can aspire to even faster growth, substantially reducing the absolute number of poor people, and to significant gains in human development, especially for the poor and excluded groups such as women and minorities. The difference between these two paths lies in second-generation reforms that will remove the bottlenecks to accelerated growth and significantly improve the delivery of basic services, such as health, education, water, and sanitation, to poor people.

South Asian countries are democracies, some of them long-standing ones. These second-generation reforms will have to emerge from a domestic political consensus. To build this consensus, the reforms will have to be tailored to local circumstances and developed and debated by domestic actors. And they will have to be underpinned by credible economic policy research that shows what works and what doesn't in those local circumstances.

While parts of South Asia have a long tradition in evidence-based policy making, the location and kind of research needed to support these second-generation reforms calls for a significant scaling up of economics education and policy research in the subcontinent. The research needs to be done closer to where decisions are being made—for example, at the state or provincial level in federal countries, and in some of the underserved countries of South Asia. The research often needs to be long term in nature and collaborative in style, and should be scrupulously independent of both domestic and external political pressures. Given where the region is currently in its growth and poverty-reduction prospects, investments in economic policy research and teaching in South Asia can have extremely high payoffs relative to similar investments in other parts of the world.

This paper has proposed several initiatives at the country and regional level to scale up economic policy research and education in South Asia. Such scaling up can promote sound policy making, accelerate growth and the delivery of basic services to poor people, and help realize the dream of eliminating poverty in South Asia in our lifetimes.

Capacity Building in Economics Education and Research

A Note on the Experience of Latin America and the Caribbean

Mauricio Cárdenas and Guillermo Perry

The economics profession has been extraordinarily dynamic in Latin America. Most countries now have a significant number of professional economists who can handle complex analytical problems. Central banks have been at the forefront in promoting professional expertise in economics, followed by think tanks and universities (currently 131 think tanks are engaged in the economic analysis of public policies in Latin America). Although university-based academic research has played a significant role, one of the most relevant problems is the low-quality peer review in local journals, mainly because the academic community is still too small or close-knit to allow for objective review. A few finance and planning ministries have enhanced their economic capability, but most government agencies continue to operate with a relatively low level of economic expertise. Improving the technical capacity of the legislative branch is also seen as a top institutional priority.

We propose a two-tier approach to graduate economics education. On the one hand, we favor financial support (increasingly in the form of loans from multilaterals and nonprofit organizations) to students who are able to pursue PhD programs in top schools in the United States and Europe. On the other hand, regional universities that offer high-level master's programs should be strengthened, while local doctoral programs should be limited to universities that have at least 15 full-time professors with PhD degrees from recognized institutions. These programs should be targeted at students who are not able to pursue doctoral programs abroad. Fiscal adjustment implies that universities have to charge competitive tuition fees, provided that there is access to educational loans.

THE PURPOSE OF THIS NOTE IS TO PROVIDE AN OVERVIEW OF RESEARCH, TRAINING, and practice of economics in Latin America, with special attention to those institutions that attract high-quality professionals and graduate students and produce relevant policy research. By *research* we mean “any systematic effort to increase the stock of knowledge” (GDN 2004), while *policy research* is aimed at the continuity or change of a practice (Crewe and Young 2002).

Context

The economics profession has been extraordinarily dynamic in Latin America. Most countries now have a significant number of professional economists who can handle complex analytical problems. Many academic economists have been trained in foreign universities, particularly in the United States, which has had a strong influence on the way the profession is taught and practiced. World-class economists work in the academic institutions, government (especially in the larger countries), and the private sector (especially banking institutions).

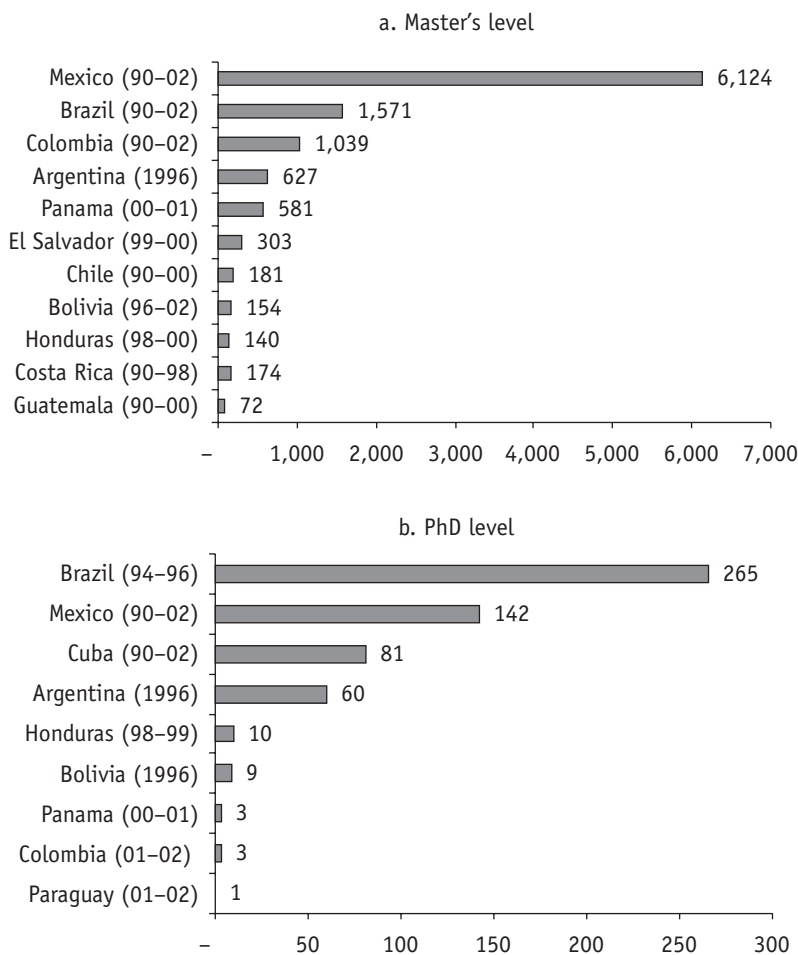
We want to address two main issues in this paper. First, we want to review the successful experiences in economics education and policy research in Latin America and the Caribbean in order to draw lessons on what has worked in capacity building. Second, we look at the region’s strategies for scaling up its capacity building in economics education and policy research. In this context, we discuss the main needs and challenges that need to be overcome, and the role that international donors can play in that process.

As Sebastian Edwards (2003) recently reminded us, 40 years ago two prominent Chilean economists—Anibal Pinto and Osvaldo Sunkel—argued that it was a mistake for Latin Americans to study economics in the United Kingdom, France, and the United States. According to these economists, training abroad was inadequate because of the unique problems of Latin America. They argued in favor of developing graduate programs in the region, with a strong emphasis on development economics, economic history, and history of economic thought. Their views were particularly influential in promoting a graduate program for Latin American students at the Instituto Latinoamericano y del Caribe de Planificación Económica y Social (ILPES), the teaching arm of the Economic Commission for Latin America and the Caribbean (ECLAC; the Spanish acronym is CEPAL). At the same time, and influenced by the prevailing view on the need to initiate local graduate training in economics, many universities developed their own master’s programs. This was the case of Universidad Católica and the Universidad de Chile (both Economía and Ingeniería Industrial) in Chile; at Pontificia Universidade Católica do Rio de Janeiro (PUC-RJ) and Getulio Vargas Foundation in Brazil; at the Universidad de los Andes in Colombia; and at El Colegio de México in Mexico. These universities have excellent programs, as do other universities that created their programs later—such as the Universidad del Centro de Estudios Macroeconómicos, Universidad de San Andrés, and Universidad Di Tella in Argentina; and Instituto Tecnológico Autónomo de México in Mexico.

The existence of high-quality master's programs in the region has allowed a growing contingent of economists to seek doctoral training in the United States and Europe, contrary to what Pinto and Sunkel expected (see figure 1). Many of these students stay on in academic jobs at the faculties of major research universities in the United States as well as in the United Kingdom, and other European countries. Multilateral agencies have also recruited many economists from the region throughout the years. Some of those that return to the region are actively participating in international conferences, publishing internationally, and training very good professional economists at local universities. Their research tends to be applied, and highly relevant for the region. As mentioned by Edwards (2003), these important developments

FIGURE 1

Graduates in Social Sciences in Latin America and the Caribbean (annual averages of years in parenthesis)



Source: <http://www.ricyt.edu.ar>

contrast sharply with the situation described by Pinto and Sunkel in the early 1960s: “[T]here is practically no possibility in the Latin American university ... to carry the fundamental research that could serve as the base for a ... theory of development” (Pinto and Sunkel 1966, 86).

In spite of the substantial progress of the economics profession in the region, many problems remain. Political leaders have a strong bias in favor of applications rather than scientific research, so public funding for theoretical research is quite limited. In recent years, however, although governments remain reluctant to support basic research, they are supporting a selective group of researchers who can do outstanding work. That is, rather than distributing resources as widely as possible, governments are more willing to fund individuals and small groups that belong to “centers of excellence.” This practice is evident across the region.

For the scientific community, in general, one of the most relevant problems that needs to be tackled is the low quality of the peer review in local journals. This problem exists mainly because the academic community is still too small or close-knit to allow for objective review. According to figures from the Science Citation Index (SCI), which is produced by the Philadelphia-based institute that monitors scientific publishing trends, Chile produces more international papers per 100,000 population than Argentina, twice as many as Mexico, and three times as many as Brazil (see figure 2). Even then, according to the Universidad de Chile, Chile is producing only 50 PhDs a year in all disciplines. In terms of expenditures on research, Brazil tops the list. Figure 3 shows that researchers in the social sciences in Mexico are close to 60 percent of the total number of researchers; in Chile and Argentina this figure is under 20 percent.

In the area of training, the most important challenge today is to consolidate and guarantee the quality of a group of relatively young PhD programs in economics. Some of the programs available today are located in Chile at the Universidad de Chile, in Argentina at the Universidad Torcuato Di Tella, and in Mexico at the Instituto Tecnológico Autónomo de México. The joint program of these three universities, described below, is called LADE. There are, of course, other doctorate programs offered by Latin American Universities. Universidad de San Andrés in Argentina and PUC-RJ in Brazil are good examples.

Successful Experiences in Economics Education and Policy Research in Latin America and the Caribbean

Several kinds of factors helped to enhance economics education and policy research in Latin America and the Caribbean. Each has played a different role.

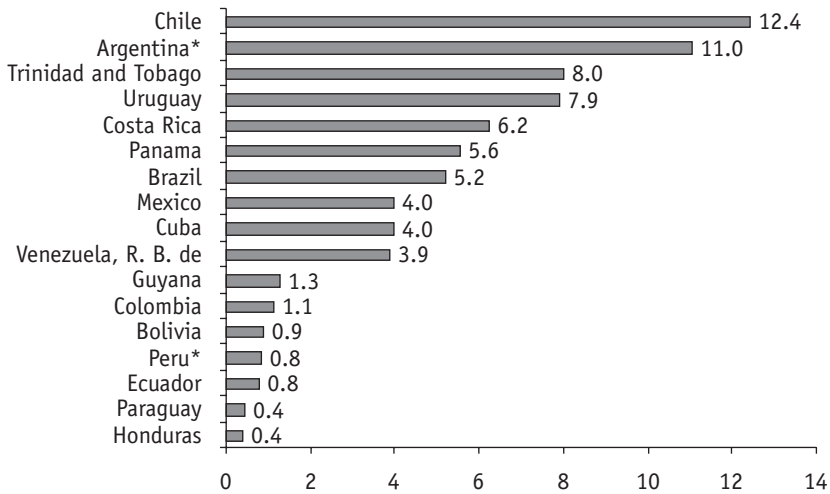
The Role of Think Tanks

Think tanks have been a favorite vehicle for the advancement of the economics profession in Latin America. Although the term is intrinsically vague and elusive, think tanks are organizations that undertake analysis of scientific and technical characteristics related to public policies and that follow certain criteria related to the publicity of their

FIGURE 2

Publications registered in the Science Citation Index per 100,000 population

(annual averages 1990–2002)



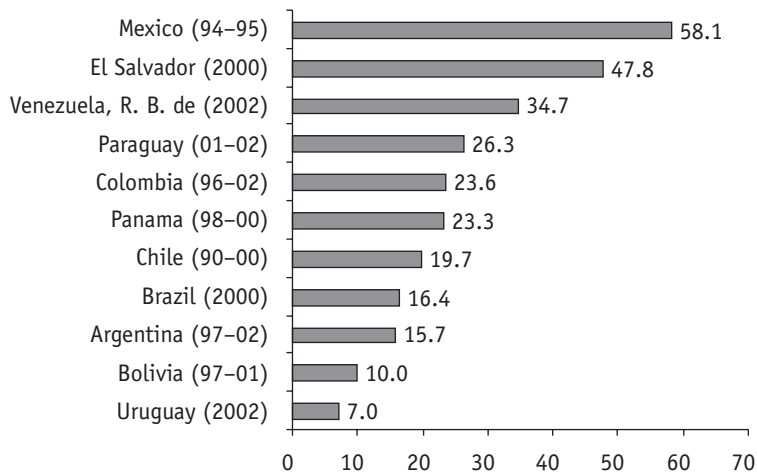
Source: <http://www.ricyt.edu.ar>

Note: *Average 1990–2003.

FIGURE 3

Social Science Researchers

(as percentage of total researchers)



Source: <http://www.ricyt.edu.ar>

work (Braun, Cicioni, and Ducoti 2002). Not all nongovernmental organizations (NGOs) can be considered think tanks. A think tank should follow scientific criteria: academic independence, peer review, and a commitment to high academic standards. However, think tanks are versatile in effectively targeting different particular audiences with specific publications. Think tanks regularly use the press, mass media, and newsletters aimed at policy makers, as well as seminars, conferences, and scientific publications to disseminate policy research.

To be considered a legitimate think tank, there are also requirements regarding the organization's relationship with interest groups. Because a think tank can easily be captured by these groups, two basic preconditions must be met. On the one hand, funding should be diversified among various sources, including foreign donors that help developing a research agenda. On the other hand, research should be publicly disseminated, which helps to draw the line between think tanks and consulting firms. A precondition for a successful think tank is that it maintains research freedom and not be beholden to any specific interest. According to Dickson (1971), for an NGO to be considered a think tank, it should include the following characteristics

- Use scientific methods (but not limited to scientific themes)
- Be multidisciplinary
- Have strong connections outside the scientific community
- Have a sense of freedom in the elaboration of its research
- Be interested in overall (that is, general equilibrium) effects of policy actions

There are literally hundreds of think tanks in Latin America and the Caribbean. They can be classified into four categories: (1) private research centers; (2) political party foundations (the intellectual basis of the parties' political platforms); (3) advocacy NGOs that do not produce research but act as sounding boards of certain ideas and ideologies; and (4) policy implementation think tanks. Although the distinctions are somewhat blurred, private research centers (PRCs) are the only type of think tank closely linked with capacity building in the economics profession. Since the 1960s, PRCs have been used to link the academic, philanthropic, and political worlds.

PRCs arose as a solution to the researchers' need for academic and financial autonomy (many universities had been subject to political interference and instability). They facilitated this goal by allowing researchers to obtain better salaries while providing independence. Several of the think tanks were also created with the specific goals of raising the level of public awareness of, and the quality of public debates on, economic policy, and thus of economic policy itself. University institutes were more academic than policy oriented, somewhat distant from the policy world. As think tanks evolved, they gained importance in other roles such as the training of government technical experts for key decision posts, which followed the "revolving door" model—where people come and go from research centers to government—that is common in the United States.

Think tanks have indeed changed significantly since the 1960s. Although they remain key strategic actors of the policy process, political systems have become

increasingly complex because many other relevant political actors have entered the policy-making game. The channels of influence of think tanks are no longer the traditional and more direct ones (such as political parties) but other groups in society that are decisive (the media, legislators, and so on). Moreover, think tanks are generally *outside* formal political arenas (Stone 1996), meaning that, although they are political actors in the sense of producing ideas that influence decision making, they play a role quite different than the role played by the state bureaucracy, legislative, executive, judicial authorities, or political parties.

Although sources of funding may come from governments and the private sector, research freedom is a prerequisite in the attempt of economists to influence policy through analysis rather than lobbying. Their influence is limited to certain aspects of the policy-making process, such as agenda setting, developing policy alternatives, and shaping public understanding of issues. Of course, think tanks cannot be responsible for the final implementation of their proposals.²

In a recent study, Miguel Braun and others (2004) underscore the factors that explain why some think tanks are more successful than others in their ability to influence policy. They look in detail at the experience of four Latin American research institutes³ and eight from other countries in Africa and Asia. According to their analysis, for think tanks to be influential,

they must conduct continuous, serious and accurate research with operational outputs, political feasibility and validated research methodologies. We have detected that, in Latin America, continuity over time, important budgets and the existence of close relations between think tanks and the business sector, as well as the existence of a window of opportunity due to a political, social or economic crisis, or to the fact that research is demand-driven by the government, among other factors facilitate the influence of think tanks on policy. Instead, in Africa, age is not such an important factor, since most think tanks were created in the 1990s. In this region, funding coming from philanthropy as well as the presence of stakeholders [on think tank] boards is a key and distinctive factor (2004, 3).

Recent research on the subject has emphasized a two-way relationship between research and policy (see, for example, Garrett and Islam 1998; RAWOO 2001). Following Carol Weiss (1977), it is widely recognized that although research may not have direct influence on specific policies, the production of research may still exert a powerful indirect influence by introducing new terms and shaping the policy discourse.⁴ This view acknowledges that policy making is a complicated political process, involving many actors, with outcomes that are hard to predict. In this context, think tanks do not have a clear path to influence policy. Their role in society cannot be compared with the formal arenas of political parties, legislators, and executives. The role of think tanks is much more informal, which gives rise to certain skepticism about their real influence and policy impact.

However, influential think tanks continue to attract the attention of politicians and the media. Although measuring impact is elusive, the proliferation of think tanks

suggests that the generation of ideas and knowledge is a source of power that cannot be ignored. Policy and legislation needs to be grounded in solid theory and evidence, and the role of think tanks is to provide such theories and evidence. According to Braun and others (2004), there are two conflicting views on think tanks. At one end of the spectrum, think tanks are seen as elite-ridden centers of power and governance behind the scenes. At the other end, think tanks are portrayed as independent centers of objective policy research guilelessly pursuing public interest goals, their influence counterbalanced by the competitive environment in which they operate. Neither extreme adequately portrays the multifaceted roles of these institutes.

In line with most of the recent literature on the subject, think tanks are seen as political actors with a strategic position in the decision-making system as mediators between the cognitive and power fields (Belmartino 1999, 2–3). In order to exert influence on policies, think tanks strategically interact with other key actors of the political system. Their main role is to produce some practical, applied knowledge and translate the outcomes of research for different audiences. Think tanks are constrained by the formal and informal rules of the policy-making game and by their own organizational structure. These two factors make them more or less successful.

An Overview of Think Tanks in Latin America and the Caribbean

Based on a project funded by the Global Development Network (GDN), Braun and others (2004) built a think tank directory (available at www.researchandpolicy.org) that includes 193 nonprofit organizations engaged in the analysis of public policies in Latin America (68 percent of these think tanks are involved in the area of economics). Research centers at universities were excluded on the grounds that they are not organizationally independent (this, however, does not detract from their research autonomy). The same is the case for foundations that are part of corporations or business conglomerates.

Only 13 percent of these organizations have annual budgets in excess of US\$1 million, suggesting that they are relatively small (44 percent have budgets between US\$100,000 and US\$500,000, while 60 percent have fewer than 20 employees). Although most of the think tanks have diversified sources of funding, “international organizations” are the most important source (especially the World Bank and the Inter-American Development Bank). Books and research papers—but not technical journals—are the most commonly used vehicles of dissemination. Speaking at and organizing public events are part of the activities of nearly 80 percent of the think tanks in the region; these events are a clear channel of influence. Meetings with policy makers are also regularly used. Frequent contact with the media, in the form of op-ed columns in newspapers, interviews, and the publication of research findings in magazines and newspapers is a common characteristic.

Think tanks also derive their strength for influencing policy from hiring highly qualified researchers, who usually have a PhD degree. Think tanks frequently incorporate external researchers or experts into their research teams when needed in order to develop their research. In Latin America and the Caribbean, unlike Asia or

Africa, think tanks in general do not include other stakeholders (such as the private sector and government). A think tank in Latin America and the Caribbean typically has between three and seven PhDs on its research team.

One key dimension that must be clarified to assess the role of think tanks is the proportion of demand-driven to supply-driven research. Demand-driven research facilitates influence (those that ask for research—including international agencies—can be key actors in the political game). In contrast, think tanks with endogenous funding are more inclined to supply-driven research. The drawback in this case is that the research agenda can be influenced by the most important donors, which can include business groups. Finally, the fact that there is a “demand” for research is common to all kinds of think tanks, regardless of their different organizational structures, procedures, or interests.

The Cognitive Map of Applied Knowledge in Economic Policies

In a recent paper, Santiso and Whitehead (2005) provide a first attempt at measuring the institutional density of research centers and the diffusion of applied knowledge in relation to economic policies in Latin America and the Caribbean. They argue that these centers provide adequate articulation between technical and political rationality deliberation as well as arenas of interactions between “experts” and “politicians.” Centers of excellence host technopols that operate as traders or bridge-builders. To use Hirschman terminology, they are *trespassers* of knowledge between the technical rationality and the political rationality.

The dialog between technical and political rationality is a rather recent development in many countries in the region. Santiso and Whitehead argue that even as late as the 1980s, the pattern of elite formation encouraged generalists rather than specialists (the student leader–cum–journalist who subsequently became a legislator–cum–lawyer). Political leaders tended to disregard intellectual or disciplinary boundaries. More recently, those who have attempted to imitate this style ended up with no political power—and no real field of professional competence, either. However, even today Latin American intellectuals have a taste for deep and fundamental issues—such as internal conflicts, income inequality, and poverty—so they do not limit themselves to “specialized” or narrowly “technical” areas of competence.

Central banks, perhaps because of their specialized functions and greater exposure to the outside world, have been at the forefront in promoting professional expertise in economics. Other specialized academic centers and think tanks have been able to attract experts with an interest in national politics. Several ministries of finance have also enhanced their economics capabilities—at least at the top levels of the bureaucracy. Some governments, however, continue to operate with a relatively low level of economics expertise even today. The case of República Bolivariana de Venezuela is paradigmatic in this sense, and not just as a result of recent political developments in that country.

Capacity building in economics education and research has not been restricted to central banks and think tanks. Other institutions of knowledge—such as research groups at international organizations and government agencies, private consultants

or research departments of banks, and university-based academic research centers—have played a significant role. In particular, multilateral organizations have benefited from ample funding and technical capacities, substituting in many cases—especially in small countries—local capacities for the production, dissemination, and implementation of policies. Some of these multilateral organizations are based in Latin America; examples are the Economic Commission for Latin America and the Caribbean (ECLAC), the Corporación Andina de Fomento (CAF), and the Facultad Latino-Americana de Ciencias Sociales (FLACSO). The major organizations, in terms of financial and technocratic resources, are, however, based in Washington, DC: the International Monetary Fund (IMF), the Inter-American Development Bank (IDB), and the World Bank.

The IDB not only has a large research department with world-class economists—many of them Latin American—but it also promotes research throughout the region, through its networks of research centers.⁵ Research at the IDB focuses on the most prominent problems of the region, and the institution is truly a bridge between centers of knowledge in the industrial countries and local researchers throughout the region. More importantly, research outcomes have been highly relevant for the design of economic policies in various countries.⁶ The Office of Chief Economist for Latin America at the World Bank also conducts a research program—in addition to the global one in the Bank's Development Economics Vice Presidency (DEC)—that is highly influential in the region. The Bank has recently decentralized many of its centers of knowledge, basing its operational departments directly in the borrowing countries. The chief economist for Latin America is based in Colombia, generating positive spillovers into the local academic community.

At a more regional level, in the last decade CAF has increased significantly its research and knowledge capacity. By 2006 its research department employed 14 economists, most of them with PhDs and all them based in Latin American countries. The technical capacity of this institution is becoming influential, especially in the smaller countries that have greater dependence on its lending.

Turning to the role of government agencies, since the 1960s several countries created high-profile institutions—many of them at the cabinet level, reproducing the model of the Council of Economic Advisers in the United States—in order to attract a growing number of technocrats and improve the quality of policies. Prototypical examples are the Departamento Nacional de Planeación (DNP) in Colombia (see box 1) and the Instituto de Pesquisa Econômica Aplicada (IPEA) in Brazil,⁷ but other examples abound (such as CORDIPLAN in República Bolivariana de Venezuela).

Technical capacities at the legislative level have been typically weak (with the possible exception of Brazil, where hundreds of well-trained economists are hired as congressional aides). Legislatures lack an office dedicated to evaluate economic policy in a systematic way, while at the same time these legislatures do not enjoy advisory services from multilaterals. As Javier Corrales (2004) has recently noted, “. . . the result is a major technical imbalance between the technical capacity of the Executive branch and that of the Legislature. Ministers of Finance enjoy an informational premium that legislatures lack.”

One potential side effect of the lack of technical competence in congress is the prevalence of ideological opposition rather than detailed discussion of technical merits. Recent efforts at mimicking the role of the congressional budget office in the region (with the help of multilateral institutions) have ended in failure (República

Box 1

The Technocracy in Colombia

Long before John Williamson in his writings on the Washington Consensus coined the term *technopols* to describe the key role played by U.S. or U.K. graduate-trained economists in the policy-making process in Latin America, in Colombia, since the early 1960s, *technocrats* was the term used for this new breed of bureaucrats.

Technocrats made their first appearance in Colombia as a result of the creation of the Monetary Board in 1963 and the powerful National Planning Department, which became the landing place for the newly graduated foreign-trained economists. With rare exceptions, the head of the Planning Department (a cabinet level position) has been a PhD economist with recognition in academic circles. The role of the technocracy as a key player in the policy-making process was strengthened under the Lleras administration in 1966–1970. The president made wide use of the CONPES (Consejo Nacional de Política Económica y Social) as a vehicle to formulate policies that were based on documents prepared by the Planning Department. Moreover, the implementation of those policies was often delegated to the technocrats.

The role of the technocracy reached a high point during the López administration (1974–1978). Not only were the powers of the Monetary Board advisers and the Planning Department enhanced, but—for the first time—a foreign-trained economist was appointed as finance minister. All significant posts at the ministry were assigned to technocrats (some of them becoming ministers of finance years later). More importantly, the leadership in the economic policy making was transferred completely to the finance minister; notwithstanding some exceptional periods, it has become a norm that finance ministers are chosen from among professionally trained economists, most of them with graduate training in top foreign universities.

Another high point in delegating policy-making powers to technocrats was reached during the administration of Cesar Gaviria (himself a professional economist and former finance minister). This point was the delegation of monetary policy to an independent board, which has become a stronghold of the technocracy. Other than this decision, it does not seem that there has been any enhancement in the role of technocrats resulting from the 1991 constitutional.

Although technocrats have, on occasions, been appointed to other ministries, their influence has been much less important than in the economic policy arena. The career path of technocrats often involves academic work at independent institutions such as Fedesarrollo and the Universidad de los Andes, or international organizations. Very few technocrats have embarked on successful political careers.

Source: Cárdenas and others (2005).

Bolivariana de Venezuela being an emblematic case). Many countries have opted for a model where national audit offices (*contralorías*) develop technical capacities, rather than congresses. The results, however, have been not entirely successful, as these institutions are highly politicized and very rarely attract top-rated economists.

Improving the technical capacity of the legislative branch, as done in the past for certain areas of the executive branch, is now seen as a top institutional priority. Legislators need an independent and nonpartisan source of technical analysis on economic affairs. This office should systematically analyze the economic impact of bills coming from the executive and should generate studies of previously enacted laws. In the 1990s, the IDB unsuccessfully attempted to create these offices across Latin American legislatures. One of República Bolivariana de Venezuela's most important policy reforms of the 1990s, the 1998 oil-stabilization fund, occurred after this office was created. The reform also boosted that country's congressional demand for technical knowledge.

Current Strategies for Scaling Up Capacity Building in Latin America and the Caribbean

The Latin American and Caribbean Economic Association (LACEA) was founded in July of 1992 in order to encourage greater professional interaction and foster increased dialogue among researchers and practitioners who focus their work on the economies of Latin America and the Caribbean. The idea of creating such an association of economists was first put into action during the April 1991 Washington, DC, meetings of the Latin American Studies Association. At a meeting attended by close to 40 participants, a seven-member organizing committee, led by Nora Lustig, was appointed. LACEA has since grown to an organization with more than 400 active members.

*The Role of LACEA and Its Journal *Economía**

The organizing committee quickly obtained enthusiastic support for the idea of creating an association from a dozen leading scholars in the field. This early support was critical to the success of the efforts to create the association. Soon after, the organizing committee identified the initial executive committee, drafted the association's bylaws, and applied for membership of the Allied Social Science Association (ASSA), officially launching LACEA.

Over one hundred prominent economists from throughout the region were invited and accepted the invitation to be charter members of LACEA. The first executive committee was selected, and Albert Fishlow—then professor at the University of California, Berkeley—was invited to become its first president. Nora Lustig, then at the Brookings Institution, was selected as vice-president.⁸ On July 1, 1994, the charter members officially approved LACEA's bylaws and its first executive committee.

Under Albert Fishlow's presidency (1993–97), LACEA became a member of the Allied Social Science Association (in January 1993) and soon began to host sessions

at the annual meetings of the American Economics Association, the Latin American Studies Association, and the Econometric Society/Latin American Meetings. In 1996, LACEA began to host annual international meetings of its own. Since then, meetings have become an increasingly important gathering of economists. Thousands of papers are submitted and strict criteria are applied in the selection procedures. Between 200 and 400 papers are presented during the annual meetings.⁹ LACEA has already held two meetings outside Latin America (in Madrid and Paris), with the purpose of strengthening links with the European academic community.

In the late 1990s, LACEA expanded its activities in several directions. In conjunction with the IDB and the World Bank, LACEA formed the Network on Inequality and Poverty in 1998. It also started the Network on Political Economy (hosted by Fedesarrollo and Universidad de los Andes in Colombia) and a summer camp on International Economics and Finance, a joint initiative with the Center for International Economics at the University of Maryland. All these activities are carried out in conjunction with academic centers in Latin America and the Caribbean. LACEA's four thematic networks (Inequality and Poverty, Political Economy, Regional Integration, and International Finance) have continued to thrive, providing excellent venues for high-quality professional exchanges focused on some of the most crucial issues in the region. Each of these networks holds one or more academic meetings throughout the year in different countries in the region, providing crucial feedback and guidance to junior and seasoned scholars, and allowing for further intercountry and interinstitutional networking and information sharing as well as for interactions among researchers and policy makers.

In 1999, at its Fourth Annual Meeting, held in Santiago, LACEA announced the launching of a new academic journal, *Economía*, modeled on the *Brookings Papers on Economic Activity* and *Economic Policy*. Its first issue was published in the fall of 2000; since then, *Economía* has been established as a central reference point in development discussions throughout the region. Also in 1999, LACEA was selected to be the Latin American and Caribbean regional partner institution of the Global Development Network, a World Bank–initiated network of research institutions around the world that generates and shares knowledge about development.

LACEA has a tremendous range within the region and even outside it, reaching economists, other social scientists, and development practitioners interested in Latin American institutional, social, and economic development. LACEA has over 1,000 members spread over 18 countries, covering more than 300 research institutes in the region. LACEA's professional standards are comparable with those of developed-world academic associations.

To respond to growing membership, internal networking, activities, and interactions with other networks, and in order to be able to exploit additional opportunities fully—including more effective partnering with GDN and other regional networks—important steps have been taken to increase the operational capacity and degree of institutionalization of LACEA. A new site for LACEA's secretariat, with expanded responsibilities, has been chosen after an extensive review process. This secretariat will be provided for the next six years by a joint venture of two solid and

prestigious institutions in Bogotá, Colombia: Fedesarrollo and Universidad de los Andes.

Along with its successes, LACEA faces many challenges, especially in relation to fund-raising efforts. To ensure the long-term sustainability of its current activities as well as to be able to grow and advance in its objectives of coverage, quality, interaction with other disciplines, and increased impact on the link from research to policy, a secure source of funding is needed. New thematic networks (economic history has high priority) also need to be developed while strengthening the existing ones.

Latin American PhD Programs

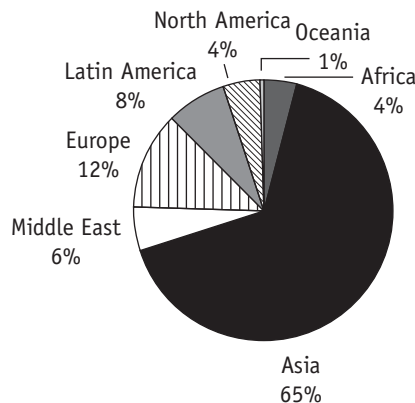
Figures from the Institute of International Education (IIE 2004) indicate that, of a total of 279,076 international students enrolled in graduate programs in the United States in 2004, 65 percent came from Asia and 8 percent from Latin America (figure 4). The fields of study are distributed as shown in figure 5, with the percentage of students enrolled in doctorates in the social sciences is 10.9 percent and in business and management is 15.7 percent.

According to the Institute of International Education report, India is the country that has the most students enrolled in doctorate programs in the United States (17.5 percent), followed by China (14.5 percent) and Korea (9.7 percent). There are three countries from Latin America and the Caribbean in the top 20 list: Mexico, which ranks 8th, Brazil 15th, and Colombia 18th (table 1).

According to local ministries of education, the global enrollment rate in graduate education (as a percentage of total population) is 0.64 percent in the United States, 0.11 percent in Mexico, and 0.02 percent in Colombia (figure 6). As a consequence, the percentage of professors with PhD degrees teaching in undergraduate programs

FIGURE 4

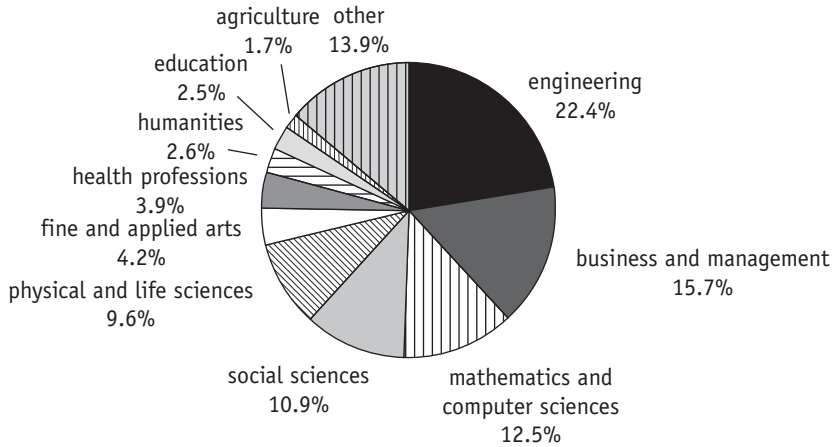
International Students Enrolled in Graduate Programs by Place of Origin, 2004



Source: IIE (2004).

FIGURE 5

Students Enrolled in Doctoral/Research Institutions by Field of Study, 2004



Source: IIE (2004).

TABLE 1

Ranking of International Enrollment in Doctoral and Research Institutions in the United States (2004)

Rank	Place of origin	Enrollment (%)
1	India	17.5
2	China	14.5
3	Korea	9.7
4	Japan	4.6
5	Taiwan	4.6
6	Canada	4.3
7	Turkey	2.2
8	Mexico	2.1
9	Germany	1.6
15	Brazil	1.2
18	Colombia	1.1
20	Singapore	0.9

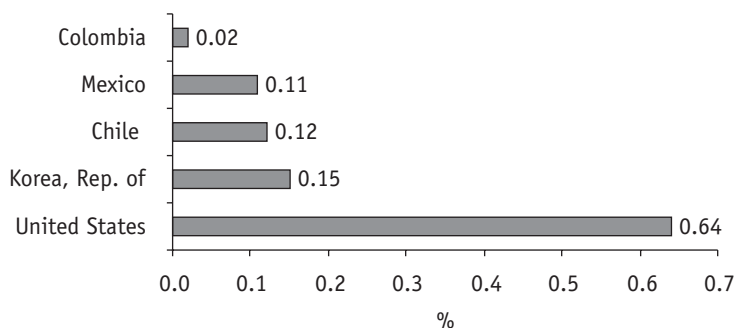
Source: IIE (2004).

Note: Percentages are of total international students.

in Latin America and the Caribbean is very low relative to those with PhDs teaching in the United States: 3 percent in Colombia and 5 percent in Mexico (Chile, with a figure similar to that of the United States, is an interesting exception) (figure 7). In many cases in the region, university professors do not even have a masters' degree.

FIGURE 6

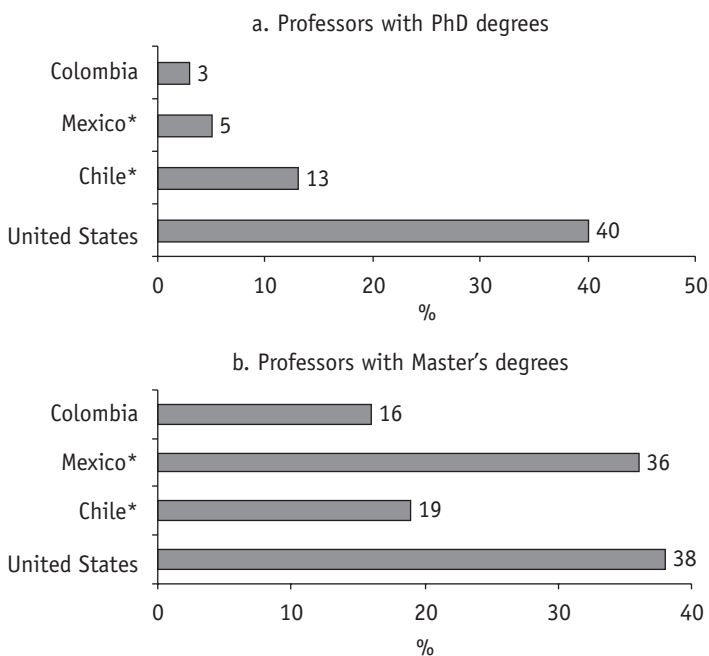
Global Rate of Students Enrolled in Graduate Programs, 2001



Sources: Ministries of Education.

FIGURE 7

Professors with Advanced Degrees Teaching in Undergraduate Programs, 2001



Sources: Ministries of Education and World Bank (*World Development Indicators 2005*).

Note: *Data are for 1995.

According to Convenio Andrés Bello (CAB), which is an organization that gathers information on cultural and educational programs in some Latin American countries, there is a total of 1,871 doctorate programs in different areas in its member countries plus Brazil and Mexico.¹⁰ PhD programs in business and economics represent only 2 percent of this total. Table 2 shows the number of business and economics PhDs offered by universities that belong to this association.

Given the few number of local doctorate programs in economics, PhD-level training—to a large extent—depends on travel to developed countries. This implies that there are issues related to financing that restrict the access of many Latin Americans to this type of education (see box 2 for a description of a model for financing graduate education abroad). In addition, few PhD programs can offer specialized training in the areas of most relevance for the key economic and social challenges in Latin America.

As a response to this situation, in 2000 a group of world-class universities in the region launched the Latin American Doctorate in Economics (LADE) program. This program gathers the Instituto Tecnológico Autónomo de México, Universidad de Chile, and Universidad Torcuato Di Tella (Argentina). The goal of the program is to train research economists who will carry out original research and contribute to the field of economics in Latin America. These institutions (as well as others in the region) currently offer MA programs that are very competitive (students are regularly admitted to the top PhD programs in the United States and Europe after they finish their local MA programs). However, not all students have the financial capabilities and personal readiness to travel abroad.

The association of three universities will help to attain a critical mass of faculty and students that will make the program feasible. Combined, these three institutions have more than 50 academics with PhDs from the best U.S. and European universities. These professors are responsible for a significant portion of the research pub-

TABLE 2

PhD Programs in Business and Economics (2003)

<i>Country</i>	<i>Number of PhD programs</i>
Bolivia	1
Chile	1
Colombia	1
Cuba	4
Ecuador	1
Panama	0
Paraguay	2
Peru	13
Venezuela, R. B. de	1

Source: CAB.

lished in the region, which covers a wide spectrum of theoretical and applied fields of economics.

The primary objectives of LADE are to enlarge the student population and to expand the teaching and research capabilities in the region. A particular emphasis will be placed in attracting candidates from universities that want to increase the number of PhDs on their faculties. Currently only a handful of universities in Latin America have a large share of PhDs their faculties. A similar effort will be made to attract candidates from Latin American government bodies that need to increase the technical qualifications of their staff, such as central banks, offices in charge of social and health policies at the national and provincial levels, budget offices, antitrust offices, and so on. To date, the three institutions have financed all current costs, including tuition waivers and stipends for all students accepted into the program. To sustain this initial effort in the future, additional resources will be vital.

The program has been enrolling, on average, five students per year. Many students come from smaller countries, such as Bolivia and Ecuador. The goal of the program is to admit 10 students per institution each year. In Europe, the current enrollment rates is between 12 and 15 students per institution for a doctoral program.

Funding Research in Latin America and the Caribbean

During the import-substitution era, direct and indirect public support for the development of technological capabilities was the norm. Key players were the national science and technological councils, which were in charge of formulating science and technology policies and promoting scientific research and technological development. As argued by Melo and Rodríguez-Clare (2005), research and development involved an array of public research institutes and laboratories, located both outside and within public universities (see ECLAC 2002). In the case of the economics profession, with few exceptions—such as the Brazilian (Conselho Nacional de Desenvolvimento Científico e Tecnológico) (CNPq)—these public entities played a minor role in funding training and research. The basic model was supply driven and worked under the premise that it was sufficient for the state to organize and subsidize the supply of scientific knowledge and technological know-how as public goods.

The crisis of the supply-based approach to research in the 1990s resulted in the adoption of a new model emphasizing demand-side incentives (ECLAC 2004).¹¹ The basic idea is to promote the demand for technological innovation and technological transfer at the firm level. Demand subsidies are ideally allocated in a horizontal and neutral way, making a clearer separation between funding for technological modernization and funding for scientific research. This divide has increased the availability of funds for research, in part because the private sector has been more involved than previously in providing financial support for technology funds, often as a counterpart to public funds.

Box 2

Initiatives for Financing Graduate Education Abroad: The Case of COLFUTURO in Colombia

Latin American students have depended on government agencies and some international organizations to fund their graduate education abroad. However, the size of the scholarship programs has been relatively small relative to programs in other regions of the world. In response to the need for high-level graduate education, several nonprofit institutions have been created in part to correct the market failure associated with limited access to financial resources.^a COLFUTURO, a privately run nonprofit organization, supports Colombian professionals with high academic performance to continue their studies at the master's or doctorate level. Through a loan-based system, incentives are geared toward the return of graduates to Colombia. Since its creation in 1991, COLFUTURO has helped a total of 1,319 students from several disciplines and regions of Colombia. Figure 8 shows that applicants grew from 193 in 2001 to 445 in 2004.

COLFUTURO's initial endowment was US\$12.6 million (56 percent of this came from the local private companies and 44 percent from the Colombian government). Its net worth in 2006 is close to US\$26 million, reflecting the effective repayment of the loans given to students and the profitable investment of its portfolio. The total support given to students has been US\$36.6 million, of which US\$12.6 million are grants. The total number of supported students is 1,318 (360 of whom have received PhD degrees). Top destination schools have been the London School of Economics, Columbia, Harvard, Georgetown, MIT, and McGill.

COLFUTURO provides its beneficiaries with a maximum of US\$25,000 per year for up to two years. After returning, students must remain in Colombia for twice the time they spent overseas with financial support from COLFUTURO, plus one year. Beneficiaries have five years to pay the complete debt, which remains in US dollars. Fifty percent of the loan is written off, provided that the student returns to the country. For those who join the public sector or undertake teaching or research activities, an additional 10 percent is forgiven.

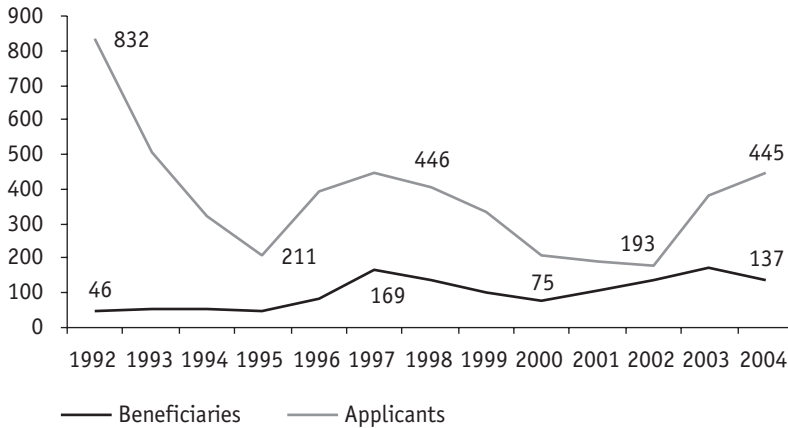
COLFUTURO supports professionals in disciplines such as management, engineering, sciences, and the arts. Selection is carried out on an independent and anonymous basis, and is made on academic merit, the quality of the study program chosen, and the student's second-language proficiency. Sixty-six percent of the students have returned to Colombia (64 percent in the case of PhD training and 96 percent in the case of other graduate studies and diplomas). The organization has created a program to facilitate the placement of its beneficiaries in the job market.

Finally, COLFUTURO plans to increase the number of beneficiaries from an average of 126 per year to 500 per year in the near future; it also plans to increase the return rate to 88 percent by 2013.

Source: COLFUTURO (2004).

a. For example, INCE in Argentina, CORFO in Chile, FUNDAYACUCHO in Venezuela, INABEC in Peru, and IECE in Ecuador.

FIGURE 8

COLFUTURO's Beneficiaries and Applicants

Source: COLFUTURO (2004).

Conclusions

Economics education has advanced significantly in Latin America during the past few decades. The region has a group of world-class universities that train students at the undergraduate and master's levels. Above-average students are able to pursue PhD degrees in the best universities of the industrialized countries, particularly in the United States. Most of these students obtain some type of financial support, often from government sources such as central banks. Some of them return to their countries of origin to work in academia, the public sector, or—increasingly—in the private sector. Those who stay abroad are recruited by economics departments (the number of Latin Americans in academic tenure-track positions has increased significantly in recent years) as well as multilateral organizations. Many of these individuals position themselves at the forefront of the profession, actively publishing in academic journals and participating in international conferences.

It is important to mention that the number of academics from the region who are actively engaged in the international academic scene has increased in recent years. Think tanks have been a favorite workplace for professional economists, although universities are becoming more independent and competitive, thus offering researchers attractive working conditions. These trends are very strong in the larger countries, such as Argentina, Brazil, Chile, Colombia, and Mexico, where affiliation with local universities and think tanks is now compatible with high academic standards and international exposure.

The smaller countries, however, have greater limitations in terms of economics education. Although some of them have very good universities, there are still severe restrictions for students who want to pursue high-level doctorate programs. These restrictions are related to the financial cost of these programs as well as to the oppor-

tunities for obtaining admission into U.S. universities. Countries in the region characterized by highly variable quality in their educational systems are at a disadvantage. To overcome this restriction, some Latin American countries have strengthened and, in some cases, introduced PhD programs in economics. This has been possible in universities where already there is a critical mass of 15 or more full-time professors with PhD degrees from recognized institutions. The alliance between three universities in Argentina, Chile, and Mexico is a step in that direction. Unsurprisingly, many of its students have come from smaller countries such as Bolivia and Ecuador.

A two-tier approach where two systems coexist seems appropriate. On the one hand, the region should continue providing financial support (increasingly in the form of loans or scholarships from multilaterals and nonprofit organizations) to students who are able to pursue PhD programs in top schools in the United States and Europe. On the other hand, the region should strengthen its universities, especially those that offer high-level and master's-level specializations in areas such as finance, industrial organization, and regulation where there is great demand. In turn, these institutions can offer graduate training to students who do not want or are not able to pursue doctoral programs abroad.

Apart from some exceptional cases, the academic and research community still has difficulty in obtaining adequate funding mainly because fiscal adjustment has meant large reductions in government budgets allocated to science and technology. The system will continue to rely on universities that can charge competitive tuition fees and think tanks that have some form of external support. Multilateral organizations and donor countries have an important role to play.

Notes

1. Prepared for the conference on Scaling up the Success of Capacity Building in Economics Education and Research, Budapest, June 14–15, 2005, organized by the World Bank and the Central European University (CEU). We would like to thank Carolina Ramírez for able research support, as well as conference participants for comments and suggestions.

2. See Acuña (1995) and Acuña and Tommasi (1999).

3. The Latin American Economic Research Foundation (FIEL) of Argentina, Group for the Analysis of Development (GRADE) of Peru, Center of Public Studies (CEP) of Chile, and Foundation for Higher Education and Development (Fedesarrollo) of Colombia.

4. See the Global Development Project “Bridging Research and Policy” <http://www.gdnet.org/rapnet/>

5. The Latin American Research Network of the IDB is one of the most important in terms of cognitive institutions support. Created in 1991, this network of nearly 300 research institutes has proven to be an effective vehicle for improving the quality of the public policy debate in Latin America and the Caribbean. More than 40 projects have been financed by this network since 1991, and 130 working papers published.

6. See Lora and others (2004).

7. IPEA is probably one of the largest cognitive institutions in Latin America; it had 600 employees in 2005, half of them economists and analysts. Nearly 70 percent of the 300 economists and analysts in IPEA hold PhD degrees.

8. The other members of the executive committee were Edmar Bacha, Carlos Bazdresch, Guillermo Calvo, Michael Conroy, Vittorio Corbo, Carmen Diana Deere, Sebastian Edwards, Raul Feliz, Daniel Heymann, Ricardo Hausmann, Patricio Meller, and John Welch. Darryl McLeod, professor at Fordham University, was invited to become the treasurer of the association.

9. In 2004 the annual meetings were organized by the University of Costa Rica and INCAE. Two hundred and thirty articles were chosen for presentation and discussion in more than 70 contributed sessions. Such a successful conference held in one small country in the region (and in a more challenged subregion) was a great step forward for LACEA. The previous annual meeting had been held for the first time in a location other than the capital city of the major countries; it was organized by Universidad de las Américas - Puebla, Mexico.

10. Chile, Cuba, Peru, Colombia, Venezuela, Ecuador, Bolivia, Paraguay, and Panama are members of CAB.

11. For a description of the process that led to this outcome, see Melo and Rodríguez-Clare (2005).

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Supporting Capacity Building for Economics Education and Research in Africa

Benno Ndulu, Michael Crawford, and Peter Materu

In 1990 the World Bank's Africa Region launched a major initiative to support capacity building in Africa. This paper reviews the results of that effort, looking first at three major regional initiatives in response to urgent capacity needs for economics education and research in the region: the African Economic Research Consortium (AERC), the African Capacity Building Foundation (ACBF), and the African Virtual University (AVU).

Two examples of the way the Bank's Africa Region has supported the strengthening of demand for both economic research and skills are then presented. The first example is that of the national policy institutes: rapid change in Sub-Saharan Africa has rewritten the terms of debate over the direction of public policy, resulting in tremendous pressure on governments to implement policies that will pave the way to prosperity and democracy, thus increasing the demand for policy-oriented research and analysis. With government ministries low on resources, policy makers have been greatly assisted by the emergence—and ascendance—of local public policy networks and institutes. National policy institutes, with a mandate to work with government, have recently been established in more than 20 countries in Africa—one such institute is the Economic and Social Research Foundation (ESRF) in Tanzania.

The second example of the way the Bank's Africa Region has supported the growing demand for research and analytical capacity is seen in the growing demand for university training, as evidenced by the innovations at Makerere University. A pilot project there partners universities and local governments to create the skills needed for administration, financial management, good governance, and other areas of service delivery.

The paper concludes with three main lessons learned: first, because capacity-building needs in Africa far outstrip the resources available, there is need not only to be selective in supporting particular projects but also to look for cost-effective approaches. The networking approach adopted by AERC and other regional initiatives provides one such cost-effective means. In addition, by not supplanting existing local institutions but rather strengthening them, this approach enhances the sustainability of the whole system. Second, there is a major emphasis in donor support of policy-oriented research. Finally, capacity-building support requires a long-term commitment and flexible forms of financing. Capacity-building initiatives

take a long time to become self-sustaining. Given the public-good nature of capacity building, sustainability is a matter of diversified funding of activities and sustained high demand for the output from these initiatives than it is a matter of self-financing. Measuring and monitoring impact and demand or use of the products has been a central requirement to show worthiness of continued support.

IN 1990 THE WORLD BANK'S AFRICA REGION LAUNCHED A MAJOR INITIATIVE TO support capacity building in Africa. It focused on capacity to analyze, adapt, and manage change by building, over the long term, a critical mass of professional African policy analysts and economic managers and by ensuring their effective utilization. This focus reflected what were then major concerns over macroeconomic instability and policy mismanagement (distortions). These were seen as the prime issues obstructing the path to sustainable growth; it was thought also that a strong sense of African ownership—empowerment—was critical for “policy sustainability” (World Bank 1989). It was concluded that this sense of ownership can be supported and cultivated through first-rate indigenous research and policy design. In addition to enjoining the support that the Development Economics Department (DEC) provided toward setting up the African Economic Research Consortium (AERC) in 1988, the Bank's Africa Region facilitated the launch of a partnership based on a common framework to support capacity building in Africa under the African Capacity Building Foundation (ACBF). This framework provided for:

- a consultation forum for prioritizing capacity-building activities, along with processes for coordinating actions (ACBF)
- an African Capacity Building Initiative Fund to finance activities for enhancing indigenous capacity for policy analysis and research at the regional and national levels—for example, regional networks and centers of excellence, national policy think tanks, universities, development management institutes, and government policy units.

The second big push by the Bank and its partners in 1995–6 was spearheaded by the African Executive Directors through an intensive consultation process with the African development community. The process resulted in recommendations for a Partnership for African Capacity Building (PACT) from which the Bank prepared its own action program (1995–6) to implement these recommendations. Apart from expanding ACBF's regional mandate to support capacity building in Africa, these recommendations also called for adapting Bank policies, instruments, and operational practices at the country level to support capacity building in the region. The latter action was partly aimed at strengthening the demand for using local policy-analytical capacity and research—by shifting away from an approach in which the Bank did things for African governments to one where the Bank and other partners would support the development of capacities of these countries to do things for themselves.

This paper, in line with the theme of the conference, will focus selectively¹ on initiatives supported by the Africa Region of the World Bank that aim at (1) strength-

ening economics education and research capabilities; (2) providing training (academic and professional); (3) facilitating links among academics and between academics and policy makers; (4) increasing access to scholarly research, data, and peers worldwide; and (5) investing in virtual infrastructure (via information and communication technologies) to enable the sharing of scholarly work and research findings among institutions, countries, the continent, and globally (for example, digital libraries, bandwidth consortia, and so on).

Regional Initiatives

Over the last 25 years, the Africa Region of the World Bank, in cooperation with other departments in the Bank, has supported three major regional initiatives in response to urgent capacity needs for economics education and research in the region. These initiatives are:

- the African Economic Research Consortium (AERC), supported since 1988
- the African Capacity Building Foundation (ACBF), supported since 1991
- the African Virtual University (AVU), which is a more indirect approach, supported since 1991

The guiding principles for the involvement of the Bank in all these initiatives were that it is part of a coalition of development partners to support the initiatives, to ensure Africa-based local ownership of these programs, and to make a long-term commitment in providing financial and technical support to the initiatives.

The African Economic Research Consortium

Established in 1988, AERC is now a public not-for-profit organization devoted to advancing policy research and training in Africa. Its principal objective is to strengthen local capacity for conducting independent, rigorous inquiry into problems pertinent to the management of economies in Sub-Saharan Africa.

In response to special needs of the region, the AERC Research Program has adopted a flexible approach in order to improve the technical skills of local researchers. It allows for regional determination of research priorities, strengthens national institutions dealing with economic policy research, and facilitates closer ties between researchers and policy makers.

AERC has also launched a training program to augment the pool of economic researchers in Sub-Saharan Africa by supporting graduate studies (master's and PhD) in economics as well as by building capacities in economics departments of local public universities. AERC currently runs a very successful collaborative master's program in economics and has recently launched a collaborative PhD program in economics. These programs and other AERC activities and their impressive results are described very well in the paper prepared by Professor William Lyakurwa for this conference and will not therefore be repeated here.

The World Bank is a pioneer member of the consortium and played a key role in leveraging other funders for AERC's programs. It continues to be one of a number of international supporters and sits on the AERC Board of Directors. Although the Bank is not at present the principal source of funding for the organization, it served as an important catalyst in the early phases by bringing together international development partners and member governments toward a common goal. By its continued presence, the Bank signals its assessment of how valuable AERC service continues to be in building Africa's capacity in economics education and research, and it brings a wealth of knowledge and experience through networking and publications to bear on policy and development management.

The African Capacity Building Foundation

ACBF was established as an independent organization in Harare, Zimbabwe, in 1991 through the collaborative effort of the African governments, the African Development Bank (ADB), the United Nations Development Programme (UNDP), the World Bank, and bilateral donors. ACBF provides grants to national and regional institutions and programs aimed at strengthening economic policy analysis and development management within African countries. The establishment of the organization was in response to observed capacity needs in Africa in the face of globalization and the challenge to invest in indigenous human capital and institutions in Sub-Saharan Africa. Membership in the foundation now comprises 21 African countries (Benin, Botswana, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of Congo, Gabon, Ghana, Kenya, Malawi, Mali, Mauritania, Mauritius, Nigeria, Rwanda, Senegal, Tanzania, Uganda, Zambia, and Zimbabwe); 11 non-African countries (Canada, Denmark, Finland, France, India, Ireland, the Netherlands, Norway, Sweden, the United Kingdom, and the United States); and four multilateral agencies (the ADB, the International Monetary Fund, the UNDP, and the World Bank). Six additional African countries (Djibouti, Equatorial Guinea, Ethiopia, Guinea-Conakry, the Republic of Congo, and Sudan) and the European Union will soon complete the necessary formalities for membership, raising the membership to 39.

ACBF's mandate was further expanded in 2000 when the Partnership for Capacity Building in Africa (PACT) was integrated into the foundation. PACT is a new initiative started by African governors at the World Bank in 1999 to respond to the continent's persistent development challenge. In essence, it represented a renewed focus on the problem of inadequate capacity in all sectors of African economies, despite earlier efforts in ensuring sustainable capacity. In 1999–2000 PACT objectives were formally integrated into the ACBF program, thus expanding ACBF's mandate to support capacity building in six core competence areas, with most resources going to the three first-mentioned areas: (1) economic policy analysis and development management, (2) public administration and management, (3) professionalization of the voices of the private sector and civil society, (4) financial management and accountability, (5) enhancement and monitoring of national statistics, and (6)

strengthening of policy analysis capacity of national parliaments. Under the expanded mandate, ACBF's objectives are to:

- provide an integrated framework for a holistic approach to capacity building in Africa;
- build a partnership between African governments and their development partners that allows for effective coordination of interventions in capacity building and the strengthening of Africa's ownership, leadership, and responsibility in the capacity-building process;
- build a partnership at the national level among all stakeholders to facilitate an inclusive and participatory approach to capacity building and national development; and
- provide a forum for discussing issues and processes and for sharing experiences, ideas, and best practices related to capacity building, as well as for mobilizing higher levels of consciousness and resources for capacity building in Africa.

Since adopting this new mandate, ACBF has been striving to reposition itself as a knowledge-based institution capable of supporting the emergence of knowledge-based economies in Africa. The ACBF Strategic Medium Term Plan (SMTP) for the period 2002–6 focuses on the foundation's role in generation, storage, dissemination, and utilization of both explicit and tacit knowledge in capacity building and the management of economic and social policies and programs in the development process. It targets knowledge generated by the foundation itself, the institutions it supports, its development managers, its partner institutions, and its development networks. The plan also provides for the development of links to knowledge sources of partner institutions and the knowledge warehouses of other development organizations that are relevant to its mandate.

As part of implementation of the SMTP, the foundation has established knowledge-sharing networks at thematic and country levels to identify and document best practices; to share ideas on policies, programs, and capacity-building strategies that have worked or that should be avoided; to monitor and document reflections by senior policy makers that would otherwise end up as tacit knowledge; and to publish and disseminate the documented materials.

Over the period of about 14 years that it has been in existence, the ACBF has provided long-term support to programs involved in developing human and organizational capacity in the areas of development policy analysis and management (World Bank 2003). It approved over 113 projects in 37 African countries, for a total of US\$197 million—a third of this amount was for regional projects, including the AVU. The World Bank remains the major source of finances, its contribution amounting to US\$158 million (40 percent) out of US\$397 million committed for the 2001–4 period. The foundation has also emerged as one of the very few African organizations that provide long-term funding for capacity building, covering not only project costs but also the recurrent and administrative costs of recipient organizations.

Recent independent reviews suggest that ACBF has been most successful in supporting semiautonomous policy units—think tanks and funding of national and regional graduate training programs. It also provides support to AERC's graduate training programs in economics and more recently, the *Programme de Troisième Cycle InterUniversitaire* in West Africa.

