

**Remarks of Antonio Spilimbergo on May 26, 2009 in Washington, DC at the conference
*Beyond the Fence: Research Lessons on How Immigration and Remittances Shape Global
Development***

This paper is different with respect to the other papers which were presented before for three reasons. First that we focus – I focused just on highly skilled people who go abroad to get tertiary education. The second that I tried to answer the question that was posing the (short ?) empty box by Lant this morning in the sense that probably the biggest effect of migration or labor mobility is not so much on wages; it's on mentality, on institutions, on political environment. And we don't know much about that. It's something that sociology calls (of power ?), but maybe it's much more important than the other variables that economies focus on.

And the third reason why this paper is slightly different from the others is that actually this is concluded work. So what I try to do is here justify, summarize what I have done, and give idea on what I'm working now and I think during – for the future that could be of interest of everybody.

First of all, a brief outline. I will explain why the issue of tertiary education abroad is so important for development. And I mentioned I will see that some border policy measures based on this. I will give some – (inaudible) – fact on foreign education democracy. Not everybody is familiar with foreign education. They think that if there's a large database which I constructed as starting from data from UNESCO going back to the '50s. We know basically from every country to every country where people went to study.

Second, I will just mention the regression results without paying too much attention to robustness because there you can find in the published paper. And I will spend a lot of time on interpretation and the agenda for future research.

First of all, this is a quote from your president, the president you elected twice, President Bush.

MR. : (Inaudible, off mike) – twice.

MR. SPILIMBERGO: Maybe one-and-a-half time. He is – in the speech – a famous speech of winning the war on terror and spreading freedom, he mentions that almost half a billion dollars is spent for education and cultural exchange programs with an emphasis on the master's (?) – (inaudible). These programs seek to improve the broader understanding of the United States and vice-a-versa. This actually was put as a way of justifying their location in almost half a billion dollar into the budget of 2007 just for educating foreigners.

This is an issue which is quite important, the U.S.'s quite famous Fulbright program. The Fulbright program has very strange characteristics because you basically – the American government is paying foreigners to come to the U.S. and to keep them out because one

condition to enter with the U.S. in many programs is not to stay in the U.S. Go with a temporary visa, and you have obligation to go back to your country.

As Ali was mentioning this morning, this is the ultimate idea of – we want Americans but not here. As he said, we want to educate people but not for them to stay here. And if you look at the Web site of the Fulbright program, it's an effective and prestigious form of public diplomacy. The program has enriched the lives of over 225,000 men and women, and has brought some of the most finest minds to the U.S. campuses. It offers insight into the U.S. society and values to future leaders from around the world.

So the U.S. has committed a large amount of money just educating foreigners, not because they stay here but because they have to go back to their country. And other potential – many Fulbrighters are involved in building institution government service when they return home.

What is puzzling about the Fulbright program is that it's seen as an instrument of foreign policy. It's not an educational instrument. It's founded by the U.S. Department of State; it's not funded by the Department of Education. So the idea is that do we know how this program is working. Do we know the U.S. is spending so much money on this – educating foreigners with the condition they go home? Is there any idea if this program is working or not?

Well, if you look at the statistics, probably it's working – some evidence. Well, these refer to two years ago. Three of America's strongest allies have started – a part of the – part of the education in the U.S. – the president of Afghanistan, the Mexican president, the British prime minister spent some time under the U.S. – I'm not sure under the Fulbright or not. And about one-third – 46 current and foreign heads of government are products of American higher education.

To get this data actually, I just went through – it's not totally – I just went through the – which were the government that the – the head of governments in 19th – I don't remember which year, but a cross section, and a look at the Internet and so where they got their primary, secondary and tertiary education. This is just a sample. I did this for the entire 165 countries of my sample and about two-thirds I think it was mentioned before has studied in developing country – has studied abroad.

I should mention that the U.S. is not the only country with this policy. Actually, the first country which started this policy was Germany in 1920s. The German basically started a program which is very similar to the Fulbright with the idea of increasing their sphere of influence in the newly formed governments in Eastern Europe. We're talking just about World War I. And afterwards the U.S. also had this idea and the Fulbright program started.

You are recently – you are familiar probably with Patrice Lumumba University in Moscow, which was found in '61 with the explicit goal of educating leaders of the communist country around the world. And also there, the idea was to educate them to bring them to

Moscow, to educate them, and they would come back to their own country to spread the idea, the ideology of the Soviet Union.

So this instrument of soft – of educating foreigners as a way of spreading soft power is not just the U.S., but it's quite vast and quite important. The problem is for us is that not only you want to spread democracy. Actually, the Soviet Union was not in the business of spreading democracy; it was in the business of spreading non-democracy around the world. So for the researchers, they needed to see whether this is a – we cannot just take how many people study abroad because depending on where you go to study, you can learn democracy, you can learn non-democracy, and so we have to focus on the composition of studying abroad, not only on the gross number.

Here comes the data. In today's hypothesis, I use the UNESCO rate. As I mentioned before, these are a snapshot of our (metrics ?) basically. You have the sending country, the receiving country for every year starting in the early '50s. So, you know, from Canada how many people went to the U.S., Japan, to Italy, and so on for every country. So I'm able to know where these people went to study. I'm able to know whether they went to Moscow or the U.S.

For most countries – actually from the '60s, but for many important receiving countries – just for the '50s – just to have an idea, these are the number of foreign students. Here I'm talking about tertiary education, university and above. This is the number of total students starting from around the '50s – was very little. Fifty thousand people were studying abroad. Now it's almost 3 million people studying abroad. I don't have the latest data, but I think they are increasing even more. Not only they – you have more students study abroad, but it's a share of population so increase quite dramatically.

Even though as a share of people enrolling in domestic universities, they decline slightly. And it's the idea that many countries in the '50s – you didn't have so many universities. These countries were building a lot of universities over time that actually went – many more people studied at home. These are just aggregate data of how many people went abroad to study, but even more interesting are the composition of where of where these people went to study. This is the share of foreign students going to the U.S. As you see, it goes between 25 and 35 percent up and down, but roughly on average, it's 30 percent.

In contrast, you see this is the Soviet Union. The Soviet Union basically was – and I think that here there is a problem with the data – but it was roughly 10 percent over three years, so 10 percent of foreign students worldwide went to the Soviet Union. And you had a collapse – an abrupt collapse in '81 because of course the communist regime failed and the Patrice Lumumba University had to find some other business. I think they recycled themselves as a peace university, something like this.

What is interesting is that also Muslim university – universities based in Muslim countries were an important pull of attraction, especially for Egypt. Al Assad, I think, is the University of Cairo, was attracting a lot of students from the area.

European countries have a mix. Sometimes they go up and down. This depends very much on the funding. We know that for instance in the U.K. the change of the legislation for foreigners became much more expensive to study. But more or less you're in three major receiving countries – Germany, France, and U.K. You have between six and 10 percent. So you have enough exposure of people – where people go to study in the U.S., Europe, or in the Soviet Union, local places. Other important local places are actually Buenos Aires or local pull of attraction for students.

Now, this is from the student side. Now, what I'm using is the standard indexes of democracy. Here we have the usual limitations of all of these indices. Basically don't spend much time but you have the ideas that you look at some characteristics if you are very – if you are transparent – actually it's a good government. If you don't have repression you have a one, otherwise you have a zero. And you have different ways of different rating different components. So people have constructed different indices.

Here, before going to the analysis, I need somehow to summarize the information where students go to study abroad because possible destination are about to 30, 40. I cannot put in the same – (inaudible) – for the variables. So the way in which I summarize is that a weighted average of the democracy, where the students go to study. So if all of your students go to study in the U.S., this index is one. If all of the students go to study to the Soviet Union, this index was zero. If it's half and half, it's a half. So it's a weighted index of democracy where the students went to study. And it changes every year because every year you could have a different composition.

Just so you have an idea of how this could affect – this is Chile – this is – we have good data starting in the '50s, and this is just a rough number of foreign students abroad starting in the '50s in the thousands, so you have an increase – about 4,000 by mid '70s and 6,000 at the end of the year – (inaudible). Here is the democracy – here is democracy in Chile. As you see, according to the, I think, Freedom House, Chile was considered a very democratic country up to the coup d'état, and after, it dramatically went down. And little by little it went up and up before becoming almost completely democratic after the '90s.

Now, it's interesting what happened to the number of students abroad. The total number had basically a steady increase with a wave of foreign students just after the coup d'état. You have a series of left-wing students who after the coup d'état left. More than in the numbers, actually, that you see between '71 and '72 doubled to almost 5,000, you see it in the composition. Basically this wave of students start moving to democratic countries. It makes sense because if you are in a country and if there is a coup – a right-wing coup d'état and you don't like the regime, you move abroad mostly to democratic countries; you don't go to another non-democratic country.

What is interesting is that starting in the mid '80s you see an increase in the composition – in the number of students going to more democratic countries over time. So it's

almost like you have an increase in the democracy where the students were proceeded – the actual movement of democracy. It's almost like some ruling class was studying abroad in democratic countries ready to take power, and after a few years, they came back and the government actually became more democratic. I don't claim a causal relationship, but it's interesting to study.

Similar study for Korea: Korea actually is one of the most important sender countries for U.S. They started from a very small amount in the early '50s and now they are one of the most – of the countries which send more foreign students to the U.S. in general. There are about 80,000 foreign Koreans studying abroad. