



Educating Latin American Economists

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Abstract

Graduate economic programmes in Latin America have evolved along the lines of two different traditions: one closely linked to the current economic mainstream (being in that sense ‘global’) and the other more local and heterodox. This paper provides an overview of perceptions, interests, concerns and opinions of global Latin American graduate economic programmes, comparing them with similar programmes in Europe and the US. It reports the findings of a survey of Latin American global economics programmes and discusses the debate between global economics and traditional economics, arguing that there is a role for both, with global economics concentrating on the science of economics and traditional economics concentrating on the applied policy ‘political economy’ branch of economics – which is much broader than the applied policy training that graduate students get in global economics.

JEL classification: A11, A12, A23

1. Introduction

Graduate economic programmes in Latin America can be classified into two broad groupings. One set of programmes teaches what might, for want of a better term, be called ‘global economics’; what is taught in mainstream graduate economics programmes in the US, Europe and Australia/New Zealand.¹ Global economics’ lingua franca is English; it sees itself as a science, and it is becoming increasingly technical. The other grouping is more likely to teach non-mainstream, or what are often called heterodox ideas, and reflect local Latin American traditions, being in that sense more ‘local’.² It tends to be more historical, more leftist in its ideological leanings, less mathematical and less well-funded than its global counterpart.

While this paper focuses on global post-graduate economics programmes in Latin America,³ towards the end we discuss the relationship between global programmes and those with a more traditional

* The views expressed in this document do not reflect those of the Bank nor its Board of Directors. Eduardo Lora provided useful comments.

¹ We call it global, not US economics, to emphasise that what it teaches (except for some bias toward US statistical data) is not perceived as US-centric by those doing it any more than modern chemistry or physics is perceived as US centric. It is what is taught in those sets of programmes that consider themselves part of the global mainstream. Japan is the developed country that has most resisted the global movement in economics.

² The heterodox aspects of the programmes have international connections as well, and the faculty at these schools often have contacts with other heterodox programmes throughout the world, such as the regulation school in France and programmes associated with the International Confederation of Associations for Pluralism in Economics (ICAPE).

³ For a similar analysis, also inspired by Colander (2006), but focused on the undergraduate level see Lora and Ñopo (2007).

approach. We do so by comparing perceptions, interests, concerns and opinions of students in global Latin American graduate economic programmes, with those of students in the US and Europe. In this way, this paper provides background for considering the future of these two traditions.

The findings reported for the Latin American economics programmes come from a six-page online survey, which is similar to the one that Colander used to study US and European programmes (Colander, 2006, 2009a). While our plan was initially to focus only on global Latin American programmes taught in English (which is why we left the questionnaire in English), we quickly found that in Latin America even the global programmes are still taught both in the native language of the country and in English.⁴ The survey was accessible on the web between July 2006 and March 2007, allowing for both in-session and vacation time in the programmes for both the northern and the southern hemisphere. The survey took anywhere from 15 minutes to an hour to complete.⁵

We were not especially successful in getting participation, but after a couple of requests, we did manage to get 125 respondents from 20 schools, the three largest schools reporting being the University of the West Indies, the University of Chile and Ilades/Georgetown University Alberto Hurtado University in Chile. Students generally answered all questions. Some 41% of respondents were second-year students, 29% were first year students, 13% were 3rd or 4th year students, and 18% were fifth year or beyond students.

Because of the low response rate, and the lack of randomness of the responses, the results of the survey should be seen as most suggestive, providing us with a glimpse of Latin American graduate economics, and a reference point to discuss issues relevant to graduate economics education in Latin America.⁶

The paper is organised as follows. First we provide a profile of our survey respondents. Second, we compare and contrast Latin American student responses with those from the US and European surveys in terms of their attitudes, interests and views towards the profession. Third, we use the results as a springboard for a broader discussion of the relationship between global and traditional graduate education with special reference to Latin America.

⁴ 25% of our respondents stated that between 70 and 100% of their courses were taught in English; 17% said between 50 and 70% were taught in English, 22% said that 30 to 50% were taught in English, 13% said that 10 to 30% were taught in English and 23% said that between 0 and 10% were taught in English.

⁵ The survey was distributed by sending out email requests to 56 programme deans, asking them to send the survey out to their students. The survey was listed on SurveyMonkey; it allowed only one response per IP address, so unless students used different computers, they could only respond once. The 56 programmes were selected on the basis of personal consultations with economists from these countries. We crafted a preliminary list of institutions in the region from the programmes of the Meetings of the Latin American Economic Association, the Caribbean Economic Association (LACEA) and the Latin American Meetings of the Econometric Society (LAMES). We also did an online search of programmes and added a few other institutions that although they did not participate at the meetings that year had a postgraduate programme and an online presence. We believe that the resulting list exhausts the institutions that we are labelling as 'global' but we recognise that it also includes some more traditional programmes. However, since the questionnaire was in English, we would expect that it captured significantly more global students than it did traditional students.

⁶ We have reviewed the results with knowledgeable Latin American economists to see if they noticed any significant outliers and, except where noted, the survey results were consistent with their views. The comparison groups are roughly the same, although because Latin American programmes have separate Master's programmes whereas most US programmes combine their Master's programmes into their PhD programme, there are a greater number of first and second year students in the Latin American survey.

2. Profile of global Latin American graduate economics students

The average age of our respondents is about 29 years, which is three years older than the average age of respondents in the US survey.⁷ The percentage of women was 41%, which is higher than the 29% of the US survey. All but one of the students were from Latin American countries. A small majority (56%) went to graduate school directly from undergraduate college; most of those who worked before entering graduate school did economics-related work or research prior to starting graduate study. The large majority of students (80%) are native Spanish speakers (7% were Portuguese and 13% were other).

Most students came from upper-middle class backgrounds; more than 60% of their parents were college graduates; 7% of mothers and 16% of fathers had done graduate work. A majority (about 60%) did not consider going abroad to study; 20% considered studying in Europe and 10% considered studying in the US. They did not go abroad for graduate study primarily for financial reasons. Of those students surveyed who were planning to do a PhD after completing their Master's, 40% planned to do it in Europe and 60% planned to do it in the US. None planned to transfer to another Latin American programme. This reflects an important characteristic of global Latin American graduate education; it is to a large degree a feeder system into the US and European PhD programmes, rather than a set of self-standing programmes. Only about 10% considered another Latin American university than the one they attended. (This is far lower than the European and US percentages.) Most of the students were self-financing their education, although the programme tuition is subsidised by the government at most Latin American universities. 27% reported some government support besides the subsidised tuition, and 22% reported receiving a university fellowship.

The large majority of the respondents (81%) considered themselves Master's students; 19% considered themselves PhD students. This reflects a difference between Latin American graduate economic education, where, for many students, the Master's degree is a terminal degree at the university they attend, and US graduate economic education, where almost all students are directly admitted to a PhD programme. Even first-year graduate US students consider themselves PhD students who get a Master's degree on the way to getting a PhD; most first year Latin American students consider themselves Master's students who may go on to do a PhD degree at another school.

The standard course sequence that these Master's students take is essentially identical to the first two years in the US or European global programmes. The first year consists of core material (microeconomics, macroeconomics and econometrics), and sometimes includes an introductory course on mathematics. Students have more choice of courses in their second year and can take a range of courses such as economics of regulation, finance, economic development, project evaluation, as well as special topics in microeconomics, macroeconomics and econometrics, depending on the specialisation of the faculty. Most programmes require a Master's Thesis, written under the direct supervision of a faculty member, as a graduation requirement. The typical Master's programme takes two years to complete, but often advanced undergrads take Master's level courses during their senior year, and can complete the Master's programme in one year.

For the most part the students were satisfied with the programmes and with the economics they were learning. In response to a question about whether economists were relevant to society, 93% said yes. The reasons they gave for economists' relevance included 'economics informs policy-makers of consequences,' and 'good economics = good policy = well-being for society'. The percentages who would do it again were similar to the US, with 81% reporting that they would go to grad school again;

⁷ The average was raised by some older students in the 50s that were not present in the US study. It was lowered by the fact that there were more first and second year students in the Latin American study than in the US or European study.

5% said they would not, and 13% were unsure. However, there was less satisfaction with their programme – 60% said they would go to the same graduate school; 19% said they would not, and 21% were unsure.

The students' level of stress was about the same as students at other global economics programmes, although, not surprisingly, given that so many of them are self-financed they did report more stress related to financial considerations than did US students who often have fellowships that cover tuition and provide a living stipend. In terms of course work, 20% of the students found course work very stressful, 28% considered it stressful, 34% considered it moderately stressful, and 17% considered it not stressful.

In response to an open-ended question about what they most liked about graduate study, students mentioned the intellectual challenge, the tools they acquired, the real world expertise of faculty and their helpfulness/interest in students, the fact that they were getting a knowledge of the academic field and the economy, and the freedom they had to study what they want. Some of the students' dislikes included the low quality of some professors, the lack of job prospects upon graduation, their difficult financial situations, the short, intense structure of the Master's programmes, the heavy focus on exams rather than on learning, the large number of mandatory courses, the fact that no economic intuition was taught, only math and theory, the incompatibility of what they were learning with income producing work, and the lack of time both to study and to have a normal life.

3. Interest and views of Latin American, US and European students

Let us now turn to students' interests and views, and how these differ from other global economics students in Europe and the US. In

Table 1 we report the field interests of Latin American, US and European students.⁸ It provides the percentages of students who reported that the fields were of great interest to them.