The African Virtual University

The World Bank began work on the African Virtual University (AVU), a satellite-based distance education program, in 1995. At that time, access to the Internet in Sub-Saharan Africa was virtually nonexistent; at the same time, the developed world was preparing to move to the knowledge age. The objective of the program as it was then conceived was to leverage the power of modern information and communication technologies (ICT) to provide an opportunity to students and professionals in Sub-Saharan Africa to access quality educational resources worldwide, and to sow the seeds of transformation toward the knowledge age in African higher education institutions. The focus was on tertiary and continuing professional education (particularly science and engineering, as these were considered to be areas critical to economic development that were not adequately catered to by existing institutions). The program's goals were to:

- train a large number of African scientists, technicians, engineers, business managers, and employees in Africa;
- encourage the further development of scientists, technicians, engineers, business managers, and employees; and
- provide an academic environment in which African educational institutions, faculty, and students can participate in the worldwide community of learning, research, and knowledge dissemination.

Economics education and research have also benefited from this initiative, and with the expanding network of universities to be served by the ICT connectivity (bandwidth component), the AVU will be a key facilitator of effective networking among institutions of higher learning and researchers. The rationale for the AVU concept is rather obvious. With over 50 percent of the region's population below 20 years of age, Sub-Saharan Africa had (and still has) by far the lowest gross enrollment ratio (GER) at the tertiary level in the world (0.1–4 percent). Given high unit costs (> 400 percent of per capita income on average in 1996) and overstretched government budgets, further expansion of tertiary education using the traditional approach is unsustainable. Yet the demand for highly skilled workers continues to be one of the major constraints to investment, particularly foreign direct investment.

Following a successful pilot, the AVU was established as an independent inter-governmental organization in Nairobi, Kenya, in 2002. From its modest beginnings with six anglophone universities, the AVU now has a network of 34 learning centers located in tertiary institutions in 19 Sub-Saharan African countries. Thanks to recent developments in the telecommunication infrastructure and ICTs in Sub-Saharan Africa, the AVU has now moved away from satellite broadcasting to a fully Internet-

based learning platform backed up by powerful servers resident in individual learning centers as well as various forms of multimedia. This move has led to a drastic cost reduction, making its courses more affordable.

The AVU currently offers undergraduate degree and diploma programs in computer science in collaboration with the Royal Melbourne Institute of Technology in Melbourne, Australia (English language) and from Université Laval in Quebec, Canada (French language); and a business studies undergraduate diploma and degree program in collaboration with Curtin University in Perth, Australia (English language). The AVU also offers 8- to 10-week certificate courses in collaboration with overseas universities such as Georgetown University, New Jersey Institute of Technology (NJIT), and Indiana University of Technology. The ultimate objective is to have these courses delivered by and for Sub-Saharan African institutions themselves, once the requisite capacity is in place. To this end, the AVU has recently embarked on an aggressive program to develop the capacity of its member institutions to design, develop, deliver, and support online courses in a flexible learning mode. In addition to training staff at these institutions, the AVU has distinguished itself as the leader in a continentwide effort to reduce bandwidth costs for educational purposes. A recently completed survey conducted by the AVU identifies availability and affordability of bandwidth as the critical factors to mainstreaming of online learning in Sub-Saharan Africa.

The AVU is funded by a number of multilateral and bilateral development partners, as well as through revenue generated from the courses offered. Although the World Bank was the sole source of funds when the AVU started, the Bank's financial contribution is currently less than one-third of total commitments. The Bank has a seat in the AVU's board of directors and continues to provide technical support to the organization. Perhaps the most important achievement of the AVU has been in catalyzing the ICT culture in institutions of higher learning. Most of the six universities that were the pioneers in the AVU pilot phase are today leading institutions in ICT-enhanced learning in Sub-Saharan Africa. For some, such as Makerere and Kenyatta Universities, the AVU learning center was the first and only place on campus where one could access the Internet during the AVU's first two years. But challenges remain. Unit costs remain high relative to traditional programs because of low student numbers and the costs of bandwidth and the supporting ICT infrastructure. The organization continues to rely heavily on donor funding; its own revenue constitutes only a small portion of needed funding.

National Initiatives: Growing the Demand for Research and Analytical Capacity

In this section we provide two examples of how the Africa region has supported the strengthening of demand for both economic research and skills.

National Policy Institutes

Rapid change in Sub-Saharan Africa has rewritten the terms of debate over the direction of public policy.² The process of democratization and devolution of author-

ity to subnational entities is raising pressure for more effective and accountable government. The adoption of market-oriented economic policies and more democratic governance in a number of African countries has given groups from entrepreneurs to trade unions a say in how they are governed. The region has also witnessed a new openness in the media, with the number of newspapers and radio and television stations rising rapidly—this rise, in turn, subjects government policies to heightened scrutiny. The upshot has been tremendous pressure on governments to implement policies that will pave the way to prosperity and democracy.

Not surprisingly, these developments are increasing the demand for policy-oriented research and analysis. With government ministries low on resources, policy makers have been greatly assisted by the emergence—and ascendance—of local public policy networks and institutes. As mentioned earlier, at the regional level, AERC has worked for the past eight years to foster the development of policy research and analysis throughout the region. Independent voices have risen to the challenge of framing policies appropriate to Sub-Saharan Africa's new and more complex conditions.

Most African countries urgently need to strengthen their policy-making resources. Outside of government itself, capacity for policy analysis resides in universities, academically oriented research institutes, and, more recently, national policy institutes.

Through the ACBF's core institutional support program, the Bank and other partners have supported the establishment of a network of 40 national and regional policy analysis units throughout the continent. National policy institutes have recently been established in more than 20 countries in Africa. These institutes are different from the majority of African research institutes, which are usually associated with universities and tend to have a strongly academic orientation. National policy institutes have a mandate to work with government, and in many cases they receive financial support in return. National policy institutes also encourage closer relations between traditional research institutes and government and serve as a conduit for bringing knowledge from research into the policy arena.

An example of the role of national policy institutes serves to underscore the tremendous influence that they can bring both directly to the policy-making process and indirectly to raising demand for research output. One of the key activities of the Economic and Social Research Foundation (ESRF) in Tanzania has been to canvass the public for its views on pressing issues and then to bring these findings to the policy debate. With its own small staff, ESRF responds to requests for policy analysis by mobilizing local talent to carry out necessary research. It maintains its own policy watch, comments on various policy issues, and reviews current performance. By maintaining its own forward-looking research priorities, it seeks to proactively influence the policy agenda. Its close relationship with government, private sector, and nongovernment entities appears to be very much in sync with the changing policy environment and bestows upon it the credibility of an honest broker. One illustration of ESRF's integrative role is its effort to draw up a national development vision for Tanzania through organized seminars and retreats. Another such illustration is its

recent hosting of the independent monitoring process for aid effectiveness and its issuance of a local equivalent of the Transparency International report covering variation in the preponderance of corruption across sectors and a wide range of government institution. The institute has greatly helped retain qualified economic researchers in the country and doing research.

Growing Demand for University Training: The Innovations at Makerere University

The Uganda: Decentralized Service Delivery: A Makerere University Training Pilot Project (P074078) is an innovative approach to building capacity in key areas for public administration. This project partners universities and local governments to create the skills needed for administration, financial management, good governance, and other areas of service delivery. Universities themselves are also investing in research and curriculum improvement to enhance its relevance to training and policy. The project is cofinanced by the Rockefeller Foundation, and grows out of that foundation's capacity-building experiences at Makerere since the mid 1990s. In addition to the US\$5 million from a World Bank Learning and Innovation Loan (LIL), the Rockefeller Foundation has contributed US\$6 to the project to date.

The LIL is unique in addressing long-term training needs of individuals who work in local governments by providing some of them with the opportunity to obtain degrees in one of six priority areas while they retain their positions as local government employees. In six pilot districts, the project has worked with district human resource officers to identify candidates for sponsored full-time studies in master's and undergraduate degree programs in one of six priority disciplines—health, agriculture, education, engineering, financial management, or governance/accountability/administration. Ninety master's students have been sponsored, along with 120 undergraduates, at an average of 15 and 20 per district respectively. Most officials have become full-time students at Makerere, with a few at partner institutions. All students have returned to their positions during academic recess; the first master's degree students finished their two-year degrees in December and have returned to their full-time positions in local government. Early evidence from project monitoring and evaluation indicates that this increase in skills and experience is bringing positive results. The program is very popular because the participants receive something of concrete economic and personal/social value—a university degree. As degree recipients return to their jobs in large numbers, the impact their skills make on the complex tasks of local government service delivery will rise, as should the quality and efficiency of the services delivered.

Another aspect of the project concerns the restructuring of curricula within universities to improve course quality and especially relevance to challenges of local government service delivery. In some cases, the project has nurtured radical changes in the way faculties organize education: the faculty of medicine, for example, has completed abandoned “chalk and talk” instruction in favor of a new curriculum organized around “problem-based learning.” Students acquire their general knowledge of medicine

through a process that highlights how that knowledge will be used to solve the particular problems that they will face with their patients. Satisfaction with the new curriculum is very high. The faculties of agriculture and technology (engineering) are going through similar transformations that are growing out of internal assessments of how best they can fulfill their mandate. Other academic staffs, the faculties of which may not have embraced these types of full transformation, have the ability to compete for funds for renewing or restructuring of academic courses (or creating new courses) relevant to local government needs, and/or for research resources for related problems. All academic staff have access to courses on pedagogy, meant to improve general teaching/lecturing practices.

The project is also changing attitudes of students, faculty, and most importantly, local government officials and society at large about the usefulness of Makerere and other universities. Before the project, Makerere and other institutions suffered from a sense of distance and isolation from national problems—the classic academic aloofness. People generally viewed these institutions as completely irrelevant to national needs and as only a drain on public resources. Now an increasing number of informed government (local and national) officials view universities as potential partners for solving their problems. Consciousness of the need to be relevant has also risen among a significant portion of students and professors. The project sponsors a student summer internship that supports degree candidates in supervised summer jobs with local governments in the six priority areas. Close to 3,000 students have participated. They report having a greater understanding of challenges of local service delivery, but especially how their own education is relevant, and how it can be made more relevant by taking greater account of the practical problems they may face as graduates. It is likely that some will choose careers in local government based on their experiences, although we do not yet have reliable data on this. The internship program is one of several activities that are leading to this change in attitude.

The training is very cost-effective because of its reliance on local educational institutions governed by local price structures. Although definitive data are not yet available, it is also likely that the cost-per-classroom hour of “training” is very low compared with other training courses. It is also likely that there are spillover effects of being in a degree program rather than in one or a series of discrete, short-duration training courses.

Conclusions: Lessons from Experience

The World Bank’s role in capacity building in Africa has been not only financial but also (perhaps more importantly) that of an honest broker—with its ability to bring together development partners, governments, and the civil society to focus on a common capacity need. In all the examples discussed in this paper, the World Bank’s Africa Region partnered with others to support four types of interventions to strengthen economics education and research: regional facilitators of capacity building, such as ACBF; regional networks for policy analytical research, such as AERC;

national and subregional policy capacity and management institutes; and tertiary education institutions, such as Makerere.

Three main lessons can be drawn from these experiences. First, given that capacity building needs in Africa far outstrip the resources available, there is need not only to be selective in supporting particular projects but also to look for cost-effective approaches. The networking approach adopted by AERC and other regional initiatives in training economists and conducting research, as discussed earlier, provides one such cost-effective means. In addition, by not supplanting existing local institutions but rather strengthening them, this approach enhances the sustainability of the whole system. ICTs present another potentially valuable way to provide increased access by Africans to global knowledge resources and enhance cost-effectiveness in the delivery of economics education. However, existing technical and financial constraints need to be addressed before the full potential of ICT-enhanced programs can be unleashed. In this regard, the AVU is a long-term and futuristic initiative, which is now turning into an effective networking instrument that supports the adoption of an ICT-based learning architecture. It builds on the comparative strengths of existing tertiary education institutions while also supporting capacity development in this approach to the delivery of higher education. With the adoption of the open, distance, and e-learning (ODe-L) methodology, this learning architecture holds great promise for enhancing the capacity of higher education institutions to meet the large demand in a cost-effective manner.

Second, although long-term original research is deemed valuable, there is a major emphasis in donor support of policy-oriented research. And often there is a fairly high degree of impatience to see policy impact. Policy think tanks are playing a particularly important intermediary role in improving the accessibility of research to policy and channeling demand for research in the other direction. Building on the accomplishments of the national policy institutes and regional think tanks, four measures appear to be key to forging links between research and policy across Africa and worthy of support:

- Enhancing the credibility of research as a means to increase policy influence through production of high-quality, accurate research
- Improving the usefulness of research for policy purposes by ensuring relevance and accessibility as well as responsiveness to current and prospective policy concerns
- Nurturing closer relationships between researchers and the broader policy community through policy seminars to bridge the gap of suspicion between academics and policy makers and to showcase local talent in policy analysis
- Involving the media to bridge another divide that separates researchers and journalists. As the press continues to increase its influence on policy making in the region, access to the work of independent policy institutes will become even more important. It is vital that research institutes and networks tap the press as an avenue for disseminating their findings and raising the profile of their recommendations.

Finally, capacity-building support requires a long-term commitment and flexible forms of financing. Pooling resources, flexibility in funding both investment and recurrent costs, and using a common framework for accountability substantially reduces transactions costs of receiving institutions. A major lesson learned from the experience to date is that capacity-building initiatives take a long time to become self-sustaining. Given the public-good nature of capacity building, sustainability is not simply a matter of self-financing; it is rather more a matter of diversified funding of activities and sustained high demand for the output from these initiatives. Measuring and monitoring impact and demand or use of the products has been a central requirement to show worthiness of continued support.

Notes

1. Several training initiatives that are shorter term and targeted to policy analysts, for example offered jointly with WBI, are not include in this paper.
2. Much of the discussion in this section updates Ndulu (1996).

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Economics Education and Research in the East Asia and Pacific Region

Experience and Directions

Homi Kharas

This brief review presents observations on the status of higher-level economics education and economic research in the developing countries of the East Asia and Pacific Region. It is based on two main sources of information. First, it summarizes the experience of the World Bank in building or strengthening capacities in these fields. Second, it draws upon information provided by staff members of the World Bank who collaborate extensively with local academic and research institutions, individual experts, and the consumers of economic research in the countries in which they work—policy makers, business leaders, and technocrats.

The review is in three parts. The first section describes some important characteristics and issues in the East Asia region that provide a frame of reference for the assessment contained in the second section. The third section presents some options for the future, embracing both regionwide and country-specific approaches.

The Regional Context

Economic growth in East Asia (excluding Japan) reached a cyclical peak of 7.2 percent in 2004, from which it is expected to slow only moderately to about 6 percent in 2005 and 2006. Over a longer time period, and despite the Asian Financial Crisis of 1996–8, this region has recorded the fastest sustained growth record in the world. Although there are substantial country differences in rapidly growing East Asia, a common thread is a tradition of consultation with, and deeper involvement of, economists in decision-making processes. This showed, for example, in the role of University of the Philippines' economists who have moved in and out of successive policy-making positions in the Philippine government. In Vietnam, economists at both the Vietnam Academy of Social Sciences and the Central Institute of Economic Management played critical roles in establishing policies to open the economy to market forces and foreign investment. Indonesia's post-1970 economic liberalization and management was largely in the hands of a well-trained cadre of mainly foreign-

trained economists (the so-called Berkeley Mafia and others). But the pool of economists in general, and homegrown economists in particular, that provides inputs into decision-making processes is small. There may, indeed, be some truth to the claim that a country's economic performance is negatively related to the number of its practicing economists! But until this is established more credibly using, of course, the entire range of powerful quantitative tools developed by economists in the service of their profession, there are several reasons to be concerned about the small pool of economists and about the state of economics education and research within East Asia. Some stylized facts about the present situation are presented below.

The existence of indigenous capacities to design and evaluate economic policies, programs, and institutions is generally limited. One consequence of this is that there is usually only a very small group of economists—generally they are Western-trained—advising governments on their policies. Often, governments call upon the same group of economists to provide advice on subjects well beyond their specializations, across the board on all economic issues. The absence of other nodes of expertise, or of alternative qualified views, is a persistent vulnerability that sometimes has seriously adverse effects.¹ It makes the process of consensus building even harder than in pluralistic environments.²

The Asian Financial Crisis conspicuously exposed this weakness when, with the exception of Malaysia, both problem-identification and crisis-mitigation policies were driven largely by external experts. Interestingly, one positive effect of that crisis has been to promote a new and welcome interest in building research capacities in economics in East Asia, both through reforms in higher education and associated research, and through increasing support from within and outside the region for economic think tanks, research institutions, and the creation of regional knowledge networks.³ However, much of this interest has manifested itself in support for broad, aggregative analysis (for example, fiscal-monetary-exchange rate coordination) rather than in microeconomic and sectoral research, where the main lacunae exist.

The volume of more recent applied economic analysis from within the region has tended to be small and, generally, at a level that has not always proven useful to policy makers in guiding longer-term recovery strategies. The weaknesses in this area are threefold:

- National databases are inadequate for many research purposes.⁴ Useful empirical research tends to flow mainly from small-scale surveys, but these are often too scanty to support economywide or sectorwide policy formulation. Capacity shortages in assessing multisector linkages undercut the usefulness of economic research to policy makers.
- Related to the above, very little research is conducted on the microfoundations of growth strategies, and even less on institutional designs that fit specific national and regional circumstances. The latter is a pernicious gap in indigenous research, as the relative advantages of local researchers and long-term observers should be strong in this area. Instead, this crucial “missing middle” of research effort—which bridges between theory and practical policy and project design—has confined local economists largely to the fringes of economic

advice and decision making or, when involved, to recommending imitative, sometimes unsustainable, models imported from abroad.

- There is virtually no tradition of systematic and scientific monitoring and evaluation of economic policies, programs, and projects. There is little impact evaluation—as opposed to several forms of organizational reviews, process monitoring, and a few reflexive (“before and after”) comparisons. This has meant that the broader community of local economists is not just on the outside at the outset of programs and policies. These local economists are too seldom engaged in the main decisions on whether to eliminate, modify, or expand the programs and policies, or in determining public policy priorities for the future. Indigenous learning, not only for policy makers but also within higher education institutions in the region’s countries, is severely impaired by the absence of involvement by the local economist community in impact evaluation.

The early 1990s saw a large expansion of higher education in economics in most of the region’s countries, which in relative terms came at the expense of science and technology education. Many observers have noted the sharp erosion of quality that occurred as a result of increased enrollments and overcrowding.⁵ However, by the end of the decade, rising interest in business management studies resulted in a flattening of demand for economics at the level of master’s degrees, reducing the current and future throughput of students at the doctoral levels. Nevertheless, the quality (and usefulness) of economic graduates has improved because of sharp improvements in higher education administration (as, for example, in Indonesia), recruitment, and curricula in several East Asian countries, most notably in China and Korea (as well as in Japan and Australia, which began to attract large numbers of postgraduate students from the region).

Moreover, better financial support from official and private sources and higher international mobility resulting from the globalization of knowledge services permitted local institutions in most of the larger countries of the region (as well as in Hong Kong, Special Administrative Region, and Singapore) to recruit a larger number of their foreign-trained nationals into local teaching institutions. Through increased interaction with teaching and research institutions in other parts of the world, many postgraduate institutions in East Asia are beginning to function as organic parts of the international academic and research community.⁶ As a result, graduate quality is expected to improve significantly, provided the East Asian countries maintain appropriate policies to promote economics education and research.

We turn in the next section to a brief evaluation of experience, in order to draw some lessons for the kinds of support that would be most useful.

Lessons of Experience

Three nodes of experience are discussed in this section—those that relate to general capacity-building efforts that support better-quality economics education and

research; issues relevant chiefly to economics education and research; and, finally, specific research gaps that have been identified.

In the first group, at least three major lessons exist.

- In East Asia, the World Bank's experience with single-country investment lending for higher education and university reform projects has been satisfactory. Several projects have been implemented since the mid 1980s in the region, in Cambodia, China, Indonesia, Korea, Malaysia, Thailand, and Vietnam. Although many components in these projects have focused on science and technology training and research, the bulk of their success has been in modernizing systems of higher education across the board, with positive effects on economics education. In several projects, components related to economics education and research were addressed directly; in others they were addressed through improvements in university funding, standard setting, and management systems.⁷ Rates of return in such projects have also been judged to be high, related no doubt to the high rates of return to tertiary education in the East Asian countries.
- Fixing national statistical efforts has high payoffs. In the case of the transitional economies of East Asia, such as China and Vietnam, the process of modernization and conversion from the limited communist-based systems to the UN system has proved to be laborious, and is still far from complete. In many of the other countries of the region, although harmonization with international systems has been achieved, inadequate resources and compartmentalization of functions impair the production and dissemination of real-time, comprehensive data that can be used to support economic research and be of use in economic policy making. At the same time, a coherent program of international support of national statistical efforts is yet to develop, despite (or perhaps because of) the large number of international agencies involved in such assistance.
- The contribution of research networks—whether they are in-country, across the region, or international—cannot be overestimated. The East Asia Development Network (EADN) is a good example of the benefits to be had from formalizing networks of expertise and facilitating cooperative work programs within them. The regional coordinator and 11 country coordinators represent premier economics research and teaching institutions in East Asia, as does the broader membership of 39 institutions. Research activities have been focused largely on problems related to the Asian Financial Crisis and on broad macroeconomic management. Numerous other networks of economic expertise have been built through the involvement of regional and extraregional academic, research, government, and international institutions. The experience with such pluralism in promoting knowledge exchanges is generally good; however, a common weakness is the inability of most research efforts under such umbrellas to provide real-time assistance to policy making.

Although most of the middle and large countries of East Asia have succeeded in building national centers of excellence, recent attempts to establish regional centers have generally floundered. Existing institutional programs

for regional analysis have been more successful in business and technology studies, and they are fertile ground for recruitment by national and multinational firms rather than for core economic research and support of the formulation of regional economic policies. In most cases, national policy mechanisms have been cross-fertilized by expertise—both citizens and foreigners—imported from non-East Asian centers, rather than from any regional center of excellence.

Turning to some specific experiences with economics education and research, the following points are worth noting:

- The main transfers of teaching technologies, research methods, and economics knowledge to trained personnel in the region has occurred through joint work—that is, through carefully calibrated research and project collaborations between high-quality experts and less-experienced local economists. Local experts are usually able to bring deep institutional knowledge and access to sources of information that may not be visible to researchers and academics who do not belong to local institutions. However, local experts are often weak in their standards of analysis, experience with scientific surveys and their statistical/econometric analysis, and the ability to link analysis to policy judgment and practical policy design. The value added from inserting high-level expertise to impart or demonstrate such skills—usually through built-in seminars and learning events while the work collaborations are underway—has produced positive results in notching up the usefulness of research. Nevertheless, an unfortunate offshoot of such collaborations has been the tendency of the best local talent to be associated solely with such projects—local “brain drains” that sometimes leave core academic institutions, research institutes, and core economic agencies of the government without individuals who have the skills needed to perform basic functions.⁸
- The support for research capacity building needs to operate on a logic of *commitment* rather than one of *exit*.⁹ The time frame over which capacity building is successful is much longer than the time horizon of the typical funding agency and research grant administrator. Providing certainty about funding, research collaboration, and technical assistance over a reasonable time frame is a key factor in supporting institution-building efforts, but is not always provided in the interaction between external agencies and local institutions.¹⁰
- Conventional models for the locus of capacity-building effort do not address the changed institutional settings of many of the larger East Asian countries. Across the region, the rise of pluralism, the increased international trade in services and flows of knowledge, a significantly higher level of private funding of higher education and research in economics and business studies, and stronger linkages between research/academic institutions and industrial and services firms have led to the rise of nontraditional institutions operating in specialized niches, often autonomously. As a result, the strategic selection of nodes for the delivery of capacity-building support has become more important than ever before.

The importance of research networks, relative to brick-and-mortar centers of excellence, is rising rapidly. However, unlike funding from corporate sources or foundations, standard capacity-building support from official sources—local or international—has been slow to recognize this change. Consequently, some of the most powerful change agents in East Asia remain unutilized, including several that exercise extensive influence at the policy level.¹¹

In concluding this section, it is useful to provide a brief description of the major gaps that exist in the current regional research needed to support the design and implementation of economic policies, programs, and projects in East Asia. As mentioned earlier, improvements in national statistical databases and the transfer and mainstreaming of impact evaluation methods are two areas with high payoffs to research support for economic decision making. Beyond these areas, however, the following are some identified gaps.

- **Regional integration.** East Asia is looking for win-win solutions to development in the region, through regional cooperation. The East Asian countries have historically pursued unilateral and nonpreferred approaches to liberalization. Indeed, through the Asian Financial Crisis, market access was largely preserved. But the crisis also exposed significant gaps in the regional architecture, in finance, in investment flows, and in macroeconomic coordination. The new regionalism is being pursued on both the trade policy and financial sector fronts. Success will depend ultimately on the consistency of approaches among all elements of integration and across unilateral, regional, and multilateral frameworks, and on placing regional integration in the broader global context. Research findings can play an important role in helping achieve such consistency. Within the broader program of work on regional integration, the following are some fruitful areas for research collaboration:
 - China’s adjustment to the phaseout of the Multi-Fiber Agreement (MFA). For example, is China moving up the technology ladder in garments and textiles? If so, is this happening in coastal areas, while low-cost low-quality production is moving inland?
 - Impact of MFA phaseout on East Asian countries—the challenges and opportunities. For example, how are countries adjusting? Are they scaling back or upgrading? How are they competing in China and in other markets? How do their products compare with those from China in terms of quality and unit values?
 - Association of Southeast Asian Nations (ASEAN) plus China. For example, what are the likely outcomes, and how can East Asian countries leverage their gains into more rapid and broad-based economic development?
 - Trade in services. For example, what are the benefits and challenges of further liberalizing trade in services in East Asia? What is the appropriate sequencing of liberalization—first regionally, then globally?
 - Production and trade in rice and other sensitive products. For example, how feasible are self-sufficiency targets, given productivity trends and pricing

policies? What regional mechanisms are possible to ensure adequate supplies in the East Asian countries?

- **Growth and inequality.** The rapid growth of the East Asia region has received a lot of attention, but significantly less consideration has been given to the unevenness of recent growth processes within countries and, by extension, among the different communities populating the region.¹² Spatial divergence in incomes and nonincome measures of well-being is one aspect of inequality, but even within subregions, segments of economies and societies have been left behind. Until recently, such inequality was tolerated as an unfortunate by-product of growth, which was seen as generating leaders and laggards in different parts of an economy. Lately, however, there is concern that the processes that generate increasing inequality are malignant, resulting in outcomes that perpetuate unequal opportunities and prospects. Apart from the direct human and economic costs that this implies, the persistence of high inequality in the context of heightened aspirations can reduce the societal tolerance of inequality, dampen support for growth-enhancing market-friendly policies, catalyze social unrest, and ultimately threaten the sustainability of growth itself. Putting in place the right mix of policies and institutions to ensure that the dual objectives of sustaining growth and mitigating persistent inequalities are met is high on the policy agendas of East Asian governments. There is need to robustly establish the underlying facts, better understand the causal processes at work, and translate this understanding into concrete policy priorities. Within this framework, for the major countries in East Asia, the following research gaps deserve attention:
 - Profile of the “left behinds.” For example, who are the people who have been left behind? Where do they live? What are their economic, social access, and demographic characteristics? What are the dimensions of their disadvantages?
 - Inequality-generating processes. For example, what factors lie beyond the control of individuals, and are they amenable to public policy interventions?
 - Impediments. For example, what restricts mobility and empowerment? How are the acquisition of skills, security, and adequate health constrained?
 - Policy alternatives. For example, what are the tradeoffs involved in labor market and fiscal policies, or in making human capital investments? What are the relative impacts of these tradeoffs? What are the distributional and growth effects of alternative patterns of large-scale infrastructure provision?
 - Monitoring and evaluation of service delivery.
- **Asset markets.** Most East Asian economies have high savings rates. However, their household and corporate sectors have very limited scope for diversifying assets in their domestic economies. Among financial assets, bank deposits dominate, and the transfer of financial savings through the banking system has resulted in very high leveraging among firms. Limited competition in many countries’ financial markets has retarded the development of new products and

keeps the costs of financial intermediation high. Less-than-adequate standards of prudential supervision in all but a couple of countries result in the costly diversion of savings and raise overall risk in financial markets. Spillovers into other major asset markets, such as real estate, have created speculative and potentially destabilizing situations in several countries. Yet little is known about the specific asset-holding behaviors within each country, their interlinkages, and their implications for macro-financial management. There are two areas that deserve significant research attention.

- Real estate markets. For example, what is the size of these markets? Who are the players? What are the channels of financing? What is the potential for asset bubbles? What policy and institutional reforms would promote the orderly functioning of these markets?
- Technology needs of financial markets. For example, what is the cost structure of financial transactions and how can alternative technologies increase efficiencies? What are the likely implications of new technologies for macro-financial management, employment in the financial services industry, and access to financial services by underserved segments? What kinds of competition and pricing models will deliver the desired technology adoption outcomes?

Conclusions

This brief review of experiences, lessons, and challenges in the East Asia region provides a platform for tailoring future capacity building in research and economics education to rapidly changing situations and needs. The general guideline for future effort is that strategic research and investment-lending collaborations can have high payoffs—provided that the modes of engagement recognize the new institutional nodes that are being created in East Asia, many of them outside the traditional universities and research centers. Consequently, as demonstrated by the use of private sources of funding, smaller packages of funding in the form of venture capital (but with a logic of longer commitment) could play as useful a role as traditional modes of support. In addition, as engagement with policy makers and inputs into policy, program, and project design and implementation are the ultimate objectives of such capacity-building efforts, the production and dissemination functions assume *equal* importance. This equality of importance has implications for patterns of funding and other support.

In specific terms, the World Bank's future support for capacity building in economics education and research in the East Asia region will continue to cover a number of parallel initiatives. These comprise investment lending for the improved functioning of government departments, institutions of higher learning, and specialized research institutions; technical assistance; research collaborations with individuals and institutions in the region; support for the professional training of economists both at home and abroad; and a renewed emphasis on the creation of networks of research.

In this regard, it is worth noting two major initiatives that are underway. The first is the possible intensification of the World Bank's interaction with the Boao Forum for Asia, which could serve as a hub for coordinating a research effort on Asian regional integration issues. The second is a program of research on the implications of the rise of China and India on the regional and global economies. In collaboration with research institutes around the world, and leading up to the annual meetings of the World Bank and IMF in September 2006 in Singapore, a series of events was organized around this central theme. Many of these events presented the fruits of collaborative research. It is expected that this massive research effort will yield useful outputs, but will also provide a platform for stronger research networks in the future.

Finally, there are important considerations with regard to the establishment of centers of excellence. Alternative approaches suggest themselves. Clearly, the more developed parts of the region—in particular Australia and Japan—have proved to be strong magnets for national and international expertise on Asian economic issues. A strategy that harnesses this expertise to build capacities elsewhere in East Asia is bound to generate quick returns. Alternatively, or even in parallel, and using long-term commitments, selected national centers of excellence—such as CCER at Peking University (research) or the School of Public Policy at Tsinghua University (applied economics)—can be targeted to develop as regional centers. This targeting would involve the selective introduction of specialized programs of regional application and interest—for example, monitoring and impact evaluation, institutional economics, or governance—and technical assistance for modernized systems of research administration and regional or international collaboration. A third approach would be to go beyond the conventional institutions and, again, through long-term commitments, build simultaneous programs of networking and research capacity building, as was proposed for the case of the Boao Forum for Asia. In this approach, linkages to policy makers and the broader community of stakeholders need to be direct and visible in order to ensure the continued relevance of the institutions and, at least in the initial stages of capacity building, to develop brand names in specific product niches.

Notes

1. For example, one can point to several examples of decentralization policies, regulatory reform, and agricultural protection and rural development interventions in East Asia that suffered from basic design flaws. These flaws were compounded during implementation by a lack of capacity to monitor and evaluate program impacts and make appropriate midcourse corrections. The costly experience of the Philippines with private participation in utilities is often cited as an example of such weaknesses.

2. Dialogue between a small group of economists and a large group of noneconomists is sometimes more difficult than among groups of economists themselves.

3. For example, the East Asian Development Network was established in 1998, and the first research outputs were produced from the year 2000. Only recently has the output from this network focused on issues related to the Asian Financial Crisis and expanded to cover several other areas of economic recovery, shared economic growth, and cross-border issues of harmonization and other regional arrangements.

4. For example, even with the current data sets available at the global, regional, national, sector, and firm levels, we are unable to identify how much of the rapidly increasing intra-East Asia trade is accounted for by intrafirm trade—the same multinational firm putting a product together at different locations in the region. Although microstudies exist for some individual products, the total amount of information available is inadequate for informing discussions on trade standards, harmonization, or even the topical trade and investment integration debate among policy makers in East Asia.

5. For example, see Weifang (2004).

6. This is illustrated best by the case of Indonesia where, in addition to the interchanges that have traditionally occurred among foreign institutions, University of Indonesia, and selected think tanks, there is now a significantly larger volume of two-way flows with *mofussil* institutions.

7. For example, the Environmental Research and Education Project (Korea), the University Research for Graduate Education Project (Indonesia), the Higher Education Project (Cambodia), the Higher Education Reform Project (Malaysia), the Key Studies Development Project (China), and the recent Higher Education for Relevance and Efficiency Project (Indonesia).

8. The problem is exacerbated by external funding and the level of remuneration that is usually found in such research projects, which can be several multiples of levels available in locally funded projects.

9. For a description of the two logics and how they operate in knowledge capacity building—and for a definitive criticism of the World Bank's standard approach—see Ellerman (2005).

10. A recent example is World Bank funding of the Chinese Center for Economic Research (CCER) at Peking University, the recipient of a three-year grant to strengthen networks of expertise among Chinese economists located within China and abroad. Despite good results, as evidenced by its research outputs, at the end of the three-year period a major difference between funding agency and recipient was visible in expectations about the time span over which capacity building would occur. Funding levels were reduced drastically, utilizing the same exit-oriented logic that dominates most of us trained in market economics. It is not evident that the strategy has worked, inasmuch as CCER's continuing successes stem from finding more stable and reliable assistance, and not from any drastic structural change that, it was argued, would come from greater self-sufficiency. Similar examples from China include World Bank support to research institutes in Hainan and within the Chinese Academy of Social Sciences. The lessons from these efforts are being used to design future commitment-oriented research capacity building support in China and the rest of East Asia.

11. A case in point is the Boao Forum for Asia (BFA), a multigovernment, heads-of-state platform for promoting regional economic integration and economic development. BFA is seeking to develop capacity to research, build coalitions, and disseminate findings on regional integration, a major impulse in the future economic development of East Asia. BFA has established a rudimentary network for sharing knowledge, but it still requires extensive technical assistance, combined with small amounts of funding, to generate the quantity of research required to support integration efforts across Asia. With its international and pluralistic yet Asia-focused approach, BFA is well placed to develop capacity to deepen research. Although corporate and national government sponsors have recognized its merits, BFA is largely invisible to traditional financiers of capacity building in economics, who seem more comfortable with the established and traditional institutions that house teaching and research.

12. The Gini coefficient that measures inequality in consumption has deteriorated during the past decade for most countries in the region, and levels are often high (for example, it is

49.1 in Malaysia, 45.7 in China, 44.5 in the Philippines, 42.2 in Thailand, and 37.5 in Vietnam). See World Bank (2006) for the latest available estimates.

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Capacity Building in Modern Economics in the Caucasus and Central Asia

Ulrich Hewer

SINCE THE BREAKUP OF THE FORMER SOVIET UNION, WESTERN GOVERNMENTS AND foundations have invested in the creation of new institutions and capacities in the former Soviet republics. Not surprisingly, such investment has focused on areas that were underdeveloped or ideologically distorted under the Soviet system, and which became crucial to the development of democratic, market-based societies:

- *social sciences*, especially those such as economics that have policy applications;
- *managerial disciplines*, such as business administration, public administration, and education administration; and
- other *professions* such as law, journalism, and library science.

Generally, the focus of development has been on individual rather than institutional capacities, although a few *de novo* universities are exceptions—most notably our host today, the Central European University—as well as the other “centers of excellence” under discussion. In developing capacities, Western donors have pursued two chief strategies: (1) retooling opportunities for established Soviet-trained academics and professionals and (2) rigorous postgraduate training, usually at the master’s level, to create new academic and professional communities. Both strategies have been implemented inside and outside of the transition countries, but they are generally more effective when conducted inside the countries themselves.

In the field of economics, retooling has had limited effect. Those of us working in the field have encountered many Soviet-trained economists who have undertaken research or training in Western countries, often lasting as long as an academic year, but they often have only a superficial understanding of modern economics.¹ Only in exceptional cases have fellowships of this sort produced lasting new capabilities. The EERC’s Moscow-based research network and the existing centers of excellence (see

below), which retrain economists in situ and maintain long-term links with them after their retraining, have had better results.

International initiatives providing rigorous graduate-level training have had a much more profound effect on the economics profession in the transition countries than retraining programs. Graduate training, usually resulting in a master's degree, has been the approach of several international fellowship programs. Among these are the U.S. government-sponsored Muskie and Freedom Support Act programs, their analogues in the United Kingdom, and, to some extent, the European Union's ACE Program (Action for Cooperation in Economics). These programs made an important contribution to the development of economics, especially in the early 1990s, but high-quality master's and PhD programs launched in the transition countries and supported by Western donors have proven even more effective.

Western-supported centers of excellence have been created at four institutions in former communist countries to provide graduate-level instruction in economics, aspiring to and achieving international standards of academic quality. They are:

- the Center for Economic Research and Graduate Education/Economics Institute (CERGE-EI) in Prague;
- the Central European University (CEU) in Budapest;
- the EERC Master's Program in Economics at Kyiv-Mohyla Academy in Kiev; and
- the New Economic School (NES) in Moscow.

These centers have had the following impact on the economics profession:

- They produce well-trained economists in much larger numbers and at a lower per capita cost than the international fellowship programs.
- They offer an integrated master's curriculum, whereas Western universities typically have PhD programs only, not master's programs per se. Students on master's fellowships simply elect courses, too often without sufficient guidance or a structured approach.
- The students remain in their countries. Through their studies, internships, research projects, and so forth, they develop close contacts in their local professional and academic communities and are much more familiar with regional issues than their counterparts who have studied abroad. As a result, one finds more graduates of the centers of excellence than graduates of foreign universities in economics-related positions.

The centers of excellence have been teaching advanced market-type economics in Central and Eastern Europe and introducing modern research techniques for a decade or more. Western donors have praised the centers for their success in creating a new generation of economists for transition countries. The World Bank and other key donors have long recognized the need for creating similar centers in Central Asia, the Caucasus, and the Balkans. Nevertheless, graduate-level economics is unavailable today in Central Asia or the Caucasus. It is not the purpose of this paper

to investigate why modern economics has not moved farther south and east more quickly, but we would like to suggest that the time for this expansion has now come.

It has now become urgent to replicate and scale up the existing training models into the Caucasus and Central Asia. In doing so, the best results can be achieved by building upon the experience of the existing centers in Central and Eastern Europe, including an early emphasis on (1) creating local capacities for economics education and research; (2) designing the programs as “regional centers of excellence” from the beginning; and (3) eliciting significant government buy-in, above all in the countries where new centers will be established, but also in the neighboring beneficiary countries.

Regional Centers of Excellence in a Rapidly Declining Learning Environment

In order to understand the magnitude of the challenge of creating local centers with capabilities for self-perpetuation and self-improvement (an aspect Robert Campbell has been emphasizing in his work on local capacity building) in Central Asia and the Caucasus, it is worth summarizing the state of affairs in graduate economics education and research in these countries:

- Old “economics” associated with central planning is still the predominantly taught discipline in most transition countries.
- The average professor in many economics departments is over 60 years old, unfamiliar with modern economics, and resentful of attempts to reform economics education. Low pensions tend to prevent faculty from retiring.
- Empirical research is virtually unknown.
- Corrupt practices are widespread in university admissions and grading. Many students not only pay tuition but also bribes for an education that does not prepare them to enter either the local job market or to become part of the global community of economists.
- Reforms in economics education have often translated into curricula of dubious quality taught by professors who often lack both teaching skills and the required knowledge (reminiscent of the Liberman reforms in the former Soviet Union during the 1960s: neither “market” nor “central planning” economics), thereby discrediting modern economics.
- General budgetary support of universities is grossly inadequate, yet in some cases governments have built modern and expensive facilities without paying attention to academic quality.
- New program initiatives funded by outside sources are fragmented over many small universities or centers, resulting in underfunded and unfocused programs.
- With rare exceptions, ministries of education and universities have not yet acquired the ability to translate their vision of upgrading the human capital in their countries into concrete action plans that would take into account domestic and foreign resources.

- Program monitoring and evaluation capability remains weak, which contributes to donors' reluctance to commit to stable medium- and long-term funding, which in turn greatly jeopardizes sustainable capacity building.
- Coordination of donors sponsoring the scaling up of "centers of excellence" needs to be improved.

Two New Regional Centers: Central Asia and the Caucasus

The governments of Georgia and the Kyrgyz Republic have requested assistance from the World Bank in creating graduate economics programs in the Caucasus and Central Asia modeled after the NES and the EERC master's programs in Russia and Ukraine. The World Bank's Europe and Central Asia Region has responded positively and made staff available to assist the governments and host institutions in launching the programs and mobilizing the funds required to run them.

The NES in Moscow and the EERC master's program in Kiev have been offering world-class graduate economics instruction, in English, to some 100 first- and second-year students each year since 1992 and 1996 respectively.² By the summer of 2005, some 800 professional economists had graduated from the two programs. Approximately two-thirds of the graduates find attractive employment in government, private business, and think tanks, where governments are increasingly making use of their expertise and skills. In the early years, foreign faculty from Western countries taught nearly all the courses; today most of the courses are taught by Russians and Ukrainians with PhDs from Western universities. Most of them are actually MA graduates of the centers of excellence in their home countries.

Several guiding principles underlie the success of the schools in Moscow and Kiev; these principles will be applied to the new centers. They are: (1) strict adherence to international quality standards based on (2) access to highly qualified faculty and modern scientific literature, textbooks, and information technology; (3) independent and transparent management; (4) strong partnerships with local institutions and individuals; and (5) diversified financing from a broad range of revenue streams.

The Central Asia MA Program

The Central Asia MA Program will be based at the American University of Central Asia (AUCA) in Bishkek because (1) the AUCA has a regional mission; (2) junior faculty with graduate training from the United States are already teaching modern economics in English in the undergraduate program; (3) its student body is drawn from the target countries—Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan; and (4) the university is introducing an international model of higher education. The AUCA is the most modern university in Central Asia and the success of its four-year undergraduate economics program has prompted its major sponsors—the Open Society Institute (OSI) and the United States Agency for International Development (USAID) to commit to the university's long-term development. Based in Bishkek,

the program will be designed as a regional center of excellence serving the above-mentioned six countries with a total population of nearly 90 million. It is expected to produce some 70–80 MA graduates per year. The graduate economics program will help the university to develop further in its stage of “early adulthood” (Ellen Hurwitz, president of AUCA).

The Caucasus MA Program

The Caucasus MA Program will be based at Tbilisi State University (TSU) and serve Armenia, Azerbaijan, and Georgia (a combined population of approximately 17 million), plus parts of Turkey, Iran, and Iraq as well as southern Russia. The program is expected to graduate about 40–50 students per year. A high-level steering committee, appointed by the Georgian minister of economic development and headed by Deputy Minister Tamara Kovziridze, after careful deliberations chose the TSU as the most suitable host organization for the program.

The Choice of TSU

The committee recognizes that a large state university with all its bureaucratic and administrative trappings may be slow in embracing fundamental change and replacing the old with a new economics curriculum. Nevertheless, it decided to select the TSU as the host institution for the program for the following reasons:

1. Georgia has embarked on a major reform of higher education, including an association with the EU’s Bologna curricular reform process. The TSU will be, if it wants to recover its status as the major local and even regional university, at the forefront of the reform process. The leadership of the TSU will use the MA program as a vehicle and example for advancing the education reform not only in economics but also in other graduate programs. The university is in the process of consolidating its four “economics” faculties into a single faculty, comprising an economics department and a business administration department.
2. Parallel programs within universities and between universities will be consolidated under the reform, and the TSU has a better chance than other universities to house such programs. One social sciences reform program funded by the Carnegie Corporation of New York and managed by the Eurasia Foundation has already expressed interest in moving to the TSU and cooperating with the new MA program. Other modern programs at the TSU, such as those managed by the OSI-supported Centre for Social Sciences, will offer additional opportunities for cooperation and for strengthening the reform process.
3. Fewer than half of Georgia’s 240 licensed learning institutions met the basic standards of a facilities inventory recently carried out by the government; hence they will not be allowed to admit new students. Also, the number of state-funded students will be significantly reduced, although more funding will be made available for each student. The TSU is expected to emerge as one of the five major universities in Georgia: two in Tbilisi (the other being the Georgian Technical University) and one each in the three other major cities.

Multiyear Cooperation with TSU

The rector of Tbilisi State University, the dean in charge of the university's reform of economics and business instruction, the ministry of education, and a consortium of donors will enter a multiyear cooperative agreement specifying their respective obligations in launching and implementing the MA program at TSU. A draft agreement specifying the partners' respective responsibilities has been elaborated and is expected to be finalized shortly. Its main elements are as follows:

- An autonomous status of the MA program within TSU in the early years but progressive integration into the university's academic, administrative, and financial structures as soon as possible on the basis of an agreed-upon business plan with built-in benchmarks and incentives.
- Merging of the traditional economics graduate program at TSU and the new MA program on the basis of an agreed-upon timetable.
- Modernizing the undergraduate instruction by having selected courses in the undergraduate program taught by graduates of the new MA program, starting in the fall of 2008—that is, by MAs from the first cohort.
- The government has donated an appropriate building and accommodations to house the MA program.

Teaching, Research, and Outreach

The new centers in the Caucasus and Central Asia will pursue a three-pronged approach: (1) teaching, (2) research, and (3) outreach. For the programs to achieve their overall objective of creating a self-sustaining capability in economics education and research, they need to be closely interconnected, though teaching will have to be developed before research and outreach can be undertaken in a meaningful way.

Teaching

Following the example of the EERC at Kyiv-Mohyla Academy and NES, the master's programs in Central Asia and the Caucasus will consist of a rigorous two-year academic curriculum, comparable with that of leading Western universities and taught in English on the basis of standard graduate-level textbooks by an international faculty. The program of studies will culminate in the defense of a thesis, written in English under the supervision of visiting faculty or a Western-trained PhD from the region. Students will be encouraged to choose thesis topics relevant to their countries' development.

During the first few years, the MA programs in Bishkek and Tbilisi will, of necessity, depend heavily on visiting faculty. The new schools will use the same modular structure as the Kiev and Moscow schools (five two-month "mini-terms" per year) as this will facilitate recruitment of international faculty, including economists from the region who hold PhDs from Western universities.

Research

Overcoming the traditional separation of teaching (universities) from research (academies of science) is essential for modernizing the economics profession. Following the example of the EERC research network, NES in Russia, and the Economic Research and Outreach Center in Ukraine, students and faculty will conduct high-quality research in Tbilisi and Bishkek, and thereby contribute to the mutual reinforcement of teaching and research. Students will be encouraged to conduct research at different locations, including partner institutions in neighboring countries, so as to benefit from specializations and experiences. The research centers will play a crucial role in providing an attractive home for returning PhDs.

Both the teaching and research programs will seek to establish “twinning” arrangements with partner universities or institutes in Europe (including the centers of excellence in Central and Eastern Europe) and the United States. At the AUCA in Bishkek, long-standing cooperation exists already with Indiana University.

Outreach

The centers of excellence in Central and Eastern Europe each pursue a program of outreach to universities, government, and think tanks. Each employs its own mixture of seminars and conferences (both policy related and academic), summer schools, faculty training and assistance with development of curricula and instructional materials, student internships in government agencies, and alumni networks.

The regional character of the new centers will make outreach even more important and labor-intensive than those in Kiev and Moscow. For example, rather than placing student interns in the city where the school is located, regional programs will have to place interns in several national capitals. The Georgian and Kyrgyz governments have expressed their commitment to facilitating formal links with the governments of neighboring countries.

Multiyear Funding

The costs of the two new regional centers in Central Asia and the Caucasus are projected to amount to roughly the same as those of the programs in Russia and Ukraine, that is, approximately US\$1 million per year, not including the research centers. Funding will come from three sources: (1) a consortium of foreign public and private sponsors; (2) domestic public and private sponsors; and (3) student tuition fees, made possible by developing a scheme whereby students can borrow funds to be repaid from the increased earnings that result from their advanced education. In the early years, program costs are projected to amount to approximately US\$10,000 per year per student, or US\$20,000 for the two years. Costs will decline as the program increasingly incorporates local faculty with Western-trained PhDs.

Sponsors from all countries benefiting from the regional MA programs are expected to contribute to their funding. Initially, most of the funding is expected to

come from foreign donors, but over time funding sources from local donors and students' families are expected to account for about two-thirds of total program cost.

The governments of the countries benefiting from the programs and the two host universities, the American University of Central Asia and Tbilisi State University, will seek to establish an endowment of US\$15 million. This endowment would generate sufficient income to fund the programs.

As a second-best alternative, a minimum of US\$5 million should be in place before the programs are launched. It would not be advisable to initiate the programs with less funding as too much time and effort would have to be spent on fund-raising—at the expense of program implementation and academic development.

The government of Georgia has made available an appropriate building for the TSU program and central budgetary funds for its renovation in 2006. The start-up capital of US\$5 million was secured by the end of 2005.

Cooperation Among Existing and New Programs

The creation of two new regional programs in the Caucasus and Central Asia would not only help alleviate the shortage of trained economists in these regions; equally important, it would enable governments and universities to acquire the capabilities of building their own economics education and research programs. The launching of the two programs would benefit considerably from strong cooperation with the existing programs: teaching programs in Tbilisi and Bishkek could adopt what has worked at NES and the Kyiv-Mohyla Academy, and the research centers should make use of the experiences gained by the EERC research network in Russia. Faculty and student exchanges among the different programs, joint conferences, and other forms of networking could result in cost savings. Formal networking among the existing and new centers will help strengthen the new economics profession in the region and raise its impact on the creation of functioning democracies.

Notes

1. For a preliminary stocktaking, see the Summer 2000 issue of *Comparative Economic Studies* (42:2).

2. First-year courses include microeconomics, macroeconomics, statistics and econometrics, and mathematics for economists. Second-year courses cover all major areas of economics, such as industrial organization, law and economics, finance, game theory, and so on, as well as transition economics. In their second year, students also receive advanced research training and write and defend a thesis in English.

Developing Graduate
Economics Education Programs

Developing Graduate Economics Education from Scratch

The Case of the Central European University

John S. Earle

This paper analyzes problems in capacity building in economics education and research, drawing on experience from the special case of the CEU Department of Economics. Among the problems discussed are the virtual absence of economics as understood in the West from the countries of Eastern Europe; the inherited bias toward viewing economics as applied mathematics rather than as an empirical science; the lack of preparation of the students; and difficulties in developing a faculty, a research environment, and all the complementary institutions that together raise the effectiveness of economics education and research. A particular issue that arises as the capacity-building programs mature is whether the economics taught and practiced should be of the ultrastandard “plain vanilla” variety, or whether instead it could be valuable to emphasize certain areas or styles of economics. One solution may be found in “the relationship of the particular to the general,” which in this context may be interpreted as exploiting the specific problems and sources of intellectual inspiration of the transition economies to draw lessons of broader interest to economists around the world.

THE CENTRAL EUROPEAN UNIVERSITY (CEU) WAS FOUNDED IN 1991 WITH THE purpose of bringing the social sciences to a large group of ex-socialist countries where these disciplines, as they are understood in the West, hardly existed. This paper considers the specific problems of capacity building in the field of economics, describes some aspects of the teaching program and research activities at the CEU economics department, and provides suggestions for further development organized around the CEU theme of “the relationship of the general and the particular.”

The emphasis throughout is on problems in building a PhD program, a much more demanding task than building an MA program in terms of necessary resources, faculty time and dedication, and complementary activities and infrastructure. My perspective throughout is that of someone who has been a regular teacher and researcher (and, to a lesser extent, an administrator) in a capacity-building program since 1991; thus, the approach is much less macro than the “technology transfer” perspective of Ofer and Polterovich (2000). Rather than taking the viewpoint of

someone organizing large fund-raising efforts or negotiating with governments, the paper analyzes the behavior and characteristics of faculty, students, and university administration—the micro actors in capacity building.

In broad terms, the condition of economics in Central and Eastern Europe and the Russian Federation at the time the socialist regimes collapsed is fairly well understood.¹ Western economists arriving soon after to teach in the newly established capacity-building organizations immediately gleaned from their students that there was a virtual absence of any exposure to the neoclassical theories and empirical methods standard at that time in the West. Researchers from the West who attempted to find collaborators or speaking partners among the numerous and well-staffed institutes of economics could not fail to be impressed by the stark differences in questions and methods. Of course there were some very few exceptions, represented chiefly by some highly motivated individuals who sought out and taught themselves substantial parts of Western economics; and there was some cross-country variation, particularly associated with the greater liberalization in some countries than others during the 1980s.

A more interesting dimension of variation, because it is a systematic factor with considerable inertia through the following transition, is the extremely wide gap in the “level” (from a Western standpoint) of different aspects or fields of economics. In particular, mathematical theory was well developed at the best universities of Eastern Europe and the former Soviet Union, and the concepts of neoclassical economics were taught with such a thick mathematical patina under the guise of “economic cybernetics” (at such places as Kiev, Novosibirsk, and TsEMI, in my experience) that students could actually learn them without ever discerning that they were analyzing the standard problems of bourgeois economics, such as consumer choice and profit maximization.

This heavy mathematical emphasis represented a great strength in certain departments of the region, and teaching in the capacity-building institutions has exploited the much stronger preparation of students in mathematics to move more quickly and technically than they could in the United States. Yet in some cases the mathematical strength may actually have made it more difficult to absorb economics as it is actually practiced in the West. After all, only a tiny fraction of US economists spend their days proving theorems, even if the profession (mistakenly, according to most observers who take a step back from following the fashions) has accorded outsized rewards and prestige to this activity.² For examples, see the list of Nobel Prize winners (but not John Bates Clark award winners), or the standard first-year graduate curriculum at any US university (a subject to which we shall return). Most economists, by contrast, are primarily involved in the very useful attempt to try to understand real-world phenomena through the analysis of data and (mostly) simple empirical methods.³ But although mathematical theory may be relatively easy to learn from a textbook, the highly idiosyncratic nature of empirical research renders it less immediately conveyable. For all these reasons, the applied fields that account for the vast majority of economic practice have proven much harder to inculcate in the region than anyone had anticipated.⁴

This difficulty is also relevant for the new capacity-building organizations, such as CEU, that have been set up in several countries of the region. Part of the problem is that, even if the ventures were greenfield from a legal point of view, many of the inputs were not. Faculty members, many of them well qualified, were drawn from the region, and in some cases they tended to bring strong mathematical skills and biases with them. Nor in terms of labels are the new organizations clearly differentiated from the old: *economics* is a much misunderstood (and, some might say, abused) term throughout Eastern Europe and Russia. Both from visits to many universities in the region and from experience with our arriving students, a CEU instructor knows better than to expect that someone with a BA in economics from most area universities has ever experienced even such basic concepts as utility maximization and income and substitution effects.⁵ Instead, economics is confused with business and management throughout the region, and the several hundred transcripts that the CEU economics faculty must evaluate each year as part of the admissions process are full of courses in marketing, accounting, and some other extremely practical-sounding subjects that, however, are not part of economics as we define it.

The lack of preparation of students for graduate programs is probably a common problem for all the capacity-building efforts, as it affects the quality of the basic input—new students.⁶ This lack raises questions about the focus of international resources almost exclusively on the graduate area, to the neglect of undergraduate preparation and broader education in economics for noneconomists.⁷ It reflects the limited effects of capacity-building efforts on other universities outside the new institutions themselves: perhaps these externalities are necessarily slow to develop, but one cannot help but notice how little an impact the effects of these efforts at capacity building have on the universities compared with their apparently large effects on the lives of the students graduating from the capacity-building programs. Yet the goals of capacity building presumably involve more than the creation of new ivory towers, insulated not only from the broader society—as are most economics departments in the West—but also from other universities in the same region.

The problem of unprepared students is also related to the almost uniform hostility of most economics departments toward importing foreign skills and materials. For instance, the Civic Education Program of the OSI has frequently had difficulty getting state universities in the region to accept temporary appointments of Western-trained scholars, even when they come at very low cost to the local university and—from our perspective—would seem to have very high benefits for students. For the most part, the local universities are loathe to hire new PhDs from the West (some of them CEU or other capacity-building institution MA graduates, exacerbating the brain drain problem on the supply side; they are also reluctant to introduce substantial changes to their curricula).⁸

Some other general problems of capacity building in East European economics relate to the lack of complementary activities and infrastructure surrounding at least some of these programs. A successful graduate program, particularly a PhD program, requires a vibrant research environment in which students can participate and learn as apprentices to more experienced scholars. Contrary to frequent practice in the

region (and indeed in Europe more generally, although not in the United States), this does not mean that students get involved in a variety of money-making projects that have little bearing on their development as researchers. Rather, it means that students see that faculty members are actively engaged in scholarly research and that the former are able to draw upon the latter's expertise for help with dissertation ideas, and with implementing and writing up those ideas. Other important aspects of infrastructure include the library, student services, admissions office, placement services, and alumni organization. It is very difficult in a new institution to have all these working at an adequate level in just a few years and to run them professionally and according to the espoused Western standards.

Finally, we come to what many perceive as the biggest problem of capacity-building institutions, both for year-to-year management and long-run strategy: the recruitment, retention, and motivation of faculty. The approach in most organizations has been to bring in visitors, sometimes regular visitors, from Western universities to deliver courses. Gradually, there have been some appointments resembling full-time positions, mostly among young PhDs from the same country in which the organization is located and sometimes through open searches on the international job market (at least at CEU). The continuity of longer-term and more frequent presence is clearly desirable for students, particularly for PhD students who benefit from regular consultations on their research progress. Presence is also important for the development of research environment, as we can see that physical proximity is a frequent stimulus for researchers to work together.

But there are also some drawbacks to recruiting and retaining faculty: many of the faculty coming from the same country decreases the international character of the department. It makes the degree less valuable and the department less attractive to students from outside the country and to some extent from inside as well, which should be of great concern if the capacity-building goals encompass more than one nation, as they certainly do at CEU. "Returnees" may or may not identify with the capacity-building goals of the organization, instead seeing the job as merely the best available (usually by far the best available among academic positions) in their home country. They may perceive their interest primarily as promoting an ultra-standard approach to the discipline, since that is likely to garner the widest acceptance internationally even if it has less impact locally and regionally. Such junior faculty in Western universities are not usually given large responsibilities in PhD teaching, particularly in the core courses, nor are they expected to do a great deal of dissertation advising—the usual argument being that they are still so concerned to develop their own research careers that it is difficult for them to share ideas with students. They are also not burdened with administrative work nor are they put in positions of authority; they may be consulted but they rarely have a vote on important curricular issues, new faculty hiring, and department strategy. More senior visitors, although more experienced in these functions and possibly at a better place in their careers to exercise them generously, have other drawbacks. They are expensive, and they have little personal interest in investing time and energy in the new programs. They are almost never interested in a full-time, exclusive appointment, because of the partially

inherent uncertainty associated with new institutions in countries experiencing instability and lacking reliable contract enforcement. The perceived job insecurity in these positions is also related to the difficulty faced by the capacity-building institutions in offering tenure, which CEU does not grant at all. So senior scholars are loathe to give up the status and security of an appointment in the West and very few are interested in full-time appointments in new capacity-building institutions in Eastern Europe or Russia. The possible strategy of motivating these people not through compensating differentials but by encouraging them to identify with and develop the goals of capacity building through their own research and teaching has been neglected.

Economics at CEU

The CEU economics department shares some similarities with the other new economics programs in Eastern Europe and Russia, including the goal of capacity building, but there are also some important differences. Unlike most other programs, and unlike its early years, the CEU economics department is now firmly embedded in a much larger university, although it is the largest department in CEU. Many of the functions that at other economics programs (and formerly at the CEU department) are performed almost entirely by the department—student recruiting and admissions, faculty hiring and promotion, student records, human resources, research contracts, alumni relationships—are now almost entirely carried out by the university. There are some disadvantages to this centralization, some of which are related to the peculiarities of the way the economics profession operates—such as the academic job market and the credentialing role of the PhD degree for professional economists—and some of which tend to be only poorly understood by those without much experience in US universities. In general, the dominant role played by United States departments in setting the standards for the profession is probably greater in economics than in just about any other discipline, and a small, start-up department with little reputation has to follow many established conventions.

The department also benefits in a number of ways from membership in the larger university. Most obvious is the more secure funding due to the endowment given the university by George Soros a few years ago. Less obvious are the possible scale economies associated with centralizing certain functions. Also potentially quite valuable is the broader sense of shared mission that may come from bringing together not only a single social science, but a whole package of related disciplines. The nature of the mission is a topic that may be more frequently discussed when one convenes regularly together with a diverse group of philosophers, sociologists, legal scholars, and gender studies specialists than when the possibly narrower perspectives of economists receive little outside feedback. This benefit might be still much greater if economics department faculty members engaged in more interdisciplinary research and dialogue, but the quest for such interaction seems to be as elusive at CEU as elsewhere.

