CAPACITY BUILDING IN ECONOMIC EDUCATION AND RESEARCH: A NOTE ON THE EXPERIENCE OF LATIN AMERICA AND THE CARIBBEAN (LAC)\textsuperscript{1}

Mauricio Cárdenas\textsuperscript{2}, Fedesarrollo
Guillermo Perry\textsuperscript{3}, World Bank

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Summary

The economics profession has been extraordinarily dynamic in Latin America. Most countries now have a significant number of professional economists that can handle complex analytical problems. Central Banks have been at the forefront in promoting professional expertise in economics, followed by think tanks and universities (there are currently 131 think tanks 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 governments 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 non-profit organizations) to students that are able to pursue PhD programs in top schools in the U.S. and Europe. On the other hand, regional universities that offer high level master 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 that are not able to pursue doctoral programs abroad. Fiscal adjustment implies that universities have charge competitive tuition fees, provided that there is access to educational loans.

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\textsuperscript{2} Executive Director of Fedesarrollo, a policy research center in Bogotá, Colombia.

\textsuperscript{3} Chief Economist, Latin America and the Caribbean, World Bank.
1. **INTRODUCTION**

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).

The economics profession has been extraordinarily dynamic in Latin America. Most countries now have a significant number of professional economists that 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. Top 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. First, we want review the successful experiences in economic education and policy research in LAC, in order to draw lessons on what has worked in capacity building. Second, we look at the region’s strategies for scaling up the capacity building in economic 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, forty 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 them, training abroad was inadequate given 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 the promotion of a graduate program for Latin American students at ILPES, the teaching arm of ECLAC/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 programs. This was the case of Universidad Católica, and the Universidad de Chile (both Economía and Ingeniería Industrial) in Chile; at PUC-RJ
and Getulio Vargas Foundation in Brazil; at the Universidad de los Andes in Colombia; and El Colegio de Mexico in Mexico. These universities have excellent programs, as well as others that created them later such as Universidad del CEMA, Universidad de San Andrés and Universidad Di Tella in Argentina; and ITAM in México.

The existence of high quality masters’ 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 (Figure 1). Many of these students stay at the faculties of major research universities in the United States, the U.K. 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 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, p. 86).

**Figure 1**

**Graduates in Social Sciences in LAC**

**Annual average**

![Graph showing graduates in Social Sciences in LAC](http://www.ricyt.edu.ar)
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, although governments remain reluctant to support basic research, they are supporting a selective group of researchers that can perform 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 observed across the region.

For the scientific community, in general, one of the most relevant problems that need to be tackled 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. According to figures from the Science Citation Index (SCI), 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 (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 Social Sciences in Mexico are close to 60% of the total number of researchers, in Chile and Argentina this figure is under 20%.

**Figure 2**

**Publications registered in the Science Citation Index per 100,000 population (1990-2002)**

Annual averages

Source: http://www.ricyt.edu.ar
In the area of training, the most important challenge today is to consolidate and guarantee the quality of a group relatively young PhD programs in Economics. Some of the programs available today are located in Chile at Universidad de Chile, Argentina at Universidad Torcuato Di Tella and Mexico at Instituto Tecnológico Autónomo de México. The joint program of these three universities is called LADE which will be described below.

2. SUCCESSFUL EXPERIENCES IN ECONOMIC EDUCATION AND POLICY RESEARCH IN LAC

2.1 The role of think tanks

Think tanks (TTs) have been a favorite vehicle for the advancement on the economics profession in Latin America. Although the term is intrinsically vague and elusive, TTs 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 work (Braun, Cicioni and Ducoti, 2002). Not all NGOs can be considered think thanks. A think thank should follow scientific criteria, which means academic independence, peer review, and a commitment to high academic standards. However, TTs are versatile in terms of reaching different audiences with specific publications targeted at desired audiences. TTs regularly use the press, mass media, and newsletters for policymakers, seminars and conferences, as well as scientific publications to disseminate policy research.
There are also requirements in terms of the relationship with interest groups. A TT can easily be captured by these groups, so 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 TTs and consulting firms. A precondition for a successful TT is to maintain research freedom and no to be beholden to any specific interest. According to Dickson (1981), for an NGO to be considered a TT, it should:

- 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 (i.e. general equilibrium) effects of policy actions

There are literally hundreds of TTs in LAC, which can be classified in four categories: 1) Private research centers; 2) Political party foundations (intellectual in charge of preparing the parties’ political platforms); 3) Advocacy NGOs which do not produce research but act as sounding boards of certain ideas and ideologies; and 4) policy implementation TTs. Although the lines are somewhat blurred, Private Research Centers (PRCs) are the only type of TT closely linked with capacity building in the economics profession. Since the 1960s, PRCs have been functional in overlapping the academic, philanthropic and political worlds.

PRCs arose as a solution to the researchers’ need of academic and financial autonomy (many universities had been subject to political interference and instability), by allowing researchers to obtain better salaries, while providing independence. Several of the TT were also created with the specific goals of raising the level of public awareness and the quality of public debates on economic policy, and thus of economic policy itself. University institutes were of greater academic character, somewhat distant from policymaking concerns. As TTs evolved, other roles gained importance such as the training of the technocracy for key decision posts, which followed a ‘revolving door’ model that is common in the United States.

TTs have indeed changed significantly since the 1960s. Although they remain key strategic actors of the policy process, political systems have become increasingly more complex as many other relevant political actors entered the policymaking game. The channels of influence of TTs are no longer the traditional and more direct ones (e.g. political parties) but other groups in society that are decisive (the media, legislators, etc.). Moreover, think tanks are
generally outside formal political arenas (Stone, 1996), meaning that, although they are political actors since they produce ideas that influence decision-making, they play a role quite different that 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 their attempt to influence policy through analysis, rather than lobbying. This informality limits influence to certain aspects of the policymaking process, such as agenda setting, developing policy alternatives and shaping public understanding of issues. Of course, TTs cannot be responsible for final implementation.

In a recent study, Miguel Braun, Mariana Chudnovsky, Constanza Di Nucci, Nicolás Ducoté and Vanesa Weyrauch (2004), underscore the factors that explain why some TTs are more successful than others, in terms of their ability to influence policy. They look in detail at the experience of four Latin American research institutes and eight from other countries in Africa and Asia. According to their analysis, for TTs to be influential,

“[T]hey 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 in TTs’ 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 e.g. 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 through introducing new terms and shaping the policy discourse. This view acknowledges that policymaking is a complicated political process, involving many actors, with outcomes that are hard to predict. In

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5 The Latin American Economic Research Foundation (FIEL) of Argentina, Group for the Analysis of Development (GRADE) of Perú, Center of Public Studies (CEP) of Chile and, Foundation for Higher Education and Development (Fedesarrollo) of Colombia.
6 See the Global Development Project “Bridging Research and Policy” http://www.gdnet.org/rapnet/
this context, TTs do not have a clear path to influence policy. Their role in society cannot be compared to the formal arenas of political parties, legislators and executives. The role of TTs is much more informal, which gives rise to certain skepticism about their real influence and policy impact.

However, influential TTs continue to attract the attention of politicians and the media. Although measuring impact is elusive, the proliferation of TTs suggests that the generation of ideas and knowledge is a source of power, which cannot be ignored. Policy and legislation needs to be grounded in solid theories and evidence, and the role of TTs is to provide them. According to Braun et al. (2004), there are two conflicting views on TTs. At one end, TTs are seen as elite-ridden centers of power and governance behind the scenes. At the other end, TTs 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 multi-faceted roles of these institutes.

In line with most of the recent literature, we see TTs as political actors that have 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, TTs strategically interact with other key actors of the political system. Their main role is to produce some applied knowledge and translate the outcomes of research into different audiences. TTs are constrained by the formal and informal rules of the policymaking game and by their own organizational structure. These two factors make them more or less successful.

An overview of Think Tanks in LAC

Based on a project funded by GDN, Braun et al. (2004) build a Think Tank directory (available at www.researchandpolicy.org) which includes 193 non-profit organizations engaged in the analysis of public policies in Latin America (68% of these TTs are involved in the area of economics). Research centers at universities were excluded, on the grounds that they are not organizationally independent (which, however, does not detract from their research autonomy). The same is the case of foundations that are part of corporations or business conglomerates.

Only 13% of these organizations have annual budgets in excess of USD 1 million, suggesting that they are relatively small (44% have budgets between USD 100,000 and USD 500,000,
while 60% 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 IDB). 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% of TTs in the region, and are a clear channel of influence. Meetings with policymakers 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 to influence policy from hiring highly qualified researchers, usually with a Ph.D. degree. Think tanks usually incorporate external researchers or experts to their research teams when needed in order to develop their research. In LAC, unlike Asia an Africa, TTs in general do not include other stakeholders (such as the private sector and government). A TT in LAC typically has between 3 and 7 PhDs in its research team.

One key dimension in order to assess the role of TTs is the mix between demand- and supply-driven research. Demand-driven research facilitates influence (those that ask for research can be key actors in the political game –including international agencies). In contrast, TTs that have 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 and/or interests.

2.2 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 LAC. 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 technical rationality and the political rationality.
This 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. In more recent times, those that 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 outside world, were at the forefront in promoting professional expertise in economics. Following their path, other specialized academic centers and think-tanks were able to attract experts with an interest in national politics. Several ministries of finance have also enhanced their economic capability—at least at the top levels of the bureaucracy. Some governments, however, continue to operate with a relatively low level of economic expertise even today. The case of Venezuela is paradigmatic in this sense, and not just as a result of recent political developments in that country.

Capacity building in economic education and research has not been restricted to Central Banks and TTs. Other institutions of knowledge, such as research groups at international organizations and government agencies, private consultants or research departments of banks, as well as 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 them are based in Latin America, like ECLAC (Economic Commission for Latin America and the Caribbean), the Corporación Andina de Fomento (CAF), or FLACSO (Facultad Latino-Americana de Ciencias Sociales). The major ones, in terms of financial and technocratic resources, are however based in Washington: the International Monetary Fund, the Inter-American Development Bank and the World Bank.

The Inter-American Development Bank not only has a large research department with top class economists—many of them Latin American—but also promotes research throughout the region,
through the network of research centers.\textsuperscript{7} Research at the IDB focuses on the most prominent problems of the region, acting as a bridge between centers of knowledge in the industrial countries and local researchers throughout the region. More importantly, research outcomes have been very relevant for the design of economic policies in various countries.\textsuperscript{8} The Office of Chief Economist for Latin America at the World Bank also conducts a research program—in addition to the global one in 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 the region, generating positive spillovers on the local academic community.

At a more regional level, in recent years CAF has increased significantly its research and knowledge capacity. Its research department employs 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 U.S.— in order to attract a growing number of technocrats and improve the quality of policies. Prototypical examples are Departamento Nacional de Planeación (DNP) in Colombia (see Box 1), and IPEA in Brazil, but other examples abound (such as CORDIPLAN in Venezuela).\textsuperscript{9} Technical capacities at the legislative level have been typically week (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 they do not enjoy advisory services from multilaterals. As Javier Corrales (2005) 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”.

\textsuperscript{7} The Research Department of the IADB manages in total 7 networks. The Latin American Research Network 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 financing quality research to enrich the public policy debate in Latin America and the Caribbean. More than 40 projects have been financed since 1991 and 130 working papers published.

\textsuperscript{8} See Lora et al. (2004)

\textsuperscript{9} IPEA is probably one of the largest cognitive institutions in Latin America with 600 employees in 2005, half of them economists and analysts. Nearly 70% of the 300 economists and analysts hold PhDs degrees.
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 (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 very rarely attract top rated economists.