Table 1: Percentage of students who have great interest in selected fields

	Latin Americans grad students	European grad students	US grad students
Economic Development	50%	37%	39%
Political Economy	50%	35%	24%
Microeconomic Theory	48%	43%	35%
Econometrics	46%	40%	22%
Macroeconomic Theory	46%	35%	33%
International Trade	43%	20%	19%
Money and Banking	38%	21%	21%
Public Finance	36%	20%	24%
History of Thought	34%	15%	9%
Law and Economics	29%	9%	15%
Labour Economics	25%	25%	32%
Comparative Economic Systems	18%	12%	9%
Urban Economics	12%	6%	11%

⁸ The US data in this table and the following ones comes from Colander (2006), and the European data comes from Colander (2009a).

There are a number of things to note about this table. First, Latin American students seem to be more interested in everything. Second, Latin American students are relatively more interested in political economy, money and banking, international trade, and the history of economic thought. Many of these differences are possibly explained by the greater number of first and second year students in the Latin American survey. First and second year students have not had a chance to specialise yet. Another possible explanation for the relatively greater interest in political economy, money and banking and international trade is that these fields are more relevant to the policy problems facing Latin American than they are to the problems facing Europe and the US. It is impossible to choose among these explanations.

The interest in history of economic thought may be explained in that it provides a connection to earlier Latin American writings, which are now generally only presented in history of economic thought courses, and because, even though we focused on those programmes that were most globalised, even these programmes are not fully globalised: they still teach history of economic thought (at least at the undergraduate level), whereas most US graduate programmes do not. In fact, a measure of how global a programme is may well be the degree of interest in the history of economic thought expressed by the students. The more global a programme is, the less interest students will have in the history of economic thought.

Some of the most remarked-upon results of the first US study (Colander and Klamer, 1987) were students' responses to the question of what characteristics would most likely put them on the fast track.⁹ Table 2 lists the responses of Latin American, European and US global students.

Table 2: Perceptions of success

	Very important			Moderately important			Unimportant		
	LA	EURO	US	LA	EURO	US	LA	EURO	US
Being smart in the sense that they are good at problem solving	60%	61%	51%	37%	34%	38%	1%	6%	7%
Being interested in, and good at, empirical research	51%	38%	30%	41%	51%	52%	8%	9%	12%
Excellence in mathematics	40%	40%	30%	51%	51%	52%	9%	9%	14%
Being very knowledgeable about one particular	20%	35%	35%	65%	48%	42%	14%	14%	15%
Ability to make connections with prominent professors	25%	30%	33%	43%	54%	40%	24%	11%	19%
A broad knowledge of the economics literature	25%	16%	11%	55%	53%	44%	16%	28%	35%
A thorough knowledge of the economy	40%	16%	9%	48%	39%	24%	11%	42%	51%

⁹ Students could interpret 'fast track' as they wanted. From interviews with students in previous studies, it was found that most US and European students interpreted it as advancing within academic economics.

As you can see, Latin American students see empirical work as more important than either US or European students, and they see being knowledgeable in a particular field as being less important, although that is probably explained by the greater percentage of first and second year students in the Latin American group. However, the largest difference here is that Latin American students considered having a broad knowledge of the economics literature and having a thorough knowledge of the economy as much more important than did the US students. This suggests to us that the Latin American students are not as single-mindedly focused on techniques as is the case in US programmes, and that the Latin American programmes are giving students a broader perspective of economics than they get at top US schools, another possible reflection of the incomplete globalisation of the programmes.¹⁰

A number of the questions in the survey explored student views on what economics was and how students' views changed over time. Table 3 compares the 'before' and 'after' views of Latin American students with those in the US and European students on a number of propositions.

Table 3: Current vs. earlier perspectives on economics

	Latin American students		European students		US students	
	Strong agree		Strong agree		Strong agree	
	Before Grad school	Current View	Before Grad school	Current View	Before Grad school	Current View
The study of mainstream economics is relevant for the economic problems of today	46%	61%	37%	34%	37%	44%
Economists agree on the fundamental issues	19%	18%	11%	9%	11%	9%
We can draw a sharp line between positive and normative economics	15%	17%	10%	9%	15%	12%
Learning economics means learning a set of tools	29%	54%	23%	41%	26%	36%
Economics is the most scientific discipline among the social sciences	34%	37%	34%	36%	46%	50%

As you can see, Latin American students saw economics as being more relevant both before and after beginning their graduate studies; they saw more agreement on fundamental issues, while US students saw economists as more scientific both before and after.¹¹ However, the Latin American students had a lower belief than the US ones that economics is the most scientific discipline of the social sciences.