Notwithstanding a number of arguments concerning the precise mission of the university, the CEU economics department has organized its programs predomi-

nantly along standard “Western” lines. Focusing on the PhD program, which can be much more easily compared to an international standard (there being few if any MA programs like CEU’s in the United States), application requires GRE general scores (unlike other PhD and MA programs in Eastern Europe) in addition to the standard application form, transcripts, statement of purpose, and two letters of recommendation. In practice, it appears that the quantitative GRE score plays a heavy role in admissions decisions, as it does in the United States, and accepted students seldom if ever have had a score below 700, with most much closer to 800. The acceptance policy is similar to most US universities in that there is no expectation of substantial attrition: once students enroll, the department and the university do not try to eliminate a large fraction as a secondary screening procedure, the usual practice at a few programs, such as the University of Chicago. Also, unlike the Chicago practice, all students in good standing have the right to full financial aid. Part of the rationale for these policies at CEU might be that they induce fruitful cooperation among students. The program includes a substantial component of coursework, similar to US PhD programs but dissimilar to the standard in Europe until recently. The list of courses offered in the CEU PhD program since the first year in 2000–1 is shown in Table 1, together with the course instructors each year. The first year of coursework is devoted to core courses in micro, macro, and econometrics, as is standard in the United States. At the end of these sequences, comprehensive exams are offered in each, and students are required to pass these before continuing with the program (generally, only two attempts are permitted). During the second year, students are required to take a number of field courses in various areas of applied economics, and they must submit a dissertation proposal. With the approval of the proposal, the student is matched with an adviser and expected to participate in departmental seminars and to make rapid progress on dissertation research. When the dissertation work is substantially completed, but not yet finalized, the student takes an oral examination. Although as a formal matter, the oral examination committee votes on whether the student passes or not, failure is expected to be rare, as the dissertation adviser should not permit a student to take the exam if failure is a distinct possibility. More importantly, the oral examination is intended to yield an explicit contract between the student and the dissertation reading committee (which is a subset of the oral examination committee) on what work remains before the dissertation can be signed.

On first examination, this organization of the program appears very similar to those at good universities in the United States. Admissions, financial aid, and other procedures are designed on the basis of standard Western practice. The titles and contents of most courses offered differ trivially if at all from international standards. The backgrounds of the faculty, who have PhDs from leading Western universities themselves, and the course workloads of the students are also similar.

But there are some important differences. Most significantly for the current stage of the program, which is still in development, CEU coursework is actually significantly shorter than in the standard US program. Currently, a total of 36 credits are required for the PhD, with 1 credit implying 12 hours in the classroom. Of these 36

TABLE 1

List of PhD Courses and Instructors at CEU from 2000 to 2005

<i>PhD Course Title</i>	<i>2000–1</i>	<i>2001–2</i>	<i>2002–3</i>	<i>2003–4</i>	<i>2004–5</i>
CORE COURSES					
Advanced Microeconomics 1 (4)	L. Ambrus Lakatos	L. Danziger	L. Danziger	L. Danziger	L. Danziger
Advanced Macroeconomics 1 (4)	M. Gillman M. Kejak	M. Gillman M. Kejak	M. Ben-Gad (3)	M. Gillman	M. Gillman
Advanced Microeconomics 2 (3)	L. Danziger	L. Danziger	L. Danziger	L. Danziger	L. Danziger H.Gintis
Advanced Econometrics (4)	L.Matyas	L.Matyas	L.Matyas	L.Matyas	L.Matyas
Advanced Macroeconomics 2 (3)	F. Coricelli	F. Coricelli	F. Coricelli	F. Coricelli	A.Dalmazzo (2)
Advanced Time Series Analysis (2)			T. Terasvirta	T. Terasvirta	P. Siklos (1)
Advanced Applied Econometrics (2)		C. Cornwell	C. Cornwell	C. Cornwell	G. Kezdi
OPTIONAL COURSES					
Contract Theory (1)	U. Pagano	U. Pagano	U. Pagano	U. Pagano	U. Pagano (2)
Topics in Macroeconomics (1)		F. Canova			
Advanced Labor Economics (3)		J. Earle Y. Weiss	J. Earle G. Pfann	J. Earle R. Sauer	J. Earle
Numerical Methods for Macro (1)		M. Kejak	M. Kejak	M. Kejak	M. Kejak
Applied Macroeconomics (2)	A. Ratfai	A. Ratfai	A. Ratfai	A. Ratfai	A. Ratfai
Pension Economics (1)		A. Simonovits	A. Simonovits	A. Simonovits	A. Simonovits
Topics in Advanced Micro (1)		T. Pietra	P. Rey		
Public Economics and Finance (2)	B. Koszegi	P. Benczur	P. Benczur	P. Benczur	P. Benczur
Economic Development (1)					I. Konya
New Economic Geography (1)					G. Ottaviano
Corporate Finance (2)	D. Mramor	D. Mramor			

(Continues on the following page.)

TABLE 1 (continued)

List of PhD Courses and Instructors at CEU from 2000 to 2005

<i>PhD Course Title</i>	<i>2000–1</i>	<i>2001–2</i>	<i>2002–3</i>	<i>2003–4</i>	<i>2004–5</i>
Monetary Theory (3)	M. Gillman	M. Gillman	T.Monacelli (2)	M. Gillman	
Law and Economics (2)	A. Dnes				
Modeling Financial Markets (2)	P. Kofman	P. Kofman	P. Kofman		
Topics in Econometrics 1 (1)		P. Siklos			
Advanced Macro Theory and Policy (2)		A. Cukierman			
Topics in Economic Theory (1)		S. Bowles			
Advanced Int'l Finance (2)		S. Plaut			
Applied Microeconomics (2)		L. Danziger	L. Danziger	L. Danziger	
Investment (1)			P. Sakellaris	G. Pfann	
Economics of European Integration (3)		R. Vickerman (2)	R. Vickerman	R. Vickerman	R. Vickerman
			K. Dezseri	K. Dezseri	K. Dezseri
Advanced Game Theory (1)			A. Ambrus		
Advanced Macro Theory (1)			R. Cooper	T. Monacelli	
Advanced Finance (2)	Gy. Loranth	Gy. Loranth	Gy. Loranth	Gy. Loranth	
Topics in Econ. Theory (1)				C. Carroll	
Discrete Choice Models (2)					R. Sauer
Exp. and Evol. Game Theory (2)					H. Gintis
Behavioral Economics (2)	B. Koszegi		A. Falk	A. Falk	L. Goette
Advanced International Finance (2)	S. Plaut				
Bayesian Econometrics (2)			W. Griffiths		
Topics in Time Series Analysis (1)				P. Siklos	
Theories of Economic Growth (3)	S. Gomulka				
	I. Bicanic				
Advanced International Trade (2)	B. Elmslie				

Source: CEU.

Note: Only PhD courses (no MA courses) are shown. Number of credits for each course/instructor are in parentheses (1 credit = 12 classroom hours).

credits, 22 are core courses (7 in each of micro and macro and 8 in econometrics).⁹ Only 14 are optional field courses. Both the core and the optional requirements are much less than the US standard. Students in the United States would normally have at least 12 hours of core courses each week of the first year, for a total of 32–33 weeks (based on two 16-week semesters or three 11-week quarters). This implies approximately 50 percent more core material in US universities, with the CEU shortfall greatest in micro and macro (because these fields tend to receive more attention in the United States).

The difference in course requirements is even greater for the optional field courses. In the United States, students usually take two or three year-long field courses plus some distribution requirements, altogether adding up to at least one more full year of coursework. The CEU requirement is less than half that, although there are plans to increase it slightly in the future. The CEU PhD program also has no field courses, in the sense of particular sets of courses among which students must choose; this could be partly because of the small number of field courses students are required to take, although there are also some US programs where either there are no such groupings or they vary regularly (or irregularly) from year to year. The CEU faculty have been discussing whether to organize the coursework into fields, and (with more heat) which fields should be chosen, but as long as students take so few courses the question appears moot.

Another way in which the economics PhD at CEU does not follow standard US practice is that CEU requires that applicants have received an MA before they enroll in the PhD program. In the United States this would be unheard of—starting PhD students rarely have an MA. The CEU policy is university-wide, and there seems to be little that the economics department can do to change it. Because of this policy, however, at least a few interesting candidates are turned away each year by the CEU Admissions Office, without even having their applications considered. Given the state of economics in the region, as discussed above, this would not seem to be a very well-advised policy.

As a result, most PhD students at CEU are Hungarian graduates of the Budapest University of Economic Sciences and Public Administration (renamed some years ago from Karl Marx University, and recently renamed again as Corvinus University). This university is certainly one of the best state universities in the entire region, so the preparation is fairly good. The formal admission requirements to CEU are stringent, and the students appear to perform very well; annex 1 contains a list of titles of recent presentations of PhD student research. But the PhD program lacks the great variety of nationalities and backgrounds found in the MA program, where a typical entering class of 45 students represents about 20 different countries. It also lacks any Western students, who could be interested in applying to the PhD program (particularly if it carved out a somewhat specialized niche—as discussed below), but who rarely have an MA before proceeding to the PhD.

Another peculiarity of the student population in the economics PhD at CEU is that there are few graduates of the CEU MA program. This result has been very disappointing for CEU faculty members, who are exceedingly proud of the high qual-

ity of the MA students, 40–50 percent of whom go on to PhD programs each year. Despite a number of conscious attempts to stimulate interest among them, including offering ways to accelerate the PhD program (by offering waiver exams, combining coursework, and permitting much to be accomplished during the two-year MA program), most of the MA students nonetheless strongly prefer to go to US programs. Sometimes they apply to the CEU PhD, but it seems to be mostly as a backup alternative. Of course, the CEU faculty can only wish them well and cheer them on when they are accepted with full funding into top US and European schools, but this pattern does point to a demand problem for the PhD programs in the region.

Although the workload in particular CEU courses is comparable to that in US universities, CEU requires much less by way of assistantship work from their PhD students. The CEU financial aid is a fellowship, and the work requirement is only some minimal teaching assistance—not a halftime job, as is typical in the United States. Although a low work requirement has many advantages, most obviously permitting students to focus first on their courses and then on their research, it has the drawback that PhD students do not have the same opportunities to interact with different faculty members each term as they receive different assignments. Indeed, after a course is finished, it may be difficult for students to approach professors, and working as a TA (or RA) provides a natural way for people to start talking with each other.

A final difference is that most PhD students work outside of the university. Most commonly they are employees of the Hungarian National Bank, but some teach economics courses at local universities or work on government-funded projects. Immigration rules prevent non-Hungarians from such outside work. Some of these experiences may be valuable, but they further serve to undercut the development of a vibrant research environment at CEU, together with other factors discussed below.

Only one explanation appears to account for all, or most, of these anomalies: the university has a strict policy limiting any student's financial aid to a total of four years (46 months, to be exact). Therefore, PhD students need to finish coursework quickly; the university requires that they already have an MA to make sure they are prepared for a rapid program; the MA requirement excludes many applicants from the region and nearly all of those from other regions of the world; the current MA students have already used up two of their possible four years and are afraid of exhausting their funding; the CEU cannot demand much assistantship work as it needs to force a fast pace; only Hungarians are able to get outside work in Hungary, making non-Hungarians even less interested in CEU; and Hungarian students readily accept jobs outside (even forgoing their stipends temporarily) because they see their financial aid running out.

A problem that CEU has in common with most other institutions is how to build a research environment that encourages individuals to carry out innovative projects and to publish them well. Most CEU faculty members are, or have been, active researchers. Annex 2 contains a list of faculty publications since 2002. But building a research environment involves more than long faculty vitae. It requires regular seminars with high levels of participation, social interaction among faculty and advanced students, and regular and informal discussions taking place in the offices, halls, and

lunchrooms. Some of the particular problems in developing such an atmosphere at CEU follow from the peculiarities of the admissions and financial aid policies, and they are also related to CEU's hiring practices and the incentives offered to faculty.

A major problem, one which is quite common in Eastern Europe and Russia, is that most faculty members have multiple affiliations. This is true not only of the non-Hungarian visitors, but also of most Hungarian faculty members. And it is true not only of the part-timers, but it is also true of some of those with full-time contracts. The multiple affiliations might not matter much if people spent their time at CEU, but many do not: the foreigners tend to come only when required by teaching obligations (and even then it is sometimes in doubt, although when they do come, they can be found around the department—usually 16 hours per day). But some of the local faculty may show up only for office hours and to teach their classes. They may run their research grants through other organizations (a practice sometimes explained by those organizations' greater expertise in handling contracts), and effectively their research energy may go elsewhere. Relatively few faculty hang around to engage in regular research discussions with others.

Granting some license for the youth of the organization, however, a research environment is clearly developing. The Budapest Economic Seminar Series (BESS) meets frequently with both internal and external speakers. Annex 3 contains a list of speakers in the academic year 2004–5. The CEU Labor Project, founded in 1994, has produced academic articles as well as contract research reports over the years; many students have been involved in these activities, some as assistants and others as coauthors. An increasing number of assistant professors with Western PhDs are joining the faculty, and more research-related conversations seem to be taking place around the department.

Some research at CEU is closely related to policy—in particular, to policies in the transition from socialist to market economies. Several faculty members have worked closely with central banks in the region and with international organizations, and Hungarian faculty members have worked on a variety of Hungarian government contracts. The CEU Labor Project staff, including faculty, students, and MA graduates (some of whom are now in PhD programs) have participated in projects with the World Bank, USAID, the European Commission, the OECD, and the governments of Moldova, Mongolia, Romania, and Russia. These latter projects focused on issues such as privatization, corporate governance, enterprise restructuring, labor market adjustments, unemployment, and education.

“The Relationship of the General and the Particular”

The mission of CEU was conceived as primarily one-way—that is, it was seen as importing the finished goods represented by the received wisdom of the Western disciplines. These products could be imparted in the classroom, and they could be used to inform policy making in the uncharted waters of transition from a socialist system. Somewhat neglected in the early plans, or at least not so clearly articulated, was the source of inspiration represented by the potential benefits flowing in the other direc-

tion: the substantial lessons that studying the particularities of the region could have for broader questions about economies, politics, and societies. Indeed, although simply being present during the momentous changes and the feeling of making some small contribution to the process provided some initial compensation for those actually “on the ground” (as some funders were wont to call them), a continuing devotion to the enterprise required either higher salaries than the organization was prepared to pay or commitment to using the experiences of the East to inform the disciplines of the West. The view that members of the community could be motivated by studying the region is far from universal inside CEU, but the organization eventually did give some lip service to the notion, in the form of the occasional slogan “the relationship of the general and the particular.” For the CEU Economics Department, this concept could become more than just a slogan, and in this section I discuss some arguments for the department to develop a clearer sense of intellectual focus. Although the discussion concerns CEU, these reflections might be useful to other capacity-building efforts also engaged in strategic planning for the future. The initial efforts to develop the new programs were necessarily concerned with the most basic requirements for economics education and research, but it may now be time to consider the place of these institutions in the region and the profession. For a number of reasons, it seems to make sense that the CEU Economics Department adopt some focus. Clearly, the department cannot dispense with broad strengths in the standard fields of economics as long as the university wants to offer MA and PhD degrees in economics. But the department could strive for something more than—or at least something different from—simply mimicking others in an attempt to join the ranks of the top 50 or top 20 programs in Europe. A vision of something unusual that the department may be able to contribute would help to create a stronger sense of shared mission among faculty and students. It would guide strategic planning, including decisions on hiring and course offerings. And it would help to build a reputation for the department outside the university as a place with a high level of research and teaching in general, plus a particular niche that differentiates the department from the mostly “plain vanilla” economics departments with whom we compete. The choice of focus is not arbitrary. In principle, the department could select one or a few fields of economics at random, with the only requirement that the field(s) be central to the discipline—because our ability to award economics degrees requires that the programs have a certain breadth. Much better, however, would be a choice

of focus that builds on our comparative strengths. A short list of CEU advantages would include location in a region experiencing some very interesting economic developments, outstanding students from all over the region who are deeply interested in those developments, faculty members who have built their professional careers studying those same developments, and a university administration that professes a strong interest in policy relevance and social service.

A focus that builds on those advantages would have to be careful to avoid being pigeon-holed as a “regional specialization.” Economists who study economies other than that of the United States know all too well that the profession is dismayingly

Americo-centric and that overstressing the non-American source of their data lowers the probability of acceptance in the top journals. Hamermesh (2002) argues in favor of much greater use of non-American data, on several grounds: the presence of exogenous shocks, more variation in policies, and the larger size and better quality of foreign data. All of these arguments apply at least to some extent to the transition economies of Eastern Europe and Russia. But Hamermesh (2002) also shows that few such papers are published in top journals: only 7 percent of all empirical labor economics articles in the *American Economic Review*, the *Journal of Political Economy*, and the *Quarterly Journal of Economics* used exclusively non-North American data, 84 percent used exclusively American data, and the remaining 9 percent used some mixture.¹⁰ He also found that published papers using non-North American data have much lower rates of subsequent citations (lower by a factor of about 3 within 3 years after publication). The inference he draws is that journal editors are reluctant to publish such papers because they attract less interest in the profession.

It would therefore seem to be privately rational for economists in the capacity-building institutions like CEU to devote their scarce research time to yet more analysis—although at a considerable distance—of the U. S. economy. It may also be socially efficient if the university takes a single-factor view of faculty quality and output. For instance, CEU now evaluates faculty research by awarding points for publications, with articles in top journals getting 3 points, those in leading field journals 2 points, and all others 1 point; the required minimum is 2 points per year on average. (In a similar vein, CERGE even provides financial bonuses for publications.) This policy might be the best one, and it probably is effective in raising consciousness among some faculty members about the importance of publishing internationally, and in the best possible venues. There may indeed be some tendency, out on the periphery of the profession, for faculty members to give up on participating actively in the big debates. Encouragement to remain involved, and to go through the steady grind of paper submission and revision, is surely valuable.

From a less atomistic point of view, however, neither the private incentives nor the points policy appears socially efficient. It encourages faculty members to abdicate from actively participating in evaluating—and even in reading—each other's work. Perhaps there is insufficient trust among the new faculty in a new university for internal evaluation to play an important role, but building this social capital should arguably be an important part of the strategy of the organization as it matures. The points policy undermines the development of such social capital.¹¹ Moreover, the individually rational solution ignores the potential complementarities of the department with the factors of location, students, and university mission already discussed.

A possible encapsulation of an intellectual focus for economics at CEU could be “the role of institutional factors in economic development, growth, and transition.” This rubric is broad enough to cover both macro and micro, and both theory and empirical work. It avoids mentioning a particular region, and thus the “regional specialist” label; and it is open to inclusion of data and analysis from any part of the world. At the same time, it expresses the possibility of reverse learning in the capacity-building process: the hope would be that the location of capacity-building centers

benefits not only the particular students who pass through it, and not only the country and region in which the center is located (even if these externalities are far from accomplished), but also the broader profession, as a result of the important lessons that may be drawn from the regional economies. In this way, capacity-building may be treated less as a missionary activity (Campbell 2000) than as a mutual benefit.

Moreover, this choice of focus would be associated with some of the fastest, if not the fastest, growth areas in economics over the last 10–15 years: new institutional economics, comparative institutional analysis, and the quasiexperimental approach to identification problems in empirical research. Just about any modern economist, with the exception of some of the most rigid “plain vanilla” variety, is likely to sympathize with such an emphasis. Nor would it necessarily change or devalue the research and teaching that the department currently carries out. But it might provide some motivation for senior faculty members to remain involved with the department and it would help students to understand that economics is relevant for their countries, not only for an (idealized) market economy such as that of the United States. And it could serve as a useful guide to future strategy about faculty development, joint research products, and special course offerings.

Conclusion

The CEU Economics Department was founded in 1991, but during its first nine years there was only an MA program; the PhD was started up only in academic year 2000–1. The department is therefore still young, but the PhD is barely a toddler. In taking its first baby steps, it has raised many interesting questions about the nature of capacity building and about the new organizations designed to effect the transfer of Western economic expertise. No doubt, the other capacity-building centers are contemplating some of those same questions. Yet the participants of the different organizations meet exceedingly rarely, and in general there is little knowledge of the others’ activities. Much more cooperation among these special centers would be useful, not only in continuing to provide good economics training to the students who pass through, but in spreading the benefits to the larger societies of the region and in becoming respected contributors to the larger discipline of economics.

Notes

1. See for instance Alexeev, Gaddy, and Leitzel (1992) or the symposium articles published in *Comparative Economic Studies* (2000).

2. See, for example, the essays by Dierdre McCloskey (2000), who criticizes the tendency of economics faculty members to mimic the axiomatic “theorem and proof” approach of their colleagues in mathematics rather than the pragmatic “let’s understand the world” approach characteristic of the physics department.

3. The applied fields include several major fields of microeconomics (industrial organization, labor economics, and public finance), as well as smaller subfields (environmental, financial, regional, and urban economics; and economics of development, education, health, institutions,

law, and so on). Most U. S. economists, in fact, work in these areas, and all the applied micro sub-fields share a common theoretical structure and approach to empirical research.

4. The same is true of applied econometrics: although econometric theory, which is also highly mathematical, may be learned relatively easily from textbooks—and it has been thus been relatively easily mastered in the region—the art of applying these methods to answer economic questions has been far slower to develop.

5. As one example, I might relate the personal experience of teaching the first course (or the few weeks of the first course) in microeconomic theory in the CEU MA program, which I did in 1993 and 1994, and again from 2000 to 2003. The students in those first two years came with essentially no background in microeconomics, but after the five-year gap in the middle of this teaching experience, I expected that their preparation would have improved (and indeed, while most of our students in the early years had backgrounds in engineering, math, and physics, an increasingly large fraction of the incoming students had majored in economics as undergraduates). To assess their backgrounds, on the first day of class in 2000 I asked them to complete a short form listing previous courses in economics, and many indicated several courses, including microeconomics. My experience in teaching them, however, was that very few had even very basic knowledge of microeconomic concepts. The next year, therefore, I added yes-no questions on the first day of the form, “Do you know the meaning of X?” where X represented some basic concepts (utility, elasticity, factor demand, and so on). Although I was initially pleased to see that quite a few students claimed to know these concepts, I was later dismayed to realize that their knowledge was much weaker than claimed. Finally, in the more recent years, I have simply given a first-day quiz, which although exceedingly unpopular with the students has revealed with greater reliability both the generally weak condition of economics training in the region and the discrepancy between course titles and what students actually learned in their previous universities.

6. Only if we think that economics is merely a branch of applied mathematics rather than a social science does it make sense to equate preparation with mathematical skills.

7. CEU is evaluating a change in this strategy to include BA programs in the future. Ideally, of course, the graduates of these programs wishing to pursue an MA or PhD should be encouraged to do so at another university, but in this case the supply of students to the graduate programs would not be affected.

8. The many new private universities that have sprung up around the region are probably no better, and may even be significantly worse in this respect, as they are oriented toward business studies and they do not even benefit from CEP instructors.

9. Almost all first-year PhD students are also required to take an additional preparatory course in econometrics, “Intermediate Econometrics,” which nevertheless does not count toward their degree requirements; if included, however, it would raise the number of credits in econometrics to 12.

10. The rate of non-North American data sources in the *Journal of Labor Economics* was somewhat higher (14 percent), but the mixed rate was lower (2 percent).

11. Social capital is undermined as well when major hiring and promotion decisions are handled by university administration without significant involvement of department faculty members.

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- Stuart, Robert C. 2000. "Introduction: Teaching Modern Economics in Transition Economies." *Comparative Economic Studies* XLII (2): 1–3.
- Svejnar, Jan. 2000. "Economics PhD Education in Central and Eastern Europe." *Comparative Economic Studies* XLII (2): 37–50.

Annex 1

List of PhD Student Presentation Titles, June 2005

Derivative Pricing With Symmetry Analysis Rational Choices or Behavioral Outcomes? A Study of the Determinants of Voting Behavior in Post-Communist Romania 1995/2001

The Costs of Investment

Choice of Privatization in Romania. Evidence from a Comprehensive Panel

Firm Behaviour and Public Infrastructure: The Case of Hungary

Compatibility and Coordination Issues in Contracting with Network Effects: Screening and Divide-and-Conquer Techniques

The Role of Endogenous Exchange Rate Pass Through in New Keynesian Phillips Curves

Revenue Generating and Behavioural Effects of the Simplified Entrepreneurial Tax in Hungary

Credit and the Business Cycle

Monetary Rules for Partially Dollarized Developing Economies

Time Consistency in Fiscal Policy

Early Retirement and Consumption Prospects - An Empirical Analysis

The Effect of Trade and Competition on Firms' Pricing: The Case of Hungary

Latent Decisions in Discrete Choice Models

Exchange Rate Behaviour Before Final Fixing

Technology Spillovers from Foreign Direct Investment

Source: CEU.

Annex 2

List of CEU Economics Faculty Publications 2002–05

(on the basis of posted CVs for faculty members teaching at least 3 credits)

Andrzej Baniak

- 2005 (with J. Cukrowski and J. Herczynski). "On Determinants of Foreign Direct Investment in Transition Economies." In *Problems of Economic Transition* 48: 6–28.
- 2003 (in Polish, with L. Paizs). "Analysis of the Market Power in Electricity Industry of a Small Central European Country." Materials of the Tenth Conference on Energy Markets (Lublin 2003), 53–62.
- 2002 (with T. Robinson). "The Volatility of Prices in the English and Welsh Electricity Pool." *Applied Economics* 34 (12): 1487–95.
- 2002 (in Polish). "Comparative Statics in Ordered Spaces." *Dydaktyka Matematyki*, 3, 27–37.

Peter Benczur

2004. "Nominális sokkok átmeneti reálhatása egy kétszektoros növekedési modellben." *Közgazdasági Szemle*, LI, 101–126, February.
2005. "Information revelation, liquidity shocks, the volatility and the level of bond spreads." *Economica* 72 (285): 95–119.
2002. "A nominálárfolyam viselkedése monetáris rezsimváltás után." *Közgazdasági Szemle*, XLIX, 480–497, October.

Leif Danziger

- 2005 (with S. Neuman). "Delays in Renewal of Labor Contracts: Theory and Evidence." *Journal of Labor Economics* 23: 341–371, April.
2003. "Inflation, Costly Price and Quantity Adjustments, and Time Spent in the Keynesian Regime." *Economics Letters* 80 (August): 161–8.
2003. "The New Investment Theory and Aggregate Dynamics." *Review of Economic Dynamics* 6 (October): 907–40.
- 2002 (with C. T. Kreiner). "Fixed Production Capacity, Menu Cost and the Output–Inflation Relationship." *Economica* 69 (August): 433–44.

John S. Earle

- Forthcoming (with U. Pagano and M. Lesi). "Information Technology, Organizational Form, and Transition to Market." *Journal of Economic Behavior and Organization*.
- Forthcoming (with D. Brown). "Job Reallocation and Productivity Growth in the Ukrainian Transition." *Comparative Economic Studies*.
- 2005 (with D. Brown and D. Lup). "What Makes Small Firms Grow? Finance, Human Capital, Technical Assistance and the Business Environment in Romania." *Economic Development and Cultural Change* 54(1): 33–70.
- 2005 (with D. Andren and D. Sapatoru). "The Wage Effects of Schooling under Socialism and in Transition: Evidence from Romania 1950–2000." *Journal of Comparative Economics* 33 (2): 300–23.
- 2005 (with C. Kucsera and Á. Telegdy). "Ownership Concentration and Corporate Performance on the Budapest Stock Exchange: Do Too Many Cooks Spoil the Goulash?" *Corporate Governance: An International Review*, 13(2): 254–64.

- 2003 (with D. Brown). "The Reallocation of Workers and Jobs in Russian Industry: New Evidence on Measures and Determinants." *Economics of Transition*, 11(2): 221–52.
- 2003 (with S. Estrin). "Privatization, Competition, and Budget Constraints: Disciplining Enterprises in Russia." *Economics of Planning*, 36(1): 1–22.
- 2003 (with S. Gehlbach). "A Spoonful of Sugar: Privatization and Popular Support for Reform in the Czech Republic." *Economics and Politics*, 15(1): 1–32.
- 2002 (with A. Telegdy). "Privatization Methods and Productivity Effects in Romanian Industrial Enterprise." *Journal of Comparative Economics*, 30(4): 657–82.
- 2002 (with K. Sabirianova). "How Late to Pay? Understanding Wage Arrears in Russia." *Journal of Labor Economics*, 20(3): 661–707.
- 2002 (with A. Telegdy, C. Kucsera, and V. Kaznovsky). "Corporate Control: A Study of Firms on the Bucharest Stock Exchange." *East European Economics*, 30(1): 96–133.
- 2002 (with H. Lehmann). "Microeconomic Studies of Russian Labor Markets: An Introduction to the Symposium." *Journal of Comparative Economics*, 30(1): 91–5.
- 2002 (with D. Brown). "Gross Job Flows in Russian Industry Before and After Reforms: Has Destruction Become More Creative?" *Journal of Comparative Economics* 30(1): 96–133.

Max Gillman

- Forthcoming (with S. Benk and M. Kejak). "A Comparison of Exchange Economies within a Monetary Business Cycle." *The Manchester School*.
- Forthcoming (with S. Benk and M. Kejak). "Credit Shocks in the Financial Deregulatory Era: Not the Usual Suspects." *Review of Economic Dynamics*.
- 2005 (with M. Kejak). "Inflation and Balanced-Path Growth with Alternative Payment Mechanisms." *Economic Journal* 115(500): 247–70.
- 2005 (with M. Kejak). "Contrasting Models of the Effect of Inflation on Growth." *Journal of Economic Surveys* 19(1): 13–136.
- 2004 (with M. Kejak). "The Demand for Bank Reserves and Other Monetary Aggregates." *Economic Inquiry* 518–33.
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- 2004 (with M. Harris and L. Matyas). "Inflation and Growth: Explaining the Negative Effect." *Empirical Economics* 29(1): 149–67.
- 2004 (with D. Cziraky). "Stable Money Demand and Nominal Money Causality of Output Growth: A Multivariate Cointegration Analysis of Croatia." In Vol. 1 of *From Transition to Development: Globalisation and Political Economy of Development in Transition Economies*, eds. D. Stojanov and B. Culahovic, 95–129. Sarajevo: Univ. of Sarajevo.
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- 2002 (with M. Kejak). "Modeling the Effect of Inflation: Growth, Levels, and Tobin." In Proceedings of the 2002 North American Summer Meetings of the Econometric Society: Money.

Herbert Gintis

- 2005 (with S. Bowles, R. Boyd, and E. Fehr). *Moral Sentiments and Material Interests: On the Foundations of Cooperation in Economic Life*. Cambridge, MA: MIT Press
- 2005 (with others). "'Economic man' in Cross-Cultural Perspective: Behavioral Experiments in 15 Small-Scale Societies." *Behavioral and Brain Sciences* 28 (6): 795–815
2004. "Review of *Why Men Won't Ask for Directions: The Seductions of Sociobiology*," by Richard C. Francis. *Evolutionary Psychology* 2: 47–49

2004. "On the Unity of the Behavioral Sciences." In *Logic, Epistemology, and the Unity of Science*, eds. Dov Gabbay, Shahid Rahman, John Symons, and Jean Paul Van Bendegeme. New York: Kluwer.
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- 2004 (with S. Bowles). "The Evolution of Strong Reciprocity: Cooperation in Heterogeneous Populations." *Theoretical Population Biology* 61: 17–28.
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- 2004 (with S. Bowles). "Prosocial Emotions." In *The Economy As an Evolving Complex System, III: Current Perspectives and Future Directions*, L. Blume and S. Durlauf, eds. Oxford: Oxford University Press.
- 2004 (with J. Henrich, R. Boyd, S. Bowles, C. Camerer, and E. Fehr). *Foundations of Human Sociality: Ethnography and Experiments in Fifteen Small-Scale Societies*. Oxford: Oxford University Press.
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Julius Horvath

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Gabor Kezdi

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Laszlo Matyas

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- 2004 (with M. Harris). "A Comparative Analysis of Different IV and GMM Estimators of Dynamic Panel Data Models." *International Statistical Review* 72 (3): 397–408.
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Ugo Pagano

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2003. "Posiciones legales y complementariedades Institucionales." *Revista de Economia Institucional* 5 (9): 17–54.
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- 2003 (with S. Trento). "Continuity and Change in Italian Corporate Governance: The Institutional Stability of One Variety of Capitalism." In *The Italian Economy at the Dawn of the XXI Century*, eds. M. Di Matteo and P. Piacentini, 177–211. Ashgate: Aldershot.
- 2002 (with M. D'Antoni). "National Culture and Social Protection as Alternative Insurance Devices." Dept. of Economics Working Paper No. 296, University of Siena, Siena, Italy.

Jacek Rostowski

- 2005 (ed. with M. Dabrowski). *The Eastern Enlargement of the Eurozone*, Boston: Kluwer Academic Publishers.
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Andras Simonovits

2004. "A Note on the Aging Populations and the Size of the Welfare State." NKFP (Hungarian Research and Development Program), Budapest, Hungary.
2004. "Bevezetés az optimális nyugdíjösztönzés tervezésébe." NKFP, Budapest, Hungary.
2004. "Designing Optimal Bilinear Rules with Flexible Retirement and Redistribution." NKFP, Budapest, Hungary.

Almos Telegdy

- 2005 (with J. S. Earle and C. Kucsera). "Ownership Concentration and Corporate Performance on the Budapest Stock Exchange: Do Too Many Cooks Spoil the Goulash?" *Corporate Governance* 13 (2): 254–64.
- 2003 (with G. Hunya). "Hungarian-Romanian Cross-Border Economic Cooperation." *Région et Développement* 18: 13–31.
- 2002 (with J. S. Earle). "Privatization Methods and Productivity Effects in Romanian Industry." *Journal of Comparative Economics* 30 (4): 657–82.
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Annex 3

Budapest Economics Seminar Series (BESS)

Speakers during Academic Year 2004–5

September 15, Gary S. Becker, University of Chicago and Hoover Institution: “The Quantity and Quality of Life and the Evolution of World Inequality”

September 27, Michael Artis, European University Institute: “The Transmission Mechanism in a changing world?”

September 29, Christopher Waller, University of Notre Dame: “Money, Credit and Banking”

October 15, Andras Simonovits, CEU: “Designing Neutral versus Redistributive Mechanisms”

November 5, Gianmarco Ottaviano, University of Bologna: “Testing the Home Market Effect in A Multi-Country World”

November 12, Zoltán Jakab, CEU: “Endogenous Exchange Rate Pass-Through with Imported Intermediates”

November 26, Steven Plaut, University of Haifa: “The Demand for “Gatedness””

December 3, Miklos Koren, Harvard University: “Technological Diversification”

December 13, Elias Khalil, Konrad Lorenz Institute for Evolution and Cognition Research, Austria: “The Political Nature of the Firm”

December 20, Eva Nagypal, Northwestern University: “Amplification of Productivity Shocks: Why Vacancies Don’t Like to Hire the Unemployed?”

January 21, Bartosz Mackowiak, Humboldt University: “Optimal Sticky Prices Under Rational Inattention”

January 24, Peter Grajzl, University of Maryland: “Allocating Law-Making Powers: Self-Regulation versus government Regulation”

January 25, Vladimir Hlasny, Michigan State University: “The Impact of State Restructuring and Deregulation on Gas Rates”

January 26, Shlomo Weber, CORE, Universite Catholique de Louvain: “Language Disenfranchisement in Multilingual Societies: The Case of the European Union”

January 27, Andrew Sfekas, Cornell University: “Physician Learning and Patient Outcomes: An Empirical Study of Cardiac Surgery in Maryland and New Jersey”

January 28, Andri Chassambouli, University of Maryland: “Job Competition and Search Externalities over the Cycle: Implications for Worker Reallocation and Unemployment Rates Across Skill Groups”

February 11, Orsolya Lelkes, European Centre for Social Welfare Policy and Research, Vienna: “Knowing What Is Good for You: Empirical Analysis of Personal Preferences and the “Objective Good”

February 18, Roman Sustek, Carnegie Mellon University: “Plant Level Nonconvexities and the Transmission of Monetary Policy”

February 25, Roderick McCrorie, University of Essex: “Identification and Estimation of Exchange Rate Models with Unobservable Fundamentals”

March 3, Juergen Maurer, European University Institute: “Do the Joneses Really Matter? Peer Group versus Correlated Effects in Intertemporal Consumption Choice”

March 4, Simon Loertscher, University of Bern: “Market Making Oligopoly”

March 7, Valeriu Omer, University of Minnesota: “Wage Growth, Search and Experience: Theory and Evidence”

March 8, Tokhir Mirzoev, Ohio State University: "Limited Commitment, Inaction and Optimal Monetary Policy"

March 10, Alexis Anagnostopoulos, London Business School: "Consumption and Debt Dynamics with (Rarely Binding) Borrowing Constraints"

March 11, Alena Bicakova, Johns Hopkins University: "Unemployment Versus Inactivity: An Analysis of the Earnings and Labor Force Status of Prime Age Men in France, the United Kingdom and the U. S. at the Turn of the Century"

March 18, Jean Imbs, London Business School: "Globalization, Competition and the Decline in Inflation"

March 25, Volodymyr Bilotkach University of Arizona and EERC, Kiev: "A Tax Evasion-Bribery Game: Experimental Evidence from Ukraine"

April 29, Valerie Lechene, University of Oxford: "On the Identification of the Effect of Smoking on Mortality"

May 6, Lorenz Goette, University of Zurich: "Do Workers Work More When Wages Are High?"

May 13, Franck Portier, Toulouse [[should this be Toulouse University?]]: "Stock Prices, News and Economic Fluctuations"

May 20, , CEU: "Nonrecoverable Wages, Learning, and Unemployment Duration of Displaced Workers"

May 27, Maros Servatka, University of Arizona: "Carrot or Stick? An Experimental Study of Reputation Effects in Dictator Games"

June 3, Miklos Koren, Harvard University: "Does Trade Improve Productivity? Evidence from Hungarian Firm- and Product-Level Data"

CERGE-EI

The American-Style PhD Program in Economics for Transition Economies

Jan Svejnar

AS THE FORMER SOVIET BLOC ECONOMIES STARTED SHOWING STRAINS IN THE 1980s, I realized that there would be a great need in these countries for Western-trained economists who could perform analytical research and formulate economic policy in the postcommunist era.¹ During a 1988 international conference in Vienna, I had an opportunity to discuss these issues with Josef Zieleniec, who was then a senior researcher at the Institute of Economics of the Czechoslovak Academy of Sciences. Josef Zieleniec was familiar with Western economic theory and shared my conviction that there would be a great need for American-style PhD economists if and when the centrally planned system collapsed.

When the collapse occurred at the end of 1989, Josef Zieleniec and I set out to establish an American-style PhD program that would educate the next generation of economic leaders for the former Soviet bloc countries, Yugoslavia, and Albania. To establish an American-style program was a natural goal since at the PhD level American education had long dominated traditional programs in Europe and elsewhere. Moreover, the one Western European economics institution that we both admired for its excellence—the Center for Operations Research and Econometrics (CORE) in Belgium—operated as an American-style economics department. CORE was established and headed by an American-educated Belgian economist, Jacques Dreze, who made it succeed largely because of its openness, use of English as a working language and adherence to the standards of top U.S. institutions in terms of publications of its faculty. I spent a formative year early in my academic career at CORE and believed that a similar program could be established for Central and East Europe.

Josef Zieleniec and I exerted considerable effort on both continents to launch a quality PhD program. We considered the options of launching the program in Budapest, Prague, or Warsaw and finally settled on Prague. We were joined by Radim Palous, the first postcommunist rector of Charles University, in establishing the program at Charles University—the oldest and arguably the most renowned university in Central Europe. From the very start, we were joined in this effort by Richard

Quandt, a former professor of mine at Princeton University, who in the 1990s served as a senior adviser to the Andrew W. Mellon Foundation in New York. Finally, Kevin Sontheimer, the chairman of the Economics Department at the University of Pittsburgh, where I was then a professor, joined the team.

With a provisional home at Charles University, financial support from the Mellon Foundation, and institutional support from the Economics Department at the University of Pittsburgh, the team started in 1990 the arduous journey toward launching the program. The result of the effort was the launching of the Center for Economic Research and Graduate Education at Charles University in 1991, and of the Economics Institute of the Czechoslovak Academy of Sciences, its sister institution, in 1992.

The Center for Economic Research and Graduate Education

The Center for Economic Research and Graduate Education (CERGE) was founded as an American-style PhD program and research center of the Faculty of Social Sciences at Charles University in Prague on March 1, 1991. CERGE was established with the technical assistance of the Department of Economics at the University of Pittsburgh and financial assistance from the U.S. Agency for International Development (USAID), the Andrew W. Mellon Foundation, the Pew Charitable Trusts, the University of Pittsburgh, and other institutions. In 1994, CERGE officially became an autonomous center of Charles University, reporting to the rector and operating through the Faculty of Social Sciences of Charles University.

Missions

CERGE was founded with four interrelated missions. The first mission was to train future public officials, university and college faculty, and researchers from the former Soviet bloc countries in the theory, methods, and applications of modern economic analysis. The second mission was to stimulate and support academic and policy-oriented economic research. The third mission was to disseminate research and policy information to a wider group of professionals (government officials, enterprise managers, and economists from other national and international institutions) through seminars, symposia, conferences, working papers, and publications. The fourth mission was to transfer the modern Western standard of scientific work into the Czech and Slovak environment and thus provide an example for the transformation of other academic institutions in the Czech and Slovak Republics and throughout the former Soviet bloc.

Organizational Structure

Since its founding, the academic governance and supervision of CERGE has been carried out by an international Executive and Supervisory Committee (ESC), oper-

ating under special guidelines agreed upon by Charles University, the University of Pittsburgh, the Andrew W. Mellon Foundation, and the Pew Charitable Trusts. Josef Zieleniec was a member of the ESC as well as the first director of CERGE. I assumed the position of chairman of the ESC. The committee underwent several personnel changes, bringing in top European economists as well as representatives of Charles University and the Academy of Sciences of the Czech Republic. As may be seen from table 1, as of April 2005, the committee was composed of external members (Professor Philippe Aghion, Professor Richard Blundell, Professor Henry Farber, Professor Randall Filer, Professor Roger Gordon, Miriam Klipper, Esq., Professor Jan Kmenta, Dr. Petr Nejedlý, Professor Richard Quandt, Professor Gerard Roland, Professor Avner Shaked, Professor Stanislav Stech, Professor Josef Stiglitz, Professor Jan Svejnar, Professor Michelle White, and Professor Josef Zieleniec) and internal faculty members who have received tenure (Jan Hanousek, Byeongju Jeong, Stepan Jurajda, Lubomir Lizal, and Kresimir Zigic).

TABLE 1

Executive and Supervisory Committee of CERGE-EI

April 2005

<i>Name</i>	<i>Affiliation</i>
Prof. Philippe Aghion	Harvard University
Prof. Orley Ashenfelter	Princeton University
Prof. Richard Blundell	University College London
Prof. Henry S. Farber	Princeton University
Prof. Randall K. Filer	City University of New York
Prof. Roger Gordon	University of California, San Diego
Prof. Jan Hanousek	CERGE-EI
Prof. Byeongju Jeong	CERGE-EI
Prof. Stepan Jurajda	CERGE-EI
Prof. Lubomir Lizal	CERGE-EI
Miriam Klipper, Esq.	District Attorney's Office, NY
Prof. Jan Kmenta	Emeritus University of Michigan
Prof. Petr Nejedlý	Academy of Sciences of the Czech Republic on behalf of the Chair of the ASCR
Prof. Richard E. Quandt	Emeritus Princeton University
Prof. Gerard Roland	University of California, Berkeley
Prof. Avner Shaked	University of Bonn
Prof. Stanislav Stech	Charles University on behalf of the Rector, Charles University
Prof. Joseph Stiglitz	Columbia University
Prof. Jan Svejnar	University of Michigan
Prof. Michelle White	University of California, San Diego
Prof. Josef Zieleniec,	Member of the European Parliament
Prof. Kresimir Zigic	CERGE-EI

I have served as the chairman of the Executive and Supervisory Committee throughout the 1991–2005 period, during which the committee oversaw and evaluated CERGE's and later CERGE-EI's activities on an ongoing basis, set the direction in teaching and research, assisted CERGE—and later CERGE-EI—with fund-raising, and selected all faculty and researchers.

In 1992, Josef Zieleniec became the minister of foreign affairs and Docent Michael Mejstrik served as acting director of CERGE in 1992 and 1993. He was succeeded by Professor Karel Kinsky, who served as CERGE director in 1993 and 1994. During the 1994–8 period, Docent Frantisek Turnovec served as the director of CERGE, followed by Docent Jan Hanousek in 1998–2003 and Lubomir Lizal from 2003 to the present. Following the tradition established at the launching of CERGE, directors of CERGE are also *ex officio* members of the ESC.

Economics Institute (EI)

From the start of its operations, CERGE was hindered in its development by the scarcity of local faculty who could be rigorously retrained and assume teaching responsibilities, severe space constraints and uncertainties in the building allocated to CERGE, and the budgetary restrictions facing Charles University. From this environment emerged the idea of integrating CERGE's activities with those of the newly formed Economics Institute (EI) of the Czechoslovak Academy of Sciences in order to create a powerful, self-sustaining entity—CERGE-EI.

In the spring of 1992, the Academy reviewed its own economic research, carried out a background study of CERGE, and decided to reorganize its economics program along the lines of CERGE. The Academy abolished its three institutes dealing with economics and created a new Economics Institute (EI) that shared CERGE's research and public service missions and whose activities would be gradually integrated with those of CERGE to form CERGE-EI. In order to carry out this reorientation, the Academy appointed me as the first director of EI and appointed the remaining members of CERGE's ESC as the international members of the Scientific Council of EI. The Academy also provided a budget for EI and permitted CERGE-EI to be located in the Academy building that housed the old Institute of Economics. The ESC consulted with the representatives of the principal sponsor institutions and approved the *de facto* integration of CERGE with EI. From this point on the ESC has set and maintained the same academic standard for both CERGE and EI.

The integration of CERGE and EI activities has been intentionally quite all-encompassing, reflecting the fact that either institution alone would be too small to have a chance of becoming a world-class institution of research and PhD education. The two institutions have therefore been designed to have the same goals and share the same building, library, and computer facilities. Moreover, virtually all faculty/researchers and staff members have joint appointments and are subject to the same criteria for hiring, evaluation, and extension of contracts.² These employees also receive substantial salary supplements so as to attract quality individuals and reduce turnover.

Since the universities and academies of sciences were artificially kept apart in the Soviet-type system, the CERGE-EI initiative has also constituted the pioneering project of integrating the corresponding units of a university and an academy of sciences. Insofar as university-academy relations generally remain delicate throughout Central and Eastern Europe, CERGE-EI represents a significant test case of how these barriers could be eliminated in the Czech Republic and in the postcommunist countries in general.

Achievements of CERGE-EI

By adhering quite strictly to the U.S.-style PhD model with its major emphasis on courses, examinations, and research, CERGE-EI has achieved considerable success in fulfilling its principal missions. Each year, 50 to 70 carefully selected students from all over the former Soviet bloc enroll in a summer preparatory semester. Most of the incoming students have a strong mathematics or engineering background, but in general they know little economics. During the summer term, they are therefore taught primarily intermediate micro- and macroeconomics. At the end of the summer term, the 25 to 40 best students are admitted into the CERGE PhD program. During the first year of the program, they take U.S.-style PhD courses in micro- and macroeconomic theory, statistics, and econometrics. At the end of the first year, the students have to pass general (comprehensive) examinations in these fields. In the second year of studies, the students select three areas of specialization and take two-semester long (U.S.-style) courses in each of them. When they pass general (comprehensive) examinations in two of these fields, they receive an MA degree and are admitted to the PhD thesis writing stage.

As the students launch their PhD thesis research, most of them become junior researchers in EI. They are hence integrated into the CERGE-EI structure not only by virtue of having been taught by faculty who have joint appointments in the two institutions, but also because they produce their first substantial piece of academic research under the heading of both CERGE and EI.

In view of the strict adherence to the U.S.-style program, CERGE-EI has succeeded in enrolling top students from throughout Central and Eastern Europe and the Commonwealth of Independent States (CIS), bringing in renowned visiting faculty from around the world, and retraining some of the existing economists who have started co-teaching and gradually fully teaching the demanding PhD courses. As may be seen from table 2, between 1991 and 2004 CERGE admitted 399 graduate students into its PhD program. Of these, 96 have been Czech nationals, 66 have been from the Slovak Republic, 50 from Russia, 40 from Romania, 38 from Ukraine, and the rest are from Albania, the former Yugoslav Republic of Macedonia, and the rest of the former Soviet bloc. Women constitute more than 30 percent of the CERGE student body.

CERGE-EI produces 15–30 MA graduates and 5–15 PhDs each year. The first doctoral thesis was defended at CERGE in 1995; 58 had been defended by 2005. The demand for the graduating students has been enormous. As may be seen from table 3, the students have taken on exciting jobs in the government, the private sector, and academe.

(Text continues on page 321.)

TABLE 2
CERGE-EI Student Enrollment by Country

<i>Country</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>Total 1991– 2004</i>
Albania		3	2	1		1	1	1		1					10
Argentina											1				1
Armenia				4	4		3	1		1	1		1	4	19
Azerbaijan						1									1
Belarus					2					3	1	4	1	1	12
Bulgaria	1	1	1		1	1			2	5	1	3		1	17
China											1				1
Croatia	1												1		2
Czech Republic	5	9	11	11	3	6	5	6	5	9	6	7	6	7	96
Estonia										1	1		1	1	4
Georgia					1				1	1			1	1	5
Hungary			1												1
India	1														1
Iraq														2	2
Italy				1							1				2
Japan														1	1
Kazakhstan		1										4	3	1	9

Kyrgyz Republic											1	1	1	1	4
Lithuania			1			1									2
Macedonia, FYR												1			1
Moldova										1	1	1			3
Netherland													1		1
Poland	1	1										1	1	1	5
Romania	1	1	6	6	4	6	5	4	3	1	2	1			40
Russian Federation	5	1		3	4	2	2	2	8	4	10	4	3	2	50
Slovak Republic	3	4	1	4	3		3	5	1	4	9	10	11	8	66
Tajikistan													1	1	2
Turkey														1	1
Ukraine		2	1	1	1	2	1	4	3	7	3	5	3	5	38
United States										1					1
Uzbekistan								1							1
Total	18	23	23	32	23	20	20	24	23	39	39	42	35	38	399

Source: CERGE-EI.

TABLE 3

Selected CERGE-EI Student Placements

April 2005

<i>Name</i>	<i>Affiliation</i>
Jan Babetskii (Russia)	Economic Analyst, International Economic Division, Czech National Bank
Ashot Baghdasarian (Armenia) ⁴⁶	Economist, COWI, a.s.
Pavlo Blavatsky (Ukraine) ⁵⁶	Assistant Professor, Institute for Empirical Research in Economics, University of Zurich
Elena Bogacheva (Russia) ¹⁵	Strategic Risk Management Analyst, Altria Group, Inc.
Michal Breský (Czech Republic) ²⁵	Junior Researcher, CERGE-EI
Nina Budina (Bulgaria)	Economist, Europe & Central Asia Region, World Bank
Štěpán Cábělka (Czech Republic) ³⁶	Analyst, Strategy and Analysis Section, Česká Pojistovna
Martin Cihák (Czech Republic) ³⁹	Research Economist, EU2 Department, IMF
Martin Cincibuch (Czech Republic) ⁴⁹	Head, Research Dept., Czech National Bank
Pavel Cížek (Czech Republic) ⁴⁰	Assistant Professor, Tilburg University
Constantin Colonescu (Romania) ¹⁶	Assistant Professor of Economics, American University in Bulgaria; formerly, Research Director, EERC, Moscow
Jacek Cukrowski (Poland) ¹	Millennium Development Goals Advisor, Central and Eastern Europe & the CIS, UN Development Program, Bratislava
Aurelijus Dabusinskas (Lithuania) ⁵¹	Senior Economist, Research Department, National Bank of Estonia
Petr Duczynski (Czech Republic) ¹⁴	Assistant Professor of Economics, University of Hradec Kralove, Faculty of Informatics & Management
Irena Dushi (Albania) ⁸	Research Analyst, U.S. Social Security Administration
Zdenek Dvorný (Czech Republic) ³⁵	Czech National Bank, Prague
Michaela Erbenová (Czech Republic) ⁵	Vice-Governor, Chief Executive Director, Czech National Bank; formerly, Economic Advisor to the Prime Minister of the Czech Republic
Kamil Galuščák (Czech Republic) ³⁸	Czech National Bank, Real Economy Division, Prague
Dana Hájková (Slovakia)	Young Professionals Program, OECD
Martin Hlušek (Czech Republic) ⁶	Emerging Market Currency Strategist, Standard Bank, London
Jan Hošek (Czech Republic)	Research Department, Czech National Bank
Delia Ionascu (Romania) ⁵⁴	Assistant Professor, Department of Economics, Copenhagen Business School
Karel Janda (Czech Republic) ³	Assistant Professor, Department of Microeconomics & Mathematical Methods, Charles U.; and Assistant Professor, Department of Banking and Insurance, Faculty of Finance, University of Economics, Prague

Martin Jarolím (Czech Republic) ²⁹	Emerging Market Currency Strategist, Standard Bank, London
Tomáš Jelínek (Czech Republic)	Head, Prague Jewish Community; formerly, Economic Advisor, President of the Czech Republic
Narcisa Kadlcáková-Virlan (Romania) ⁴⁷	Unknown
Tomáš Kadlec (Czech Republic) ⁴⁴	Consultant, McKinsey & Co., Prague
Ella Kállai (Romania) ²³	Director, Economic Research, Marketing and Public Relations, Alpha Bank, Romania
Martin Kálovec (Slovakia) ⁴¹	Boston Consulting Group, Prague
Ivan Kompan (Ukraine)	Director, Deloitte Touche Tohmatsu, Ukraine
Nevila Konica (Albania) ¹³	Economic Forecaster, Global Insight, London
Hana Krejčí (Czech Republic) ⁴³	Citibank, a.s., Prague
Libor Krkoška (Czech Republic) ⁷	Principal Economist, Office of the Chief Economist, EBRD, London
Michael Kunin (Belarus) ⁵³	Researcher, Max Planck Institute, Germany (pending Czech visa)
Radek Laštovicka (Czech Republic)	Fund Manager, EU/PHARE Risk Capital Fund
Kristyna Lenkova (Bulgaria) ²²	Senior Segment Manager, Medium and Large Enterprises, Komerční banka, Prague
René Levinský (Czech Republic) ²¹	Research Associate, Institut für Verkehrswissenschaft und Regionalpolitik, Albert-Ludwigs-Universität, Freiberg
Lubomír Lízal (Czech Republic) ¹⁰	Director and Assistant Professor, CERGE-EI
Martina Lubyová (Slovakia) ³⁷	Senior Employment Specialist, EE & CA, International Labor Organization, Moscow
Elena Mielcová (Slovakia) ⁴²	Assistant Professor, Silesian University
Elena Mikulcová (Slovakia) ³¹	Credit Administrator, Citibank, a.s., Prague
Daniel Münich (Czech Republic) ⁹	Assistant Professor and Director of Development & PR, CERGE-EI
Daniel Narwa (Czech Republic) ¹⁸	Project Manager, Dept. of Strategy and Organization, Prague
Libor Nemecek (Czech Republic) ¹¹	Assistant Vice President, Citibank, Prague
Narine Nersesian (Armenia)	Tax Policy Advisor, Governments of Armenia and Egypt, BearingPoint International
Martina Pechová (Czech Republic)	Consumer Banking, Citibank, a.s., Prague
Inna Piven-Cábelková (Ukraine) ²⁸	Assistant Professor, Faculty of Humanities; Head, Department of Social Sciences, Charles University
Jan Planovsky (Slovakia) ²⁸	Quality Control Manager, Kimberly Clark, Slovakia
Jiri Podpiera (Czech Republic) ⁵⁷	Research Department, Czech National Bank
Richard Podpiera (Czech Republic) ²⁷	Economist, Monetary & Financial Systems, IMF, Washington, DC

(Table continues on the following page.)

TABLE 3

Selected CERGE-EI Student Placements (*continued*)

April 2005

<i>Name</i>	<i>Affiliation</i>
Jana Radlová (Slovakia)	Social Policy Institute, Social Affairs and Family, Slovak Ministry of Labor
Ondrej Schneider (Czech Republic) ¹²	Assistant Professor, Institute of Economic Studies, Charles University; formerly, Chief Economist, Ministry of Finance, Czech Republic
Dmitri Shemitilo (Russia) ⁴	Economist, Emerging Markets Strategy, Commerzbank Securities, London
Peter Silársky (Slovakia) ³⁴	Economic Consultant, Young Professionals Program, World Bank, Washington, DC
Vit Šorm (Czech Republic) ³²	Chief Economist, Czech Post Office
Karel Soukeník (Czech Republic) ²⁶	Consultant, McKinsey & Co., Prague
Emil Stavrev (Bulgaria) ¹⁹	Economist, EU2, IMF, Washington, DC
Ivana Studená-Moravcikova (Slovakia) ⁴⁸	Researcher, Slovak Academy of Sciences
Oleksandr Stupnytskyy (Ukraine)	Research Analyst, Czech Ministry of Labor
Anita Taçi (Albania) ²⁴	Principal Economist, Office of the Chief Economist, EBRD, London
Andrey Timofeev (Czech Republic) ⁵⁸	Research Associate, International Studies Program, Andrew Young School of Policy Studies, Georgia State University, Atlanta, GA
Margit Tóth (Hungary) ³³	Senior Analyst, Research Department, Hungarian National Bank
George Vachadze (Georgia) ¹⁷	National Economic Research Associates, New Jersey
Juraj Valachy (Slovakia) ⁵⁰	State Advisor, Financial Policy Institute of the Ministry of Finance of the Slovak Republic
David Vávra (Czech Republic) ⁴⁵	Director, Division of Macroeconomic Forecasts, Czech National Bank
Galya Vereshchagina (Ukraine) ⁵⁵	Assistant Professor, Department of Economics, University of Iowa
Ondrej Vychodil (Czech Republic)	Assistant Professor, Department of Institutional Economics, Charles University, Prague
Bruno Wertlen (Slovakia) ⁵³	unknown
Kamil Yagizee (Czech Republic) ²⁰	unknown
Constantin Zaman (Romania)	Researcher, CASE, Warsaw; Senior Social Expert, WB Mission to Romania; Director, International Economic Advisory Group, Moldova
Krešimir Žigic (Croatia) ²	Tenured Assistant Professor, CERGE-EI

*Source:**Note:* Superscript indicates the number of CERGE-EI PhDs.

Apart from recruiting some of the best CERGE-EI students as its own faculty and researchers, CERGE-EI has been actively recruiting new PhDs on the world market. Since 1997, CERGE-EI has in most years interviewed more than 20 PhD candidates at the job market held at the American Economic Association Meetings, and in most years it hired new PhDs as assistant professors. As may be seen from table 4, there are currently 16 full-time local and 5 part-time visiting faculty members. The latter faculty visit regularly from Western universities. CERGE-EI also has 5 English-language faculty members who ensure that the English proficiency of students and faculty remains at a high level.

In fulfilling its mission of disseminating economic knowledge and information to a broad group of professionals and policy makers, CERGE and CERGE-EI have organized hundreds of outreach courses and several hundred seminars for the academic, government, business, and nonprofit sectors of the economy. Since the mid 1990s, CERGE-EI has regularly run three academic seminars a week. These have been attended by CERGE-EI faculty and students as well as researchers and policy makers from other institutions. Thousands of individuals have participated in these events. Since most participants are educators or key individuals in their organizations, the second-round educational effects of these events have been considerable.

In terms of research, CERGE-EI has produced hundreds of discussion and working papers and hundreds of other studies that have been presented at conferences. A number of these papers have been published in prestigious economics journals and edited volumes around the world, thus testifying to the high quality of pure and applied research at CERGE-EI. Numerous studies have been used by officials in the Czech government, as well as in international organizations—such as the EBRD, the World Bank, the IMF, and the OECD—to form and evaluate policies. Of the several dozens papers presented each year by scholars from Central and Eastern Europe at the annual meeting of the European Economic Association, over one-half were by faculty and junior researchers of CERGE-EI.

A large number of CERGE-EI researchers have served as economic advisors to the president and prime minister, ministers of the economy and of trade and industry. Others have been advisors to policy-making officials at the national bank, ministry of finance, and ministry of agriculture.

The achievements of CERGE (and, since 1992, CERGE-EI) have been recognized by external evaluators. In 1992, the European Community's Secretariat of the ACE Program designated CERGE as its only "Recognized Centre of Excellence in PhD Studies in Economics" in Central and Eastern Europe. CERGE was again the only institution to win the title in the subsequent open competition in 1994. In 1992 CERGE entered the competition for hosting the Annual Meetings of the European Economics Association, and in 1993 the European Economics Association selected CERGE-EI as the host of its 1995 Annual Meeting. In 1993 and 1994 CERGE-EI was officially recognized as one of the few Centers of Excellence in Economics Education in Central and Eastern Europe by USAID. In 2005 CERGE-EI hosted a major macroeconomic conference and in September 2006 hosted the Annual Conference of the European Association of Labour Economists.