Improving the technical capacity of the Legislative branch, as it was done in the past with certain areas of the executive branch, is now seen as a top institutional priority. Legislators need an independent and non-partisan 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 Inter-American Development Bank unsuccessfully attempted to create these offices across Latin American legislatures. One of Venezuela’s most important policy reforms of the 1990s, the 1998 oil-stabilization fund, occurred after this office was created. The reform also boosted Congressional demand for technical knowledge.

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 US/UK graduate trained economists in the policy-making process in Latin America, in Colombia, since the early 1960’s, “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 Ph.D. economist with recognition in academic circles. The role of the technocracy as a key player in the PMP scene was strengthened under the Lleras Administration in 1966-1970. The President made wide use of the CONPES (Consejo de Política Económica y Social) as a vehicle to formulate policies, based on documents prepared by the Planning Department. Moreover, the implementation of those policies was often delegated to the technocrats, above the mandate of cabinet members.

The role of the technocracy achieved a high point during the López Administration (1974-1978). Not only the powers of the Monetary Board advisors and the Planning Department were 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 PMP was transferred completely to the Finance Minister, and, notwithstanding some exceptional periods,
it has become a norm that Finance Ministers are chosen among professionally trained economists, most of them with graduate training in top foreign universities.

Another high point in delegation of policy-making powers to technocrats was reached during the administration of Cesar Gaviria (himself a professional economist and former Finance Minister). The major step in this direction was the delegation of monetary policy to an independent board, which has become a stronghold of the technocracy. Besides this decision, it does not seem that there has been any enhancement in the role of technocrats in the PMP 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 have embarked on successful political careers.

3. Current strategies for scaling up capacity building in LAC

3.1 The role of LACEA/ECONOMIA

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, D.C. meetings of the Latin American Studies Association. At a meeting attended by close to forty 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 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 LACEA. 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 the first President of LACEA. Nora Lustig, then at the Brookings Institution, was
selected as Vice-President. On July 1, 1994 the charter members officially approved LACEA's bylaws and its first Executive Committee.

Under Albert Fishlow’s presidency (1993-1997) 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 and 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. LACEA has already hold a meeting outside Latin America (in Madrid), and the next one will take place in 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 Inter-American Development Bank and the World Bank, it created 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 series of seminars 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. Its 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 has hold throughout the year one or more academic meetings in different countries in the region, providing crucial feedback, and guidance to junior and seasoned scholars, allowing for further intercountry and interinstitutional networking and information sharing, as well as for interactions between researchers and policymakers.

10 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.

11 In 2004 the annual meetings were organized by the University of Costa Rica and INCAE. 230 articles were chosen for presentation and discussion in more than 70 contributed sessions. Such as successful conference held in one small country in the region (and in a more challenged sub-region), was a great step forward for LACEA. The previous annual meeting had been held for the first time in a location (Puebla) other than the capital city in one of the major countries, Mexico, organized by Universidad de las Américas – Puebla.
In 1999, at the Fourth Annual Meetings in Santiago, LACEA announced the launching of a new academic journal, Economia, modeled on the Brookings Papers on Economic Activity and Economic Policy. ECONOMIA has established as a central reference 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 reach within the region and even outside the region, with economists, other social scientists, and development practitioners interested in Latin American institutional, social and economic development. LACEA has over 1000 members; spread over 18 countries, and covering more than 300 research institutes in the region. LACEA’s professional standards are comparable with those of first world academic associations.

To respond to growing membership, internal networking, activities, and interactions with other networks, and in order to be able to fully exploit additional opportunities, 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 process. This secretariat will be provided for the next 6 years by a joint venture of two solid and prestigious institutions in Bogotá, Colombia: Fedesarrollo and Universidad de los Andes.

However, LACEA faces many challenges, especially in relation to fundraising efforts in order to insure the long term sustainability of our current activities, as well as to be able to grow and advance in the objectives of coverage, quality, interaction with other disciplines, and increased impact on the link from research to policy. Among other objectives, new thematic networks (economic history has high priority) need to be developed, while strengthening the existing ones.