¹⁰ We want to make it clear that we are not claiming that that interest is bad. We are simply describing the differences.

¹¹ For two of these questions, the phrasing was slightly different in the European and Latin American studies, so the results are not completely comparable. In the US study, the question about relevancy and about economic learning focusing on tools referred to neoclassical economics in the US study and mainstream economics in the European and Latin American study.

There was also a fairly substantial increase (from 29% to 54%) in the number of students believing learning economics means learning a set of tools.

Our interpretation of these results is that they are partly a result of the different content of the programme, and partly the result of the greater concentration of Latin American students in the first and second year, during which they get a Master's degree. The Master's portion of the Latin American programmes, like the first years of the US programmes, is more focused on tool-creation (microeconomics, macroeconomics and econometrics) than on ideas.

Table 4 reports Latin American student views on policy issues and contrasts them with European and US students' views.

Table 4: Views on policy issues

	Agree			Agree with reservations			Disagree		
	LA	EURO	US	LA	EURO	US	LA	EURO	US
Fiscal policy can be an effective tool in a stabilisation policy	37%	21%	21%	59%	59%	58%	3%	9%	12%
Central banks should maintain a constant growth of the money supply	8%	9%	7%	45%	28%	22%	42%	42%	50%
The distribution of income in developed nations should be more equal	45%	35%	32%	36%	43%	41%	15%	18%	18%
A minimum wage increases unemployment among young and unskilled workers	27%	26%	33%	32%	38%	38%	32%	25%	23%
Tariffs and import quotas reduce general economics welfare	47%	42%	51%	30%	43%	39%	16%	9%	7%
Inflation is primarily a monetary phenomenon	30%	20%	34%	20%	38%	33%	23%	27%	20%

Note: The sum of the percentages corresponding to 'Agree', 'Agree with reservations' and 'Disagree' in some cases do not reach 100% due to some respondents with no clear opinions.

For the most part, the responses are similar to US and European responses. Two results, do, however, stand out. Latin American students saw fiscal policy as more effective in stabilising the economy than either European or US students, and they more strongly favoured equality of income in developed nations. Regarding disagreements with the previous statements, Latin Americans tend to be stronger against the view that minimum wages increase unemployment among certain workers than their US counterparts.

Table 5 considers the Latin American students' views of economic assumptions and contrasts them with those of European and US students.

Table 5: Importance of economic assumptions

	Very important			Important in some cases			Unimportant		
	LA	EURO	US	LA	EURO	US	LA	EURO	US
The assumption of rational behaviour	41%	40%	51%	50%	53%	43%	7%	5%	5%
Economic behaviour according to conventions	22%	14%	9%	51%	55%	55%	17%	12%	17%
The rational expectations hypothesis	33%	25%	25%	54%	55%	58%	8%	15%	13%
Imperfect competition	66%	49%	37%	30%	44%	58%	1%	2%	3%
Price rigidities	30%	25%	14%	55%	61%	65%	11%	8%	11%
Cost mark-up pricing	21%	16%	5%	56%	50%	47%	10%	9%	18%

Here we see some major differences, especially in relation to the US. Specifically, Latin American students see imperfect competition, price rigidities and cost mark-up pricing as more important than either European or US students do, whereas the US students see the assumption of rational behavior as more important than do either Latin American or European students. The results are consistent with the other findings in the survey and suggest that the economics Latin American students are learning is somewhat more grounded in the real world than is what US students are learning.

We will summarise the remaining results rather than reporting them in tabular form. Latin American students' response to a question about students' political views were similar to the US and European students, with slightly more Latin American students than US students seeing themselves in the centre of the political spectrum.¹² Some 19% of Latin American students saw themselves as conservative; 35% saw themselves as falling in the centre; 13% classified themselves as left, and 19% classified themselves as other.¹³ While the political views were similar, there was not the movement toward the right as students progressed in their studies that one saw in European and US students. Instead there was a slight leftward shift in the Latin American students. Of the 20% who changed their political views in graduate school 56% moved to the left and 44% moved to the right. However, as was the case in the US and Europe, most did not change their views, and since the surveys were done at different times (2003

¹² Because interpretations of the terms liberal and conservative differ among regions, the wording was changed slightly in the Latin American and European questionnaires.

¹³ Answers differed among schools. For example, of the three schools that had the largest number of respondents, conservatives dominated at the University of the West Indies, while at Ilades/Georgetown/Alberto Hurtado, there was a wide diversity of views, and at the University of Chile, most students were centre/left.

in the US, 2006 in Europe and 2007–08 in Latin America), all we may be capturing is the change in the ideological mood over time.

Another question was an open-ended question regarding which economist, dead or alive, they admired most. While Keynesian economics may have faded from importance in the modern macroeconomics that is taught in global programmes, Keynes remains the most admired economist in the US, Europe and in Latin America. Sixteen students listed Keynes as the most admired economist; the next most listed economists, Adam Smith, Juan Antonio Morales and Arthur Lewis, were listed by six students each.

4. Global Graduate Economics in Latin America

The survey has provided a glimpse of global graduate economic education in Latin America that is currently dealing with questions of how it should change to keep up with fast evolving changes occurring in economics. While many Latin American programmes have found their niche as Master's feeder programmes for US and European global PhD programmes, many are also dealing with the issue of whether they should become global PhD programmes (and how they should be integrating the more technical side of economics that global economics focuses on) with the more real-world policy side of economics (which traditional Latin American economics programmes focus on). Put another way, the forces that separate the Latin American economics academic institutions into the traditional and global divisions seem to be also operative within the more global set of schools in our survey. Thus, in the second part of the paper, we reflect upon the struggle between these two traditions and what it might mean for Latin American graduate education in economics. While these struggles between these two traditions are neither new nor unique to Latin America, and can be seen throughout the economics profession's history, they are of particular importance to Latin American graduate education, and the survey results serve as backdrop to such a discussion.^{14,15}

What previously protected the traditional programmes in Latin America were the different languages and the diverse institutional cultures of Latin American countries and the belief that development economics was different than mainstream economics. These differences sheltered the Latin American programmes that focused on development and allowed local conversations to develop. This led to graduate programmes that had a distinct Latin American identity, and which tended to focus on more policy-oriented analysis that was more relevant to local policy makers than to global programmes. In these traditional programmes one published a journal article only if one felt like it; advancement did not depend on it. Advancement instead depended on one's teaching, one's ability to advise government, and one's ability to impress other economists in one's country and in the international economics community devoted to development, which saw itself as separate and broader than the economics in many other subfields of economics.

That has now changed. Development Economics has become an important sub-branch of mainstream economics, using the same tools and approach as other branches of economics. Simultaneously, more and more graduate programmes are shifting to teaching in English. Additionally, given the emphasis of fieldwork in the production of mainstream research, an important number of research projects involve

¹⁴ For example, the fight between the two approaches underlied the famous *methodenstreit*. A sense of the fights can be seen by looking at US textbooks in the 1800s and early 1900s, when the texts reflected an almost total domination of the traditional approach. At that time, the forerunners of the global mathematical global approach, such as Manfeo Panteleon's textbook, *Pure Economics*, were hardly used. (Colander, 2006).

¹⁵ What is now considered global economics only became dominant in the US in the 1950s as what might be called traditional US economics, (which had strong Institutional roots and which placed heavy emphasis on economic literature, history of ideas, and heuristic applied policy), was replaced by a more formal, technical, mathematical, and statistical approach that has evolved into modern global scientific economics (Landreth and Colander, 2002).

collaboration between US and Europe-based researchers with others based in Latin America, dealing with problems that are relevant for Latin America. This means that traditional Latin American economics will have to be making some important choices in the coming decade about how much they want to integrate into global mainstream economics teaching.

While we fully agree that Latin American programmes can, and should, further integrate themselves into global economics (we will elaborate on that in the next section), we also recognise the problems of global economics training for the majority of economists who expect to be going into policy rather than into global academic research. Specifically, in terms of preparing economic scientists, global economics training has much to be said for it. However, it has less to be said for it in terms of preparing more applied political economists/hands-on, policy oriented economists, whose job is to transfer economic knowledge into workable policies, and to argue for those policies to the broader community outside of economics. Latin America and other developing countries have a great need for these policy-oriented economists. They have far less need for the economic scientists that current global programmes are turning out. Searching for workable policy solutions is more engineering-like. It has different goals than pure science, which is primarily interested in understanding, not application. It can be argued that pure science should have nothing to say about policy because policy must be based on value judgements. That was the essence of Lionel Robbins' argument in his famous book on the scope and method of economics.¹⁶

There are many subtle points in moral philosophy relevant to translating the insights of science to policy, and someone trained as a political economist would have training in those subtleties. Most current global economics training provides little training in such areas and thus is deficient in training students to bring economic insights to policy. Either the students learn it on their own, or they don't learn it and become ideologues, arguing for views that are dependent on value judgements without admitting that that is what they are doing. The tendency for economists to do precisely that is one of the reasons non-economists, and economists who do not agree with the value judgements implicit in mainstream economic models, find economists so frustrating.