TABLE 4

CERGE-EI Faculty 2004–05*Permanent local faculty*

Economics Department

<i>Faculty member</i>	<i>Education</i>	<i>Citizenship</i>	<i>Courses</i>
Andrew Austin, Assistant Professor	PhD in Economics, University of Pennsylvania, 1991	United States	Public Economics
Radim Boháček, Assistant Professor	PhD in Economics, University of Chicago, 1999	Czech Republic	Advanced Macroeconomics
Libor Dušek, Assistant Professor	PhD in Economics, University of Chicago, 2003	Czech Republic	Public Economics, Law, and Economics
Jan Hanousek, Associate Professor	PhD in Statistics, Charles University, 1990	Czech Republic	Econometrics, Financial Markets
Byeongju Jeong, Assistant Professor	PhD in Economics, University of Minnesota, 1997	Korea	Macroeconomic Theory
Štěpán Jurajda, Assistant Professor	PhD in Economics, University of Pittsburgh, 1997	Czech Republic	Econometrics
Peter Katuscak, Assistant Professor	PhD in Economics, University of Michigan, 2004	Slovak Republic	Public Economics, Microeconomic Theory
Michal Kejak, Assistant Professor	PhD in Cybernetics, Czech Technical University, 1993	Czech Republic	Monetary Macroeconomics
Evžen Kocenda, Associate Professor	PhD in Economics, University of Houston, 1996	Czech Republic	Econometrics
Lubomír Lízal, Assistant Professor	PhD in Economics, CERGE, 1998	Czech Republic	Economics of Transition
Daniel Münich, Assistant Professor	PhD in Economics, CERGE, 1998	Czech Republic	Labor Economics
José de J. Noguera, Assistant Professor	PhD in Economics, SUNY Buffalo, 1999	Venezuela, R. B. de	Financial Markets, Monetary Economi
Andreas Ortmann, Assistant Professor	PhD in Economics, Texas A&M, 1991	Germany	Microeconomic Theory, Game Theory, Experimental Economics
Sergey Slobodyan, Assistant Professor	PhD in Economics, Washington Univ., St. Louis, 2000	Russia	Macroeconomics
Petr Zencik, Assistant Professor	PhD in Economics, University of Pittsburgh, 1997	Czech Republic	Financial Economics, Econometrics
Krešimir Žigic, Assistant Professor	PhD in Economics, CERGE, 1996	Croatia	Microeconomics, Industrial Organization

English Department

Laura Mentz, Lecturer	MA in Rhetoric and Linguistics, Catholic University, Washington, DC, 1994	United States	English, Academic Writing
Robin-Eliece Mercury, Lecturer	M.Ed. in Education in Second Languages, McGill University, 1995	Canada	English, Academic Writing
Sarah Peck, Lecturer	MA in Anthropology, Temple University, 1991	United States	English, Academic Writing
Lawrence Smith, Lecturer	MA in Teaching English as a Foreign Language, University of Reading, U.K., 1995	United Kingdom	English, Academic Writing
Richard Stock, Lecturer	MA in Literature and Theory, University of Illinois at Urbana-Champaign, 1998	United States	English, Academic Writing

Part-Time Senior Faculty with long-term commitments to CERGE-EI

Ronald W. Anderson, Professor	PhD in Economics, University of Michigan, 1976; also at London School of Economics and Université Catholique de Louvain, Belgium	United States	Financial Markets
Jan Kmenta, Professor	PhD in Economics, Stanford University, 1964; also at University of Michigan	United States	Econometrics
Gérard Roland, Professor	PhD in Economics, Université Libre de Bruxelles, 1998; also at University of California, Berkeley	Belgium	Economics of Transition
Avner Shaked, Professor	PhD in Economics, Hebrew University, Jerusalem, 1972; also at University of Bonn	Israel	Industrial Organization
Jan Svejnar, Professor	PhD in Economics, Princeton University, 1974; also Executive Director of William Davidson Institute and Everett E. Berg Professor, University of Michigan	United States	Transition Economics

Source: CERGE-EI.

CERGE-EI thus constitutes an important regional institution and is increasingly recognized as a leading economics institution in Europe. If the development of CERGE-EI is successfully completed, the institution will educate a significant share of the next generation of Central and Eastern European and CIS economists, who will in turn be influential in the academic and policy decision making in their respective countries. Since CERGE-EI places great emphasis on academic excellence; exposes the students to the Western academic environment; and operates on the principles of openness, academic integrity, tolerance, and nondiscrimination, it is beginning to have a major impact on the quality of economic thinking as well as on the socio-political culture in these societies. The fact that many of the top academic, government, and private sector economists will have common professional roots at CERGE-EI will also be conducive to more cooperative and coordinated policy efforts at the regional level in the future.

The Financing of CERGE-EI

As might be expected, an initiative such as CERGE-EI requires considerable resources. Indeed, to provide funds for CERGE-EI's 2005 consolidated budget of more than US\$3.6 million requires a major effort on the part of all the involved individuals and institutions. Charles University contributes about US\$855,000 to the total budget through CERGE, and the Academy of Sciences about US\$1,160,000 through EI.³ The rest comes from earned income, income from endowment, and donations that are channelled either through CERGE-EI or through its two foundations. The Executive and Supervisory Committee has from the start placed great emphasis on fund-raising as a precondition for establishing and maintaining high-quality education and research.

One of the most important institutional features of this effort was the founding of the CERGE (later CERGE-EI) Foundation in the United States in September 1993. The mission of the CERGE-EI Foundation has been to raise funds to be used to improve the teaching of economics and methods of economic research in the former Soviet bloc countries. The Foundation has a board of directors, president, secretary, treasurer, and executive director. The members of the board of directors of the CERGE-EI Foundation are Orley Ashenfelter, Ray Batla, Alan Brown, Louis Camilieri, Randall Filer, Miriam Klipper, Richard Quandt (Chair), and Jan Svejnar.

Equally important has been the establishment of Nadace CERGE-EI, the Czech counterpart to the CERGE-EI Foundation. The Nadace has as its board members Miroslav Singer (Chair), Josef Kotrba, Martin Kratochvil, Tomas Prochazka, and Dipak Rastogi. Nadace CERGE-EI has been instrumental in raising funds for CERGE-EI in the Czech Republic.

The establishment of the CERGE-EI Foundation and Nadace CERGE-EI constitutes a conscious effort to place CERGE-EI's fund-raising effort on a solid and independent footing.

Principal Challenges facing CERGE-EI

The principal challenge facing CERGE-EI is to maintain and further develop academic excellence and financial strength. The two goals are interrelated, since the substantial flow of funds from external sponsors in the 1990s and early 2000s was conditioned by the academic promise of CERGE-EI and the ability and willingness of the Executive and Supervisory Committee to enforce quality standards and vouch for the quality of CERGE-EI's operations. Similarly, the flow of external funds is essential for continued buildup of the CERGE-EI faculty.

There have been numerous challenges to the mission of CERGE-EI. In the 1990s the main challenge was to obtain local recognition that CERGE-EI needs to be run by the ESC; at present the greatest challenge is financial. For several years, the two foundations have not been able to secure significant new sources of funding and existing sources have been gradually withering away. My greatest worry is that the CERGE-EI initiative could falter if this trend were not to be reversed. The lack of financing could lower the quality of research and teaching at CERGE-EI, resulting in the departure of the leading economists from the ESC and a further withdrawal of resources by foreign sponsors. CERGE-EI would then face the prospect of losing the best students and faculty, gradually becoming a standard local institution. Since it takes enormous effort, time, and resources to build a quality institution while the loss of quality faculty and students can be a rapid process, this threat must not be underestimated.

On the positive note, I trust that the CERGE-EI initiative will continue successfully. The ESC, the two foundations, and CERGE-EI management have proved that they could overcome the withdrawal of the first wave of Western sponsors from Central and Eastern Europe and ensure adequate flow of funds for CERGE-EI's development in the 1990s and early 2000s. Hence, after the primary initial sponsor of CERGE-EI, USAID, terminated its activities in the Czech Republic in 1996, the Sarah Scaife Foundation finished its successful three-year involvement with CERGE-EI in 1994, and two other key sponsors—the Andrew W. Mellon Foundation and the Pew Charitable Trusts—started gradually to conclude their operations in Central and Eastern Europe, many predicted that this would signal the downfall of CERGE-EI. Yet the ESC and the CERGE-EI Foundation have successfully obtained support for CERGE-EI from other sources. In particular, they secured multiyear support from a number of corporate foundations, including Citicorp, Philip Morris, Coca Cola, State Street, IBM, Monsanto, Chase Manhattan, Boeing, and the Page and Otto Marx, Jr. Foundation. Moreover, the Ford Foundation awarded a three-year grant to CERGE-EI. This successful fund-raising, coupled with the promising development of Nadace CERGE-EI in the Czech Republic, were key while I headed the foundation from 1993 to 2000. The ESC was instrumental in securing major World Bank grants in the early 2000s, but the current challenge is clearly to find new sources of external funding.

Notes

1. In covering the period 1989-98, the paper draws on Svejnar (2000).
2. The exception are several policy-oriented, senior researchers who were hired in EI at the time of its establishment and who operate under separate rules.
3. The Academy has also made a major contribution by providing the EI building in downtown Prague that hosts CERGE-EI in the Czech Republic. Its efforts to raise funds in Western Europe have so far been relatively unsuccessful, but the situation may be changing.

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Comment on William Lyakurwa, John Earle, and Jan Svejnar

John P. Bonin

TO PROVIDE A BRIEF INTRODUCTION TO MY PERSPECTIVE ON THIS ISSUE, I HAVE BEEN a teacher and scholar at Wesleyan University for 35 years and the editor of the *Journal of Comparative Economics* for the last 10 years. Wesleyan University is primarily an undergraduate institution; the Economics Department places at the top of all non-PhD-granting departments ranked by citations to publications by faculty members in economics journals (Bodenhorn 2003). Hence, even without a graduate program, our economics faculty produces considerable scholarly research. About every decade, we consider scaling up and adding a graduate program in the department. However, we always decide against this proposal because of our commitment to providing strong education in economics to students at earlier stages of their careers. Nonetheless, our curricular concerns are similar to those discussed in the three papers of this part of the conference.

Only about 5 to 10 percent of our majors continue on to do graduate work in PhD programs in economics. These students tend to go to top programs in the United States and become solid professional economists, for example, David Lipton. At least 50 percent of our majors obtain a master's degree from a professional school or a public policy program. Hence, we must design a curriculum to meet the needs of these two distinct groups of students and also to serve the other undergraduate students taking our classes. This challenge is similar to the resource allocation problem faced by a developing PhD program. As the editor of the flagship journal in the field of comparative economics, I have been involved closely with the research of young scholars from submission to publication. This experience has taught me the critical importance of clarity of presentation and of proper structure in a submitted manuscript. From this editorial perspective, I will comment on the scholarly goals and activities of these three programs, namely, the African Economic Research Consortium (AERC), the Central European University (CEU), and the Center for Economic Research and Graduate Education (CERGE-EI).

I focus on potential trade-offs faced by these programs in three areas: curriculum, research, and funding. First, regarding curricular choice, a tradeoff exists in allocating resources and student time between issue-oriented field courses and skill-based courses. If the objective is to develop human capital that will apply state-of-the-arts tools and techniques to issues of interest, no trade-off exists at the level of basic skills. All three programs stress the acquisition of basic research tools and techniques. Similarly, at Wesleyan, we require three calculus-based core courses in theory and quantitative methods for an undergraduate student majoring in economics. However, we face a trade-off between offering more-advanced skill-based courses and a full menu of issue-oriented field courses for majors and nonmajors. To address this issue, we teach electives at two tiers at Wesleyan.

A course in the first tier requires only the introductory course; these courses are policy-oriented and institution-based. A field or advanced-skills course in the second tier requires at least two of the core courses. In these courses, we bring journal articles into the classroom and require a major research paper. Although the vast majority of our students do not continue on to do graduate work in economics, we are convinced that exposure to professional research in which the tools and techniques are applied to policy issues is an integral part of every undergraduate major's education. The analogy to the PhD curriculum indicates the primacy of advanced theory and econometrics courses independent of the career aspirations of the students. In my opinion, the ranking in either a graduate or an undergraduate curriculum is lexicographic with policy-oriented and issue-driven courses following the skill courses and using these tools.

The second potential trade-off involves the type of research—that is, basic versus policy-oriented research—pursued by the faculty and students. If the objective is to apply human capital to pressing economic problems in the region, this trade-off is less clear. Recognizing the need for informed public policy making in developing- and emerging-market economies, the best human capital should be allocated to analyzing policy issues. However, my experience in tutoring honors theses at Wesleyan suggests the presence of complementarities between basic research and applied work. Hence, the overarching goal should be to produce dissertations that use state-of-the-art techniques applied to timely issues so that they are publishable in reputable academic journals, such as a leading field journal.

The third potential trade-off for both students and faculty arises from the tension between work for hire and academic scholarship. The objective should be to secure the student's required financial support with minimum sacrifice in academic quality. In my own contract work, I find complementarities—but these arose only after my scholarship had matured. Good policy papers must be based, at least implicitly, on strong economic fundamentals. In addition, thinking about the policy implications of one's research enriches one's academic scholarship. However, this cross-pollination takes time. Hence, students should be involved in contract research only in partnership with a faculty mentor who supervises the student's academic research. In this way, the cost of the trade-off is reduced and the student's academic scholarship is not affected as adversely.

These three papers present three distinct models for developing a PhD program in economics. First, William Layakurwa details the development of an overarching network—AERC—to support graduate education at local universities in several African countries. Second, John Earle discusses how a PhD program is being built upon a successful existing MA program at CEU. Third, Jan Svejnar presents the story of building an American-style PhD program from scratch at CERGE-EI. A further distinction among these programs is drawn by characterizing the first two programs as creating centers of excellence and the last activity as building capacity in existing graduate programs. Although no one size fits all, I find some points of comparison among the three programs by considering their successes and the remaining challenges.

Taking the network model first, AERC has been successful in economizing scarce resources by developing a common facility for teaching elective courses to students who have completed the core courses at a local institution and by providing support and resources for student and faculty research. The network approach does benefit from a scale effect, but challenges remain. First, monitoring and maintaining common standards in core courses taught at various institutions is crucial. Second, openness to the international academic community is important if the goal is to produce human capital that applies state-of-the-art tools and techniques to problems and policy issues in Africa. A network may look only inward for its resources and its mission; thus, it may become insular and self-centered. To preclude this outcome, faculty should be encouraged to publish in leading field journals and students should be exposed to leading international scholars who are invited to teach in the program for short periods.

Regarding the centers of excellence, CERGE-EI exemplifies the preeminence of skill courses beginning with its summer preparation and continuing through the required first-year courses. In addition, CERGE-EI employs lecturers in English to assist students with their writing. The resulting dissertations have generated publishable research in top international journals. Eight of CERGE-EI PhD recipients have published in the *Journal of Comparative Economics (JCE)* and I have chosen several others to referee for me based on their publications in other journals. Of the eight *JCE* authors, only two are in academic positions, both at CERGE-EI. The remaining six work at the Czech National Bank, the Czech Post Office, the World Bank, the International Monetary Fund, the European Bank for Reconstruction and Development, and the International Labour Organization. Importantly, the young academics tend to remain in the region; the CERGE-EI has three of its own on the faculty in addition to three other faculty members who received a PhD from a U.S. institution having some relationship, formal or informal, with CERGE-EI. This program has been successful in training young economists who publish scholarly research and hold either academic jobs or positions in the public sector.

In its formative years, CERGE-EI benefited from an informal relationship first with the University of Pittsburgh and later with the University of Michigan because of the affiliations of Jan Svejnar. These arrangements allowed some students access to the resources of a U.S. institution and exposed all students to repeated visits by U.S.

economists who stayed in Prague for substantial periods of time. The challenge for CERGE-EI is to maintain productive long-term relationships with U.S. institutions while it replaces visiting faculty with newly minted PhDs from the region. In addition, the quality of research produced by the faculty must continue to be high so as to maintain CERGE-EI's reputation for scholarly excellence. Finally, continuing the diversification of enrolled students, which is reported in table 2 of Svenjar's paper, is desirable. In this way, CERGE-EI can play an important role in educating students coming from the east and south of Prague who have had limited or no access to U.S. graduate programs.

Although the focus of John Earle's paper is on the PhD program at CEU, I emphasize that the MA program in economics was established first and existed for nine years before the PhD program began in 2000. As Earle's paper reports, almost half of the MA graduates from CEU continue to pursue their PhDs at top U.S. or European universities. Prior to this conference, I had the opportunity to observe an afternoon of student presentations of research proposals and completed PhD research. One of the PhD students has already published a joint paper in the *JCE* and has served as a referee for me several times. Presentations by both MA and PhD students were interspersed throughout the afternoon sessions. I was especially impressed by the lively interaction among the students and by their constructive comments; the students were equal partners with faculty members in these exchanges. Moreover, I found it difficult to distinguish the comments of MA students from those of the PhD students. The relevant point is that CEU already has a successful MA program that prepares talented students from throughout the region to obtain a PhD from a top U.S. or European university.

Earle's paper presents the challenges facing the CEU department as it attempts to develop an equally successful PhD program. Before turning to these challenges, I will make an observation about the MA program. The program is extremely valuable; it should maintain its own identity and mission. By bridging the educational gap in economics in the region, the MA program allows talented and quantitatively able students to gain admission to, and complete successfully, PhD programs in economics in leading U.S. universities. Providing this added value in the educational chain is at least as important as developing the capacity to offer the last professional link. If building the PhD program at CEU causes its existing MA program to morph into an MA degree obtained on the way to a PhD by students enrolled in an American-style doctoral program, the loss would be substantial. Maintaining the separate existence of its high-quality MA program while at the same time building a PhD program is the main challenge facing CEU today.

From the list of challenges in Earle's paper, I focus on the supply of students and the supply of faculty. With regard to students, requiring an MA degree for entry into the PhD program and limiting financial support at CEU to a total of four years makes it difficult for students from the MA program to continue for their PhD at that university. In addition, the MA requirement may be a deterrent for potentially strong young students from the region. In its initial years, the PhD program has enrolled mostly Hungarian students. If the objective is to attract and retain talented

students from throughout the region, some of whom already come to CEU for the MA, this tension must be resolved. If it is not, the new PhD program may turn CEU into an institution that draws from only a limited pool of potential students.

With regard to the supply of faculty, hiring and retaining first-class scholars requires a contract that is competitive with offers from U.S. and European universities. As someone who has spent his entire career at an undergraduate institution, I am fully aware of the importance of compensating differences. Budapest is a wonderful city and CEU provides an exciting, vibrant academic environment in which to work. Nonetheless, the lack of a formal tenure contract and the use of only quantifiable measures of evaluation limit the ability of CEU to offer attractive job contracts and to motivate the long-term commitment required from faculty members in supervising dissertations effectively. Restrictions that adversely affect a faculty member's tenure horizon and that do not account properly for the time and scholarly effort allocated to dissertation supervision are harmful to the health of any PhD program. In the economics department at Wesleyan, we attract high-quality young scholars at the entry level even though we are unable to meet their alternative financial offers partly because of a generous sabbatical program. The challenge for CEU in attracting and retaining first-class scholars and teachers is to find the appropriate mix of elements from the standard package offered by U.S. institutions with its particular compensating differences.

From the experiences reported in these three papers, I draw several modest proposals. First and foremost, building and sustaining a successful PhD program requires finding and developing a niche in applied economics. The resources necessary to mount a PhD program that would be ranked among the top 20 programs in the world and would have universal strength throughout all areas of economics are simply not available. Hence, these programs should pursue their own comparative advantage and focus on topics related to their local situations. For AERC, development economics is the obvious candidate and the program already takes this perspective. For CEU and CERGE-EI, comparative economics is a natural niche. As the editor of the *JCE*, I can document that comparative economics is a growing field in the discipline. Since the 1997–98 academic year, submissions to the *JCE* have increased by more than 50 percent, to 204 in the 2003–04 year; submissions totaled 207 for 2004–05 and will be over 230 for 2005–06. In addition, the total number of articles published increased from 28 in 1996 to 44 in 2004, which is again more than a 50 percent increase. I published 40 articles in 2005, which amounted to an increase of 3 percent in pages published, and I will publish 42 articles in 2006. Growth in quantity has not come at the expense of quality. According to the 2005 ranking by the Institute for Scientific Information, the *JCE* places in the top quarter of 175 economics journals: ranked in 41st place based on a two-year impact factor. Moreover, the average acceptance rate at the *JCE* fell from 22.9 percent between 1996 and 1999 to 16.3 percent between 1999 and 2004. Clearly, comparative economics is a vibrant, healthy field that provides a natural niche on which PhD programs in the region can focus.

Second, to teach students to produce publishable research, mentoring is necessary. Writing tutors who correct grammar and syntax are useful but not sufficient. Learn-

ing the idiosyncratic structure of a journal article in economics and the useful techniques for engaging the reader requires mentoring by accomplished scholars. My 10-year experience with referees' reports at the *JCE* convinces me that presentation matters. The author of a manuscript must state clearly the motivation and frame the results convincingly in the literature—otherwise, the referee may not be able to judge properly the quality of the work and its contribution to the literature. A referee's report that does not engage completely the argument in the manuscript is, more often than not, attributable to poor presentation by the author of the manuscript. Mentoring by experienced scholars to teach strategies and techniques to prepare articles for publication is a crucial, but often neglected, aspect of a student's education in economics.

Third, creative partnerships are important. Linking a PhD program with a research institute is a useful way to allow young scholars to interact with researchers who are publishing in applied economics. This approach has proven effective at l'Université de Paris; research scholars are situated in faculties at several campuses so that PhD students have daily access to these young productive researchers. Each of the three programs has some relationship with at least one research institute. However, more frequent interaction should be encouraged. In addition, one or two years of preparatory work for doctoral students could be undertaken productively at other institutions, perhaps at a U.S. undergraduate institution. Although we have no formal graduate program, the economics department can confer an MA degree. Recently, two students from Ukraine and Bulgaria—have earned MA degrees in economics at Wesleyan.

Fourth, sustainability of a high-quality PhD program requires the flexibility to develop new, alternative sources of financing and also the stability of committed long-term nonmarket funding. Once the niche is established, outreach programs such as modular doctorates, exchange programs with U.S. universities, and professional degrees can be considered as sources of market income. However, sustainability requires a long-term commitment of sufficient resources so nonmarket funding sources must be patient and persistent. Any attempt to subject the entire financing of a PhD program to market principles is likely to be as unsuccessful as applying short-term market evaluation to a long-term infrastructure development program. Building a successful PhD program is like building a dam: it takes time and the benefits are not fully appropriable by private agents. In conclusion, higher education is a public good and its rate of return, although difficult to measure precisely, is likely to be high in the region for the foreseeable future (Fleisher, Sabirianova, and Wang 2005).

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Comment on William Lyakurwa, John Earle, and Jan Svejnar

Mauricio Cárdenas

I HAVE BEEN GIVEN THE TASK OF DISCUSSING THE EXCELLENT PAPERS BY WILLIAM M. Lyakurwa on the African Economic Research Consortium (AERC), John Earle on the experience of the Central European University (CEU), and Jan Svejnar on the Center for Economic Research and Graduate Education (CERGE) and the Economics Institute of the Czechoslovak Academy of Sciences (EI). These papers are of great interest to anyone thinking about the challenges of graduate education in economics in developing and transition economies.

John Earle's paper on the experience of CEU is written with frankness and sincerity, especially in relation to the challenges and problems that CEU is having with its PhD program. Jan Svejnar's discussion on the experience of CERGE-EI is written in the first person by someone who was actually leading this process. He reminds me that academic initiatives do not happen in a vacuum; introducing a PhD program in economics is, at the end of the day, more about leadership in institutional building than anything else. And Bill Lyakurwa's paper on AERC is very illuminating about what can be done to coordinate different countries that need a common solution. The African experience is quite interesting in the sense of trying to solve a problem for an entire region simultaneously, not just for a specific country.

What are the main lessons that I derive from reading these three papers? Latin America has taken a long time developing PhD programs, much longer than we have seen here in Central Europe. So the revealed preference in Latin America is that PhD programs are not a top priority. I think that is what history tells us. And that means that in Latin America the emphasis has been placed over the last three decades or so on undergraduate education and master's programs.

There is, however, an active debate in Latin America today on the need to develop PhD programs. There are three main questions under consideration. First, why do we need our own PhD programs? You find different answers to this question in the papers in this book. The answer that you find in Lyakurwa's paper on Africa is a little bit reminiscent of what Pinto and Sunkel (1966) argued 40 years ago.¹ According

to their view, the specific training that is available in the industrial countries is not adequate for emerging countries. This inadequacy, in turn, is related to the tools and the issues that are emphasized but that are not relevant for the concerns and problems outside the developed world. So, in that spirit, there is the need for more local knowledge that is closer to the problems of the people—and this is particularly the case for the problems of the countries of Africa.

There is another reason for having a PhD program. It could be that you have talented people, that they are good students at the undergraduate level, but they just cannot find a PhD program in industrial countries for two reasons: financial considerations can put the pursuit of a PhD program out of reach, or the institutions where they have gotten their undergraduate degrees do not have the recognition needed to get into a PhD program elsewhere. It is therefore hard for these talented individuals to obtain admission into a program. The solution to this problem is to have a local PhD program.

Once the justifications are in place, you have to think hard about the prerequisites for a successful PhD program. Number one in my list is the existence of a critical mass of well-trained undergraduates. This means that, based on standardized tests such as the Graduate Record Examinations (GRE), you should be able to measure the quality and quantity of potential PhD students; these potential students are a decisive input into this project.

The other prerequisite is faculty. A successful PhD program depends on the existence of a group of well-trained professors. The necessary size of the group is a matter of debate. A top-quality economics department in a U.S. university will have between 30 and 50 faculty members. This is proportional to the minimum number of fields of specialization that a highly regarded PhD program should have. In the context of emerging countries, the experience of CERGE-EI is illustrative. This program has around 15 faculty members who are full-time professors and, hence, who concentrate their professional activities at the university. You need to have faculty members who are interested in research, not in consulting. This is not always easy to find in the developing world. As mentioned by John Earle, in the case of CEU, Hungarian professors who have multiple affiliations have become a problem since they do not spend all their time at the university. This fragmentation of their time has a consequent negative effect on the quality of their work.

But a successful PhD program has other prerequisites that are, in many cases, less difficult to get. A good library, or at least access to online publications—for example, the scholarly journal archive JSTOR—is critical. Placement offices are also highly relevant.

And, of course, the final prerequisite is the demand for the output that you are producing. Is there a demand for PhDs? And who is exercising that demand? Is it the government, the public sector, the academic institutions, the private sector? And is that demand something that you can substitute with other types of graduate education, such as specialized master's programs in different areas such as regulation, the environment, natural resources?

These questions need to be addressed before engaging in a PhD program. Finally, and I will end with this, we have to keep in mind that the essence of a PhD program is quality rather than quantity. The goal is not to maximize the number of PhDs or the number of PhD departments, but to make sure that in developing countries there is access to affordable doctoral training for individuals who have the intellectual ability and interest in pursuing a PhD. Above all, it is a matter of quality. Having a large number of poorly trained PhD economists is not only costly, but also highly ineffective.

Note

1. I mentioned Pinto and Sunkel's paper in my own presentation with Guillermo Perry at this conference ("Capacity Building in Economics Education and Research: A Note on the Experience of Latin America and the Caribbean").

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COMMENT

Developing PhD Programs

Ekaterina Stepanova

AS A RUSSIAN CITIZEN BROUGHT UP NOVOSIBIRSK IN SIBERIA AND NOW COMPLETING my PhD at the University of Washington in the United States, this is a subject close to my heart. During this short presentation I will reflect on my own experience as an economics graduate student and on the factors that I consider important for successfully developing PhD programs in economics in countries that are going through the transition process, where graduate economics education is still on the stage of early development. I also want to talk about the possibilities and obstacles of doing research in a developing region after completing a PhD in the United States.

First, let me say, it is wonderful to be back in Budapest. I first came to the Central European University (CEU) in 1998 to pursue my MA studies in transition economics. This experience changed my whole perspective on both the subject of economics and the learning process in general. This was an amazing program, structured specifically to use economic theory to analyze the transition issues in our home countries (mainly Eastern Europe). The instruction was in English and at the level the subject is taught at Western universities, many professors being leading researchers in the area. For those of us not previously immersed in other languages, this alone was an incredible experience. For me these two years at the CEU were a process of discovery, using a study process very different from the process we use in Russia. For example, this was the first time in my life that I realized that economic journals existed. We have no access to such things in Russia—I was to find what an exciting source of economic ideas they are! The environment in my MA class was very idea stimulating too: such international diversity and so many different ways to approach problems. I learned a lot from my classmates. But more importantly, as a result of my MA studies, I got a real taste for academic research in economics and decided to continue with my graduate studies. Now, thanks directly to this experience, I am completing my doctoral dissertation in econometrics at the University of Washington, something this Russian student would not have believed possible back in 1998.

I do not think I can overemphasize what a difference the CEU program made in my life and the lives of my classmates. The MA program at the CEU was such a boost for us: we were equipped with knowledge, ideas, and inspiration to make a change. Many of my colleagues have since returned to their home countries and now work for the government or policy research institutions. These people are already having an impact on their regions' economies. And for those of us who have moved on to PhD studies in Western universities? Well, most of us are thinking about the ways we can contribute to our countries in the future.

In my opinion, developing a PhD program in the region is a great next step. Of course, the purpose of any PhD program is to do research at a higher level of complexity and to focus on specific topics. The MA program is a good general introduction to economic research, but a PhD program studies subjects in so much greater depth. The advantage of having a PhD program in the region is that students can get a Western level of training without losing contact with the transitional environment of the region, having access to the data, and in many cases being able to have direct contact with the regional researchers, policy makers, and government authorities.

There are a couple of factors that need to be considered in establishing a PhD program and ensuring a smooth transition to it from an MA program:

- Both programs should be well coordinated. That is, there should be no jump in the level of difficulty but rather a gradual increase in the difficulty level for the PhD classes.
- The PhD program should be flexible enough to accommodate specific interests of the students. This puts certain responsibilities on advisers that are different from their responsibilities in an MA program. I think an MA program adviser's role is to direct and to teach a style of research. In the PhD program, the adviser's responsibilities are to act more as a guide: the adviser should be someone who can assess student ideas, and someone who can debate with and challenge the student. This is more like a relationship among junior and senior colleagues, rather than a student-professor type of communication.
- As in any program, students need to be clear beforehand about what they expect to achieve during the course of the program. This clarity should include course requirements and deadlines, but it should also include a more general idea of what the PhD program is about and the career prospects afterward. Many doctoral students enter programs without any clear idea of what to expect after they get their PhDs. If career opportunities were thought through and outlined when a program is developed, it would be a great motivator for students.
- Communication among students needs to be encouraged. The student community is very competitive, even to the extent that people withdraw from debate and hold themselves back from sharing knowledge and ideas. Partially, this is induced by the program requirements, which unintentionally discourage collaboration. However, although stolen ideas and plagiarism are always an

issue, there must be ways at the same time to encourage discussions and student study groups.

The final issue that I would like to address is how to attract students who are now doing their PhD work in the United States back to their home region. I should admit that studying in the United States gives a new perspective on how research could be done in Eastern European countries. Since our roots are in our home countries though, it is natural to desire to use the opportunity to give back to the region by bringing the standards of education back home. Nourishing this desire would therefore benefit everyone.

Attracting students back to the home countries is not a straightforward task. Unless there is a well-established link between the university in the region and people who are doing their PhDs in the United States, it cannot be taken for granted that these people will ever work on issues related to the region. Western universities are not specifically geared to focus their efforts on the interests of transitional economies. As a matter of fact, bar a few notable exceptions, it is rare that an economics department in the United States has any focus at all on transition economies. So, when students in the United States select the topic of their dissertation—which is often chosen in consideration of what the strong aspects of a particular economics department are—it may have low direct value back home. Obviously, it is difficult for a student to keep a detailed eye on and interest in the regional economy when completing a PhD applied to a different environment. This, in turn, has an impact on the scope of the future job search, which is then limited to U.S. and Western markets. Of course, a further disincentive for some seeking an academic career is the level of compensation in the U.S. universities, which is considerably higher than in Eastern Europe. Much of this cannot be changed, but it is possible to use what there is to better advantage:

- We need to encourage the development of a specialization in transition economies at the economics departments of Western universities. Those who find careers in Western universities can then cultivate and foster collaboration between their universities and universities in the region.
- We need to attract greater discussion and encourage more research on transition economies. One way to do this is to sponsor transition economics sections at the major economic conferences, in the same way as occurs today with development economics. These will serve as excellent venues for creating a nucleus of people from various universities who are interested in the topic, and will create a natural gravitational pull for students from these regions.
- We need to provide incentives for students that make it easy for them maintain an active interest in their countries' economies. There are several ways to do this, all requiring a closer touch with students while they are pursuing their PhD. Here are just two:
 - Students are often in almost desperate search of data for their term papers. Sharing data on transition economies for the course work is very good way to get motivated to do research in the transition area.

- Sponsor students looking for summer jobs. Teaching assistant or research assistant positions at U.S. universities are not guaranteed, and are in scarce supply over the summer. The summer period is therefore an excellent time for internships or research-assistantships that involve regional analysis. Indeed, if this possibility existed and were actively marketed to second- and third-year PhD students, it might well have a great impact on the direction and even choice of those students' dissertation topics.

In conclusion, I would like to thank the Open Society Foundation and the World Bank for recognizing the importance of economics education in the developing regions. Through creating these kinds of opportunities it will be possible to increase the cadre of people working on transition economics research throughout the world while also increasing the opportunities for doctoral graduates to return to benefit their regional economies.

Why American University— Central Asia Should Develop an Economics MA Program

Ellen S. Hurwitz

THE AMERICAN UNIVERSITY—CENTRAL ASIA (AUCA) IS FULLY COMMITTED TO THE development of an MA program in the field of economics, assuming that we obtain sufficient international funding. The university's board of trustees and the faculty are persuaded that such a program is essential for the democratic and educational development of the region. Sound political and economic leadership presupposes the presence of a strong cadre of well-trained economists embedded in the region.

Central Asia lacks any postgraduate programs in economics, and most of its undergraduate programs in this field are predicated on the economic assumptions of the Soviet communist era. The establishment of Western-style postgraduate programs in Central Asia would create a benchmark for the entire educational system in the region and provide incentives for its future development. Graduates from these programs would be in high demand in the banking industry, in finance ministries, in public think tanks, in private-sector enterprises, and in international organizations working in Central Asia, such as the World Bank.

During the past 15 years, educational reform in Central Asia has not produced many undergraduate or any postgraduate programs in economics that are truly contemporary. Recently developed undergraduate programs are generally eclectic, and combine the Soviet communist experience with Western approaches. Conspicuously absent here are programs with a strong foundation in Western economics that are adapted to the current postcommunist needs of the region. Our best students therefore seek master's in economics programs outside of Central Asia and frequently do not return.

It is important to note that contemporary undergraduate programs in business and business practices are developing in several countries in the region. These programs have proven to be self-sustainable. However, they lack strong foundations in market economics and in the fundamentals of Western economic thought. These programs are essential for the transformation of economics in banking, business, and the public sector: they build capacity for sustainable economic development and create a climate for the use of global market analysis.

Postcommunist economies in Eastern Europe, the Russian Federation, and Ukraine have enjoyed the benefits of postgraduate programs in Western economics. These regions are developing the capacity for sustainable progress including best practices in money and banking, business, and public sector economics. Postgraduate economics programs in these regions are contributing to successful economic development and planning. The successes in these postcommunist economies should be transferable to developing centers of excellence in Central Asia.

To date the only Western-based economics program in Central Asia is at the undergraduate level at the AUCA in Bishkek. This university is the only higher-education institution in the region that is committed to critical inquiry and the selection of courses of study based upon individual choice and interdisciplinary opportunity in the liberal arts tradition of American higher education. This university enjoys a recently established endowment funded by USAID and the Open Society Institute, and supports 12 undergraduate programs and 1 graduate program in business administration. This university acknowledges that the dearth of economists in the region constitutes a major threat to its ability to compete in a global and increasingly open market. We plan to address this critical gap by building capacity through the development of centers of excellence in economics.

AUCA has studied programs in Russia, Ukraine, and other East European countries and is prepared to absorb their best practices and learn from their failures. The AUCA master's in economics program will require a strong financial investment on which to start. With this investment, the AUCA will:

- Develop a tuition-charging funding plan including loans and state-supported programs
- Build upon its Western-style undergraduate curriculum taught by a strong faculty to top-notch students from across Central Asia
- Develop a five-semester Western-style curriculum based on Western standards of excellence
- Develop a comparative research and outreach program to transform the region into a contemporary market economy
- Identify faculty and administration who have trained in PhD programs in Western institutions
- Attract top-notch students from across the region as does the undergraduate curriculum of the university.

AUCA is ready to honor its commitment to the development of regional excellence in market economics with international partners in government, banking, foundations, and corporations.

The Quantity and Quality of Higher Education in Transitional Economies

Jong-Wha Lee

Human resources are essential to economic growth, and education—both at the college and the graduate levels—is important for meeting the challenges of changing demands for advanced knowledge and technologies. But expanding higher education is quite expensive, and many low-income transitional countries do not have the resources necessary to invest sufficiently in higher education.

This paper considers exactly what is a good outcome of education by looking first at how both the *quantity* and the *quality* of educational capital are measured. It then looks at how to improve these measurements of higher education in transitional economies by setting priorities for allocating public resources, noting that establishing regional and global networks at the university level would be very helpful, particularly in the initial stages. To improve school quality, how efficiently expenditure is allocated among different inputs is also important. The paper uses a simple accounting framework that links the source of education resources to their use and provides mathematical formulas for determining the best way to address the question of how to use resources efficiently to maximize school output.

Human resources are an essential factor for economic development. Human efforts and capabilities contribute to economic growth by expanding productive resources and promoting technological progress. Since a significant part of human capital is formed through formal and informal schooling, a country needs to build a strong capacity for good-quality education that is imperative for human as well as economic development.

Education at the college and graduate levels (beyond the primary and secondary levels) is important for meeting the challenges of changing demands for advanced knowledge and technologies. But expanding higher education is quite expensive, and many low-income transitional countries do not have the resources necessary to

invest in higher education. Nevertheless, giving up tertiary-level education is definitely not an optimal choice. People with aptitudes for advanced skills and knowledge must not allow their talents to be wasted; instead they should be nurtured by higher schooling.

What is a good outcome of education? Any outcome of education is composed of both quantity and quality of educational capital. The *quantity* of educational capital can be measured by the number of graduates, but it is rather difficult to measure the *quality* of education accurately. Conceptually, the quality of education is reflected in the performance of students and graduates. For instance, the value added by schooling can be measured by the labor market performance—seen in areas such as greater earnings or employment—of educated workers. Successful placements of postgraduate degree students in commendable occupations can be considered the result of a high-quality education. A good educational system is expected to produce an abundance of well-educated graduates. In this sense, the success of graduate economics programs, such as those of CEU and CERGE-EI, depends on whether they can continue to produce a good number of master's and doctoral students who have sufficient knowledge to be adaptable in market economies.

School output can be also measured by research conducted at the school; this is particularly true at more research-oriented graduate schools. However, assessing the quantity and quality of research products is complicated because output in terms of research is more likely to be more multidimensional than just the output of numbers of educated students. Many agree that good articles in leading academic journals are valuable. In addition, good policy-oriented articles can be of great value, especially in transitional economies where volatile economic situations often necessitate an immediate policy analysis. Researchers in the countries where English is not the official language need to write papers in local languages as well in English.

Academic institutions must appreciate both teaching and research; but the weight distributed between these two components will vary, depending on the country as well as school characteristics. Perhaps schools in countries that are in the initial stages of transition may put relatively more value on education than on research. Advancing independent original research by local economists would require a longer time period.

Questions have been raised about whether postgraduate programs in economics should focus more on policy-oriented courses than on rigorous theory courses. It is debatable what type of graduates the tertiary-level schools should aim to produce, particularly in transitional economies. These economies often lack a supply of experienced government officials. There is, therefore, a stronger demand for producing and training government officials at the graduate level. Economics programs may not be stretched out as far. But postgraduate and other programs, such as those providing a master's degree in public policy or an MBA, may serve that purpose better.

Both the quantity and quality of schooling need to be enhanced in order to generate good-quality educational output. How can we then improve the quantity and quality of higher education in transitional economies? Strong income growth seems to be most critical for the economy. The expansion of tertiary education comes from

changes in both the demand side and the supply side of higher education. Stable economic growth, by ensuring high future growth of employment and real wages, contributes to the increase in the populations' demand for higher education. Economic growth can also help to expand the supply of higher education to satisfy the increased demand. Without sufficient resources, a society cannot provide good-quality educational facilities for students. In a fast-growing economy, public and private resources available for education can increase much faster than they can in a society that is stagnant or declining. Private enterprises are more willing to participate in the supply of tertiary education by making more donations to universities. Parents in more affluent economies must be willing to take on a greater financial burden for their children's higher education.

Because transitional economies lack sufficient resources to support adequate local tertiary educational institutions, establishing regional and global networks at the university level would be very helpful, particularly in the initial stages. In the long run, however, transitional economies should strive to establish their own universities as well as their own centers for research and development. These centers will create job opportunities in these countries and encourage individuals who have been educated abroad in developed countries to invest in the human capital of their home country by returning.

One of the most important questions is how to use resources efficiently to maximize school output. How the given resources are allocated between quantity expansion and quality improvement is an important choice. An increase in education expenditures can be used for either expanding the number of enrolled students or increasing the expenditure per pupil.

To illustrate the contribution of the quantity and quality factors to the production of educational capital with finite resources, we can use a simple accounting framework that links the source of education resources to their use (at a tertiary-schooling level or at all levels). We begin with the following accounting identity:

$$(\text{education expenditure per student}) \times (\text{number of students} / \text{total population}) = [(\text{expenditure} / \text{GNP}) \times (\text{GNP per capita})] / (\text{ratio of students to total population})$$

The left-hand side of the equation decomposes the use of public resources for education (as measured by total education expenditure per capita) into two components: school enrollments and public expenditure per pupil. The left-hand side implies that an increase in resources can be used either to expand schooling quantity (numbers of students) or to improve educational quality (measured by per pupil expenditure). The right-hand side of the equation allows us to decompose the resources into three components: the share of public education expenditures in GNP, per capita GNP, and the inverse of the ratio of students in total population. The higher value of each term on the right-hand side of the equation indicates the availability of public resources for education. Hence, although the share of public education expenditures of the GNP remains the same, either an increase in per capita GNP or a slowdown of the enrollment rate can help to increase investment in education.

In order to improve educational quality, school resources should be increased. We can use the framework of an “education production function” to analyze the importance of schooling inputs for schooling quality. This equation relates the output of education to various inputs. This can be depicted as

Schooling Quality = F (School Resources, Efficiency of System; Family Factors ...)

In this framework, an increase in school resources can lead to an increase in schooling quality. But whether this is the case or not has been an issue of debate and provoked controversy among economists as well as policy makers. Hanushek (1986, 1995) concludes from existing empirical evidence that there is only a weak relationship between schooling inputs and outcomes measured by student achievement. However, several studies have challenged this pessimistic conclusion (Hedges, Laine, and Greenwald 1994; Kremer 1995). More recent studies have found the availability of resources to have positive effects on student achievement. Based on the panel data set for a broad number of countries, for instance, Lee and Barro (2001) find that school inputs such as class size and the quality of the faculty are closely related to school quality, as measured by internationally comparable test scores.

To improve school quality, it is also important how efficiently expenditure is allocated among different inputs. School inputs comprise pupil-teacher ratios, expenditure per pupil, quality of faculty, teaching materials, school length (such as numbers of school days per year), and so on. Transitional economies may not improve all school inputs at once because they have limited resources, so setting the priorities for allocating public resources is important. For instance, when good-quality teachers are scarce, the government can focus initially on recruiting good faculty. In particular, in transitional economies where brain drain prevails, the recruitment and retention of good-quality professors and researchers is a very important item on the agenda. In this regard, the experience of the Republic of Korea may be helpful. Ofer, in his paper elsewhere in the volume, asks why approximately 85 percent of the Korean students who left to study abroad go back home following graduation. One salient feature of education strategies in the Republic of Korea was to pay relatively higher salaries to teachers while keeping pupil-teacher ratios high (Lee 2001). In addition, because of rapid economic growth as well as democratization, there has been a continuing demand for foreign PhDs in academia, in think tanks, and in the public sector. The prestige of academic jobs and the seniority system in salary and promotion in a Confucian society such as that of the Republic of Korea must have helped those who received their PhDs from abroad decide to return to their home country. It seems that providing sufficient incentives for good faculty is essential for retaining them.

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Scaling Up Capacity Building to Underserved Regions

Capacity Building in Economic Policy Research

Outcomes and Future Steps

Jeffrey Fine

THE CONFERENCE ENCOMPASSED A WIDE SET OF INTERVENTIONS, CHARACTERIZED by differing approaches to capacity building. Discussion was enriched by experiential knowledge, namely, lessons learned in the course of implementation.

This note, based on a PowerPoint presentation at the close of the meeting, acknowledges concerns common to most of the papers and subsequent deliberation. It does so under five principal themes:

- The ethos underpinning various types of capacity building
- Structural parameters shaping the institutional context of the various initiatives
- Situational parameters informing their activities
- Strategic guidelines for facilitating their activities in future
- A concrete proposal for collectively sustaining their efforts

Ethos

Ethos refers to the distinguishing character or guiding beliefs of a person, group, or institution. Underpinning all of the capacity-building efforts represented at the conference is a powerful commitment to a culture of learning, to knowledge creation and validation through scientific rigor and methods, and to the enrichment and sharing of knowledge through professional peer review. Accountability for outcomes extends beyond the activities of the institutions and networks themselves to the broader inculcation of these values through evidence-based policy making, as well as openness and transparency in deliberating public choices and outcomes. In many if not most instances, the capacity-building efforts are taking place in polities where such values are far from commonplace. Consequently, their potential impact is not confined to knowledge creation and the improvement of economic policy making, but extends to other social and political processes promoting open,

democratic societies. Such outcomes are of course difficult to measure, but nonetheless they comprise very important outcomes of capacity-building in economics.

Structural Parameters

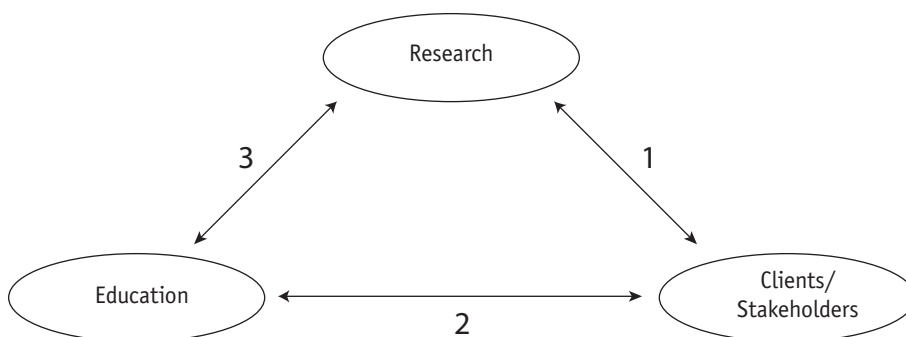
Shaping each of the capacity-building efforts is a national higher education policy. In many developing countries this policy is undergoing major changes, which may include the entry of private universities (both domestic and foreign), increasing autonomy for publicly supported universities, rapid growth in enrollment in tertiary education, and different approaches by government to its financing. Such changes in policy have a direct impact on capacity strengthening, for example, on the quality and financing of postgraduate study. Also important in many countries is science and technology policy, in determining priorities for research and its financing. Advances in information and communications technology will continue to be a seminal factor in determining how research is executed within and across national borders, in sharing knowledge, and in introducing new modes of learning. Especially meaningful to the conference participants were expanding opportunities for future collaboration in research and formal education, in particular at the postgraduate level. Also falling under the rubric of structural parameters are changes in institutional culture, since many of the efforts discussed at the meeting are either embedded within universities and policies institutes or constitute reactions to institutional rigidities. Consequently, how institutions embrace these broader-reaching changes will undoubtedly play a role in shaping future capacity-building efforts in economics.

Situational Parameters

The political and economic contexts within which the capacity-building efforts operate vary enormously. However, all of them, in a broader generic sense, are responding to interfaces among three systems (figure 1).

The capacity-building efforts typically address greatly varying demands for research from a wide range of clients including governments, donors, the private sector, and academia (as meant by the double-headed arrow 1 in figure 1). Much of this research is client specific. A major conundrum is the need to balance this type of demand, which typically plays an important role in financing an institution or network's activities, with other types of research aimed at informing public policy, generating new knowledge, and enhancing skills. Clients also play a major role in defining the competencies that should be addressed by systems of higher education as well as financing academic-sourced research and postgraduate education (as meant by the double-headed arrow 2 in figure 1). National systems of higher education produce future researchers and in turn are enriched by research (as meant by arrow 3 in figure 1). All three systems will be undergoing major changes, which in turn have far-reaching implications for the capacity-strengthening initiatives discussed at the conference.

FIGURE 1

The Three Systems in Capacity Building

Source: Author.

Shaping higher education will be the accelerated creation of new knowledge, giving rise to new areas of specialization. Economic research in the future will increasingly draw on specialized knowledge and skills in such areas as transport, health, education, finance, communications, and education. Parallel to this development will be the need for capacity-building efforts to develop training appropriate for these subdisciplines, to specialize in particular areas of public policy, and to address client demands through collaborative efforts pooling specialized skills and knowledge within and across national boundaries. Also characterizing this trend will be the emergence of new fields. Of particular importance to most of the capacity-building initiatives will be institutional and behavioral economics, which can inform research undertaken in settings characterized by asymmetries in information, the absence of a robust legal framework, and severe shortcomings in the efficiency of different markets. Advances in information and communications technology may also expand opportunities for access to a career in economic policy research, by allowing individuals who have a first degree in another discipline to obtain the core skills, through the Internet, necessary to succeed in postgraduate study. This option might prove especially important in increasing the number of women engaged in economic research and teaching.

Addressing Change: Some Strategic Guidelines

Some of the capacity-building initiatives comprise networks. All of them engage in “networking”—namely, collaboration formally among different institutions, especially in postgraduate education, and informally among individuals conducting research on specific issues.

While differing considerably in their ambit, intensity, and degree of formality, all of these networking activities are designed to fulfill two principal functions: coping and enrichment.

Most commonplace in terms of coping is a pooling of scarce resources, for example, to address shortfalls in staffing. Also important in many settings is the need to reduce intellectual isolation, through the Internet and periodic meetings, in order to provide the critical mass of scholarship necessary for peer consultation and review and to sustain professional morale. Often networks are also a response to institutional rigidities, facilitating the introduction of new materials and methods of learning.

Increasingly important for economics, as in other fields of higher education, is the role of collaboration in enriching both research and learning. An immediate consideration is the benefits to be had from pooling human resources, within countries and across regions, to utilize scarce skills in specialized fields. Beyond such scale economies are the positive externalities resulting from the convergence of staff and students from a wide range of economies and political settings. Such collaboration also allows for increased specialization, in teaching and research, by institutes and departments of economics within the same country or region. It also increases the opportunity for individuals to continue working within a particular subdiscipline without having to migrate to more-developed economies in order to advance professionally.

Looking to the Future: A Specific Proposal

The presentations and deliberations at the conference clearly established both the need for and benefits from intensified collaboration on a regional and global level. Moving in this direction, however, will mean surmounting a classic “externality.” Within their own settings, the initiatives can address, if only partially, the challenge of financial sustainability by meeting client demands for technical skills and knowledge. At a global level, however, no single “client” is prepared to underwrite a collaborative effort, since many others, not footing the cost, stand to reap the benefits.

This situation is not dissimilar to the one in agriculture, where investment in socially and economically desirable research must often be underwritten by the public sector. The international response to the state of affairs in agriculture has been the creation of the Consultative Group on International Agricultural Research (CGIAR), which directs both core and programmatic support by the international donor community to selected research institutes and other shared interventions at national and regional levels. A similar situation prevails in the field of economic policy, where global development efforts stand to benefit considerably from enhanced collaboration in research and capacity building. How a consultative group for economic management (CGEM) might be structured and financed clearly requires in-depth analysis. Its potential benefit, not only for the capacity-building endeavors discussed at the conference, but also for accelerated, equitable development more generally, comprises a logical follow-on activity.

The Experience of the Swedish Government in Capacity Building in Russia and Eastern Europe

Eva Sundquist

I HAVE BEEN ASKED TO GIVE A DONOR'S PERSPECTIVE TO ONE OF OUR SUCCESS STORIES, our contribution to the Economics Education and Research Consortium (EERC), a program that we are all happy that we decided to fund because the results far exceeded our expectations. So far we have contributed slightly more than 3 million euros to the EERC. Over the past couple of years we have made some cuts in our annual support, and soon we will decide whether to continue our support and if so to what extent and for how long. We are one of the donors that have been supporting the EERC for the longest period.

Why Did the Swedish Government Decide to Contribute to the EERC?

First, a brief background. In 1998, the Swedish Ministry for Foreign Affairs received a visit from Andrea Harris of the Eurasia Foundation, who was then responsible for the EERC in Russia and Ukraine. Usually, Swedish technical assistance is channeled through the Swedish International Development Cooperation Agency (SIDA) to Swedish experts focusing on institution-building and exchange of expertise. However, the Swedish government decided to make an exception in this case and contribute substantially to the EERC.

Seeing that the Open Society Institute and the World Bank were already in on the project helped us form a swift decision, since they acted as a quality guarantee. We were particularly pleased that the Kiev Mohyla Academy had a reputation for not taking bribes. Needless to say, the decision to contribute to the EERC was based on objective criteria, but the composition and the size of our contribution depended on the fact that the desk officer for technical assistance to Russia, myself, and my head of section, were all graduates from the Stockholm School of Economics, and that we all had experience working in Russia and in Ukraine. Also the deputy minister

responsible for technical assistance to Eastern Europe, himself a trained economist, had experience in Eastern Europe.

In contacts with the authorities in Russia and in Ukraine, we had noticed the need for more staff with real skills in economics. In addition, Swedish companies in the region needed local staff with relevant training in economics. With the benefit of hindsight, EERC graduates have been very successful in finding work in policy institutes and government, and increasingly also in companies in the private sector. Two important Swedish companies in Ukraine are sponsoring the EERC in Kiev: Tetra Pak and Chumak.

We also decided that we wanted to give a contribution on our own terms. First, we wanted to make sure that at least one of the graduates from the EERC in Russia stayed in Russia, to mitigate the risk of brain drain. Therefore we created something called the *Swedish assistant professorship*—we spent hours trying to come up with a better name, but failed. This assistant professorship has now been moved to the EERC in Kiev. Second, we wanted to include students from Belarus. In doing this, we realized that we would contribute to the brain drain, but if only one or two of the students return to Belarus once the political climate improves, we thought it would be worthwhile. Third, a couple of years ago, when we decided to double our technical assistance to Moldova, we also decided to fund some students from Moldova in Kiev. Fourth, we wanted all "our" students to learn more about Sweden, so we added a study tour to Stockholm and to the Stockholm Institute of Transition Economic (SITE) for the second-year students from Belarus and Moldova.

Other Experiences

I do not wish to dwell on our less successful attempts to fund other schools, but I think that, at least from an administrative point of view, we have learned that the ministry should never assume first-hand responsibility in funding educational projects—we should leave this to the experts. If we make a general commitment, the bill risks running up to unexpected figures.

Recommendations

The Swedish government has learned some valuable lessons about ways to provide support for educational projects; we have also learned ways to assess which organizations we want to support. The recommendations here reflect this experience.

For Other Governments

- Make sure that there is a quality stamp attached to the proposal (in our case, this was provided by the World Bank).
- Set reasonable expectations (so far we have funded some 12 Belarussians who have graduated. I think we all agree that if just one will return to Minsk, when

the political situation improves, and ends up as a deputy minister of finance, it will have been worth the money).

- Target subjects (such as economics) where training is needed to promote the future of a country.
- Make sure that other donors are there for the long term so that the project is not abandoned partway through.
- Be prepared to go in with a substantial long-term commitment in order to make a difference.
- Demand plans for how to indigenize the project.
- Make sure that there are independent evaluations from time to time.
- Never engage in direct management of an educational project.
- Make sure assistance is limited in time and targeted in scope.
- Make sure you have an exit strategy.

For Organizations Seeking Support

- Make sure you talk to the right people—often you only need to find one like-minded person, and he or she will then be able to convince the rest!
- Talk to people in charge before you write the proposal.
- Write short proposals based on donor requirements.
- Present the proposal in person.
- Offer governments the possibility of customizing their contributions.
- Make sure you speak to people who understand the importance of creating local capacity for teaching and research at internationally recognized standards.

Scaling Up Capacity Building to Underserved Regions

Regina Yan

THE EURASIA FOUNDATION HAS BEEN A PLANNER, FOUNDER, DONOR, ADMINISTRATOR, and fund-raiser for the Economics Education and Research Consortium (EERC). We have certainly learned some lessons in this venture over the last 10 years. I would like to focus my comments primarily on the financial and organizational aspects of capacity building.

In building capacity in economics education and research, we inevitably have to start with education, which is the foundation for research and network development. EERC is involved in all three elements of capacity building: providing education through our master's degree program in economics in Ukraine; supporting research; and advancing network development through research workshops, grant competitions, and publications (both print and electronic) from the network office based in Russia.

Building capacity through economics education generally requires high fixed costs and long-term financial commitment. We need to build the institutions in order to produce the human capacity we need. Unfortunately, some economics programs have to begin as projects with short-term funding and short-term planning cycles. As a result, there is a misalignment between the long-term goals and the short-term funding reality. That means that those of us who support economics education in the context of a short-term funding reality have to try consistently to cultivate and line up the next batch of donors. Often donors and the program administrators do not fully appreciate the demands of fund-raising and the financial cost of implementing these education programs.

In addition to the taxing demand of constant fund-raising, I also observe that some of these programs are lacking in their financial management and administrative capacity. Often the donors are not willing to support these costs, without which these programs are handicapped in their ability to develop into sustainable and well-run institutions. Donors often want to fund only teaching and not organizational infrastructure (that is, overhead). The fact is, poor financial management and staffing pose serious threats to the future of these programs.

Bill Newton-Smith earlier commented that, based on his experience with the St. Petersburg School of Management, he found it more effective to build programs with an existing state institution than to build them as stand-alone programs. In many ways, this approach makes sense, but in reality its success is rare. Using existing institutions presents ready local ownership and buy-in for these programs. In turn, it translates into a long-term commitment from the local community. Practical and essential matters, such as conferring degrees and achieving accreditation, also require these programs to be based in a university setting, not to mention the practical aspect of their eligibility for support from the state budget when foreign donor funds phase out.

On the other hand, it can sometimes be impossible to build a program of high international standard within the limits of a local institution—particularly one that is run by the state—that has to operate under strict state requirements that are often incompatible with modern education. We face some of these challenges in Ukraine. When building an internationally qualified program, autonomy in hiring, firing, compensation decisions, and financial management would be critical during the program's incubation period.

I applaud my colleagues at the Central European University (CEU) and the Center for Economic Research and Graduate Education (CERGE) for using multiple approaches to support economics education—including setting up endowments both in the United States and locally, establishing student loans, and securing corporate and state support. All these, if available in the local context, are essential to providing long-term support in building economic human capacity. Unfortunately, in some countries the lack of a legal status for an endowment and the strict licensing requirements for student loan programs present tremendous hurdles for the success of these programs.

We all envy Justin Lin of the China Center for Economic Research (CCER) at Beijing University. He is affiliated with a premier state university in China, and yet he appears to have a lot of autonomy, basically because he is not financially dependent on the university. He was also able to wean his program of international donor support in a very short time. In a sense, he is free of both the state university requirements and international donor expectations, allowing him to develop an array of programs ranging from economic training to business management and even training of journalists. I find the training of journalists most intriguing and forward-looking.

We discussed earlier the demand of economic capacity and the society's perception and support of the relevance of the study of economics. Often people are afraid to talk to economists, fearing that a simple question will elicit an hour of incomprehensible lecture. There is nothing more fruitful than to educate journalists about economics and assist them to be curious as well as comfortable in reporting economic news. That in turn generates public interest and demand for quality economic analysis.

In summary, the greatest challenge in building capacity lies with education, and economics education requires both long-term donor support and commitment from the local community.

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- 7,219 gallons of waste water
- 927 pounds of solid waste



For the last 15 years, the World Bank and its partners—private foundations and governments—have supported the “centers of excellence” for building capacity in modern economics education and research in developing and transition countries. To scale up these efforts, the Central European University (CEU) and the World Bank jointly organized a conference entitled “Scaling Up Capacity Building in Economics Education and Research: Lessons Learned and Future Directions,” which took place at the CEU campus in Budapest, Hungary, on June 14–15, 2005.

The joint conference brought together representatives of the following regional centers of excellence: the African Economic Research Consortium (AERC) in Nairobi; the Economics Department of Central European University (CEU) in Budapest; the Economics Education and Research Consortium (EERC) in Kyiv and Moscow; the New Economic School (NES) in Moscow; the Center for Economic Research and Graduate Education (CERGE) in Prague; the China Center for Economic Research (CCER) in Beijing; and the Global Development Network (GDN) in New Delhi.

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