3.2 Latin American PhD Programs
Figures from the Institute of International Education (2004) indicate that of a total of 279,076 international students enrolled in graduate programs in the United States in 2004, 65% came from Asia and 8% from Latin America (Figure 4). The fields of study are distributed as shown in Figure 5, where the percentage of students enrolled in doctorates in Social Sciences is 10,9% and in Business and Management is 15,7% (Figure 5).

According to the Report, India is the country that has more students enrolled in doctorate programs in the US (17.5%), followed by China (14.5%) and Korea (9.7%). There are three countries from LAC in the top 20 list: Mexico that ranks eighth, Brazil fifteenth and Colombia eighteenth (Table 1).

Table 1

Ranking of international enrollment in doctoral/research institutions in the U.S. (2004)
Percentage of total international students

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<tr>
<th>Rank</th>
<th>Place of Origin</th>
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<tr>
<td>1</td>
<td>India</td>
<td>17.5%</td>
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<tr>
<td>2</td>
<td>China</td>
<td>14.5%</td>
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<td>3</td>
<td>Korea</td>
<td>9.7%</td>
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<td>4</td>
<td>Japan</td>
<td>4.6%</td>
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<td>5</td>
<td>Taiwan</td>
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<td>6</td>
<td>Canada</td>
<td>4.3%</td>
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<td>7</td>
<td>Turkey</td>
<td>2.2%</td>
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<td>8</td>
<td>Mexico</td>
<td>2.1%</td>
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According to local sources (ministries of Education), the global enrollment rate in graduate education (as a percentage of total population) is 0.64% in the U.S., 0.11% in Mexico and 0.02% in Colombia (Figure 6). As a consequence, the percentage of professors with PhD degrees teaching in undergraduate programs is very low relative to the U.S. (13%): 3% in Colombia and 5% in Mexico (Chile is an interesting exception with a figure similar to the U.S.) (Figure 7). In many cases, university professors do not even have a masters´ degree.
Figure 6
Global rate of students enrolled in graduate Programs (2001)*

*Number of students enrolled over total population

Source: Ministries of Education

Figure 7
Professors with PhD degrees (2001)
Percentage of total professors in undergraduate programs

Professors with master’s degrees (2001)
Percentage of total professors in undergraduate programs

*Data for 1995

Source: Ministries of Education and World Bank
According to *Convenio Andrés Bello* (CAB), which is an organization that gathers information on cultural and educational programs in some Latin American countries, there are a total of 1,871 doctorate programs in different areas in the member countries of this organization\(^{12}\), plus Brazil and Mexico. PhD programs in Business and Economics represent only 2% 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 on models 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.

### Table 2

**Number of PhDs programs in Business and Economics**

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>1</td>
</tr>
<tr>
<td>Chile</td>
<td>1</td>
</tr>
<tr>
<td>Colombia</td>
<td>1</td>
</tr>
<tr>
<td>Cuba</td>
<td>4</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1</td>
</tr>
<tr>
<td>Paraguay</td>
<td>2</td>
</tr>
<tr>
<td>Perú</td>
<td>13</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: CAB

As a response to this situation, a group of world class universities in the region launched in 2000 the Latin American Doctorate in Economics (LADE). The 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 that will carry out original research and will contribute to the field of economics in Latin America. These institutions (as well as other in the region) currently offer M.A. programs that are very competitive (students are regularly admitted to the top PhD programs in the U.S. and Europe after they finish their local MA programs). However, not all students have the financial capabilities and personal readiness to travel abroad.

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\(^{12}\) Chile, Cuba, Perú, Colombia, Venezuela, Ecuador, Bolivia, Paraguay and Panamá
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 a pool of resources conformed by more than 50 academics with PhDs from the best American and European universities. These professors are responsible for a significant portion of the research published in the region, which covers a wide spectrum of theoretical and applied fields of economics.