Globally trained economists have fit the two together by concentrating their analysis on what might be called 'hands-off' policy analysis. Such analysis is written for other economists or advisors more so than it is written for policy makers. To the degree the analysis actually comes to policy conclusions, those conclusions are contingent on the implicit value judgements and goals in the models. If the policy maker accepts these value judgments and goals, and if the world works like the model, then he or she should follow this policy, but knowing when to do so and when not is a specialty that scientists are not trained in – such issues are generally considered outside of science. Scientific economists must leave it to the intermediary between the economic scientist and the policy maker to do the translation. In Robbins' view, developing models that are more easily translated into policy, and doing the translation, is the role of the political economist, and thus the appropriate training for political economists would differ from the appropriate training for an economic scientist. It requires training in moral philosophy that is currently not part of economist's core training.

What global economists have most shied away from is 'hands-on' policy analysis. This hands-on policy analysis is different from the typical policy analysis done by applied micro economists, which is more econometrically sophisticated, and is meant to be a contribution to the scientific debate. Hands-on policy analysis is designed to contribute directly to the policy debates in a country. Whereas hands-off

¹⁶ In his book (Robbins, 1935) he provided the current definition of economics used in most texts. Robbins also argued that economists should speak out on policy, but they should not do it in their role as an economic scientist, but instead in their role as a political economist, where they explicitly make clear that their policy advocacy is based on value judgements as well as on economic knowledge. (Colander, 2009a). That separation between the science of economics and political economy, which was a central tenet of classical methodology, has been lost.

policy analysis concentrates on the scientific aspect of policy, hands-on policy applies scientific knowledge to policy by integrating economic knowledge and economic models into a broader framework. It deals explicitly with the value judgements rather than leaving them implicit. It makes the argument why consumer sovereignty is desirable, and better than the alternatives; it considers when individual freedom and market mechanisms are compatible and when they are not.

The reality is that global programmes provide students with little training in the moral philosophy aspect of policy, or in any 'hands-on' policy training. The problem is that such hands-on skills are needed by applied economists, and hence are skills that professors teaching students who will become hands-on applied economists, need to have. It is not training they currently receive in the core. The central focus of core training in global programmes is to teach students to become academic researchers, not to become teachers or practising economists working in a ministry or an NGO.

The difference between the two can be seen in the measures of their output. Output of global economists is measured not in terms of useful advice offered to decision makers, nor in any measure of how effectively students are taught, but rather in terms of academic journal article output. An article in *Econometrica* and the *Journal of Economic Theory* gets high weights in these global rankings. A book (even an enormously influential one such as Hernando de Soto's *The Mystery of Capital*), policy advice given to government on designing a working programme, or a pamphlet or newspaper article that introduces a new economic idea into the political debate in a country gets zero weight in global output measures, but would get high weight in a measure of a political economist's output. Global economics students are not taught how to do such work, or how to teach it.

The skills necessary for hands-on and hands-off policy economists are quite different. For example, to contribute to hands-on policy in Latin America, Spanish is a much more appropriate language than English. The ability to quickly study data and pull out the central elements is much more important than formal statistical analysis of heteroscedacity. The ability to write up a two-page analysis that summarises what economics has to contribute to a policy issue is much more important than the ability to write a journal article. The ability to communicate with non-economists is much more important than the ability to communicate with other economists. The list can be extended substantially.

By design, global economics programmes do not have the goal of preparing students for hands-on policy. Some global economics students nonetheless may have a natural ability at hands-on policy, and thus make good hands-on policy advisors. Their expertise in those cases comes from their natural ability or from separate training, not from their training within the global economics programme, although some of the skills cross over, and a high level of knowledge of the science of economics is extremely useful for a policy-oriented economist. The policy-oriented economist needs a consumer's understanding of economic theory, not a producer's knowledge; the two types of knowledge are quite different. While a global economist is interested in policy, his or her input into policy is generally as a technical expert – interpreting data and creating long run understanding. A hands-on policy economist must know how to use economic theory, not how to create it.

In short, political economy graduate training would concentrate not on preparing students to become economic scientists, with an ability to use the latest technical, statistical and analytic techniques, but instead, would see its role as preparing students to become hands-on economic engineers, with the ability to bring the insights of economic science to policy, and preparing professors of economics who will train students in hands-on policy. The focus of such a branch would then be policy design and implementation. The political economy branch would be more similar to engineering than to science, and would be applied economics not in the sense of being sophisticated statistical analysis, but in the sense of relating economic ideas to real world policy. It would consume, not produce, information in economic science. While this branch will probably pose new questions to its 'scientific' counterpart, it will not try to provide scientific answers to them. If traditional graduate programmes take on training

students as political economists, and not as economic scientists, they can complement global economics programmes, and not be in opposition to them.

The need for two types of training is not unique to economics. Natural science, for example, has a pure science branch and an engineering branch, and each has a separate training. There are, of course, various levels of implementation – the more hands-on, the more removed the training will be from graduate economics training. At some point, the training will go beyond economics and fit in public policy, not in economics. Our argument is just that significantly more training on implementation for future applied economists within graduate economic programmes is warranted, and global economic programmes, whatever their other virtues, are not providing that training.