The primary objectives of this organization are an enlargement of the student population and the expansion of the teaching and research capabilities. A particular emphasis will be placed in attracting candidates from universities that want to increase the number of PhDs in their faculty. Currently only a handful of universities in Latin America have faculties with a large share of PhDs. 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 level, 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 Ecuador and Bolivia. The goal of the program is to admit 10 students per institution each year. In Europe, the current enrollment rates goes between 12 and 15 students per institution for a doctoral program.

**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 other regions of the world. In response to the need for high level graduate education, several non-profit institutions have been created in order to fill the gap, basically by solving the market failure associated with limited access to financial resources.  

Colfuturo, a privately-run non-profit organization, supports Colombian professionals with high academic performance to continue their studies at masters programs. For example, INCE in Argentina, CORFO in Chile, FUNDAYACUCHO in Venezuela, INABEC in Perú and IECE in Ecuador.
or doctorate level. Through a loan-based system, incentives are geared towards 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 USD 12.6 million (56% from the local private companies and 44% from the Colombian government). Its actual net worth is USD $ 26 million, reflecting effective repayment of the loans given to students and profitable investment of its portfolio. The total support given to students has been USD $ 36,6 million, of which USD $ 12,6 million have been non reimbursable. The Total number of supported students is 1,318 (360 of which have received PhD degrees). Top destinations have been LSE, 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 5 years to pay the complete debt, which remains in US dollars. 50% 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% is forgiven.

COLFUTURO supports professionals in all disciplines such as Management, Engineering, Sciences and Arts. Selection is carried out on an independent and anonymous basis. It is made on academic merit, the quality of the study program chosen and the second language proficiency. 66% of total students have returned to Colombia (64% in the case of PhD training and 96% in the case of other graduate studies and diplomas). The organization created a Worked Brokerage Program to facilitate the placement of its beneficiaries in the job market.

Finally, COLFUTURO plans to increase the number of beneficiaries from a 126 average per year to 500 in the near future, and increase the return rate to 88% in 2013.

**Figure 8**

**COLFUTURO’s beneficiaries and applicants**

3.3 The funding of research in LAC
During the import-substitution era, direct and indirect public support to the development of technological capabilities was the norm. Key players were the national science and technological councils, in charge of formulating science and technology policies and promoting scientific research and technological development. As argued by Melo and Rodríguez-Clare (2005), the second component of the strategy 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 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 in the nineties resulted in the adoption of a new approach emphasizing demand-side incentives (ECLAC, 2004)\(^{14}\). The basic intuition behind this approach is to promote the demand for technological innovation and technological transfer at the firm level. Demand-subsidies are ideally allocated in a more horizontal and neutral way. There is no a clearer separation between funding for technological modernization and funding for scientific research. This divide has increased the availability of funds for the latter use, in part because the private sector has been more involved in providing financial support to technology funds, often as a counterpart to public funds.

4. 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 masters’ level. Above-average students are able to pursue PhD degrees in the best universities of the industrial countries, particularly in the U.S. 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, and—increasingly—in the private sector. Those that stay abroad are recruited by economics departments (the number of Latin Americans in 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 while participation in international conferences.

\(^{14}\) For a description of the process that led to this outcome, see Melo and Rodríguez-Clare (2005).
It is important to mention that the number of academics from the region that 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 become more independent and competitive, offering researchers attractive working conditions. These trends are very strong in the larger countries, such as Argentina, Brazil, Colombia, Chile 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 that want to pursue high level doctorate programs, related to the financial cost of these programs, as well as to the opportunities for obtaining admission into US universities. Countries in the region characterized by high degree of variance in 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 Ecuador and Bolivia.

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 from multilaterals and non-profit organizations) to students that are able to pursue PhD programs in top schools in the U.S. and Europe. On the other hand, the region should strengthen its universities, especially those that offer high level master 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 that do not want or are not able to pursue doctoral programs abroad.

Apart from some exceptional cases, the academic and research community still has difficulties in obtaining adequate funding mainly because fiscal adjustment has meant large reductions in 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.
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