5. Positioning Latin American economics in the future

In Latin America, many of the issues that would become central to the struggle between the global and traditional approaches were discussed almost 50 years ago, when, in a well known article, Pinto and Sunkel (1966) argued that Latin American economics should be separate from U.S. economics, because Latin American institutions and policy problems differ. Many Latin American economists shared their view, and a distinct Latin American economics developed. This forms the basis of traditional economics in Latin America today. That history meant that large portions of the Latin American economics profession were slow to adopt global economics. Instead, Latin American trained economists trained other Latin American economists, allowing traditional Latin American programs to differ from U.S. programs.

This view that Latin American economics should be different from U.S. economics remains strong among students today even among the globally oriented schools that we surveyed. In answer to a question “Should the research agendas of Latin American and U.S. economists differ?” students overwhelmingly answered yes. The reasons they gave included “different problems and the need to build a new economic system”, “different institutions”, “different policy problems”, and a general belief that “research should be specific to each country’s needs.” One negative comment noted, however, that some Latin American countries have no research agendas because they don’t do research at all.

In answer to a question “Should the graduate Latin American economic educational system be structured similar to the graduate U.S. economic educational system?” there was less agreement. A significant majority of the students answered no, since they felt that the educational structure should be designed to fit the specific problems and institutions of a country. However, the minority view was that a unified educational system makes sense, and since the U.S. education system is the best, Latin America should follow it. These answers differ from those in Europe, where the strong majority views were that there was only a global research agenda and their educational systems should not differ among countries.

While we agree that there is only one scientific economic theory, we believe that the type of economists developed and developing countries need may differ, and that the Latin American students’ views may be reflecting that difference. Specifically, developing countries may need economists with training in how to apply economic insights more than in how to develop new scientific insights. As opposed to being trained in pure research, which will benefit the entire world, Latin American and other developing countries need training in the “development” part of “research and development”, that is in how to translate economic insights into workable policies in a real world institutional setting.

Despite this influx of Latin American faculty trained in the US, Latin American programs are changing more slowly than continental European programs both because Latin America has no common educational policy, and because it has less of a need to rely on English since most Latin American countries speak Spanish, allowing Spanish to serve as a common language. Thus, whereas all the courses in the global European schools were taught in English, as we stated above, in the Latin

American schools we surveyed only 25% of the students had between 70% and 100% of their courses in English, and 25% had none. Only 32% of the Latin American students were going to write their dissertation in English whereas almost all of the European students were going to write in English.

Based on discussions with Latin American economists, and on our knowledge of the experience of other areas, unless a viable alternative is developed, it is likely that Latin American economics graduate programs in the future will become more technical and more global in orientation than they currently are. More and more courses will be taught in English; history of thought and non-technical political economy will decrease in importance, and global Latin American graduate MA training will become even less distinguishable from MA training elsewhere than it is now.

In thinking about this future, it is important to note that these developments do not mean that Latin America is succumbing to U.S. economics, which was a primary concern of Pinto and Sunkel. We say this because global economics has transcended U.S. economics. Although the geographic center of the economics profession remains the US, the *nationality* center of the global economics profession is no longer Americentric.¹⁷ Modern global economics is multi-cultural, not tied to any particular nationality. A large majority of PhD economists today (over 60%) graduating from top U.S. schools are now non-US citizens.¹⁸ As Sebastian Edwards (2003) points out, many Latin American students do well, and Latin American economists have a strong presence at all levels of the global economics profession.

Modern global economics is, however, tied to English, and one area in which Latin American students find themselves at a competitive disadvantage with U.S. students involves language. Since their native language is not English, and the language of global economics is English, Latin American economists have a harder time than those native English speaking students, or other students who have had extensive training in English. In our survey we asked students about these costs. In one question we asked students how much English reduces their productivity: 47% said that it did not reduce it at all; 16% said it reduced it by 5%; 16% said it reduced it by 16%; 12% said it reduced it between 10 and 20%, while 10% said it reduced it by more than 20%. To try and put a better figure on the cost of English to students, we also asked them how much of their income they would be willing to give up if they could change the use of English in Economics to their native language. 33% were willing to give up nothing; 16% were willing to give up 0-10%; 14% said they would be willing to give up 10 to 20%; 22% said they were willing to give up 20-50% of their income, and 16% were willing to give up more than 50%. Combining these answers, and recognizing that these are the students who have self-selected into a global program that they know is English oriented, and who responded to an on-line survey in English, the costs of using English are substantial to the students, and will likely be considerably higher for students in more traditional programs.

6. Emphasizing the Need of a Global Political Economy Branch in the Region

If our above arguments are correct, what Latin American and other developing countries most need are political economists—economic engineers. Global economics does not provide such training; it focuses on training pure scientists, and as long as that is the case, to the degree that Latin American programs become globalized, Latin American students are going to be pulled away from hands-on applying

¹⁷ Put into a broader historical perspective, the globalization of the economics profession is not such a novel change. In the late 1800s the economics profession was global and multi-lingual; training in languages was part of graduate training, and there were centers of economics spread throughout Europe, and less so in other parts of the world. In the 1930s and 1940s, the geographic center of economics shifted to the US, as there was an exodus of scholars from continental Europe. These scholars were central in the U.S. economics profession, so while the geographic center of the global economics was in the US, its nationality center has always been more global. Other areas, such as India or Latin America had less of a role, although there were important individual cases of influence.

¹⁸ U.S. students actually make up a larger percentage of students at less prestigious schools. (Colander, 2007)

economics and toward the creation of scientific economic knowledge. It is that tension that we believe was being captured in the student concerns in the survey, and is captured by the division between traditional economics and global economics.

The failure to provide specialized training in political economy is, in our view, a flaw in current global training of economists. That training funnels all economists through a single training designed for the creation of economic scientists. Ironically, economics, one of whose central insights is the need for specialization, does not take advantage of it in its training. Thus, our proposal is that there should be two types of global economics—one a global scientific economics very similar to what currently exists, and the other a global political economy, which is more hands-on and applied. This global political economy would grant PhDs in political economy rather than economic science, and such political economy PhDs could be the required credential for hands-on applied policy positions for economists, and for undergraduate professors of economics. A global economics science degree would be inappropriate training for such jobs in the same way that a PhD in physics is an unacceptable degree for an engineer.

The separation between scientific and hands-on economics within Latin American economics PhD training is something that de-facto has been happening, although the traditional and the global training are seen as much more in opposition than they need be, and, in our view, as they should be. The two complement each other; they do not substitute for each other. All too often the students see applied policy as a fallback job for students trained in a global tradition. Among those trained in the global tradition, those who succeed in their program, and who have no financial/fellowship obligation to go back to their countries, generally stay in the U.S. (or Europe) and focus their research on scientific economics. Even those who return generally have a strong desire to do scientific economics research; that's where they have training. Those who end up in applied policy positions manage, but they do so without explicit training.

Because of Latin America's need for economists with hands-on applied economics skills, we believe that Latin American programs should consider designing their graduate programs *with two separate tracks in economic training*—a scientific track, which is essentially the track now being offered in global economic programs, and a political economics track, which is designed to prepare students for hands-on research and for teaching students.

This political economy track would be more like the traditional training; it would involve training in a broader range of economics literature, and better knowledge of institutions, and of moral philosophy than is now taught in economics programs. For example, as opposed to writing a Master's thesis, students in political economy would be better served by writing, say, five short papers on policy issues, some with a time limit. Such programs may well be graded by practicing economists in the agencies and ministries where they will be working in conjunction with the professors in the courses. The agency economists can present the professors with a problem, which becomes the exercise. The students will have to survey the literature, compile available data, and do a ten-page report in a specified time period of from two days to two weeks. Another of the Master's degree requirements could be writing an op-ed piece for a newspaper taking a position on a certain policy.

To get some idea of how many existing students would fit the political economy program, we asked students two questions about where the student will be in the future. In response to the first, 61% said they planned to pursue an academic career, 9% did not know and 30% were uncertain. Another similar question asked where they hoped to be 15 years from now? In response, 32% said at a university, 32% said at a policy institute, 22% said in the private sector, and 13% said other, which included the public sector or international organizations. Finally, in response to a question of where they would like to work, 70% chose Latin America. Since it is likely that a global economic scientist would most likely want to be at a U.S. graduate university, our view is that about a third of the existing students in the

programs we surveyed would be better served by a program in political economy rather than a program in global economics.

The students' overwhelming view that Latin American economics should have a different research agenda from U.S. economics is consistent with the need for two different tracks. The Latin American political economy track would be more policy oriented, and would be the hands-on applied track. We believe efforts should be made to strengthen these traditional programs without losing their current applied-policy focus.

In our survey students certainly believed that something along that line was worth exploring. As we stated above, when we asked students the question "Should the research agendas of Latin American and U.S. economists differ? If so, how and why?" most responded that yes, it should be different because the issues and economies of developing countries are different, but they urged collaboration with U.S. economists due to their better training and funding. We agree. We also agree that creating these programs in a politically charged atmosphere will likely be difficult. Nonetheless, creating these programs offers a significant opportunity for Latin America to lead the way in blending the global scientific programs with the more traditional applied political economy programs, making the training more appropriate for applied economists.

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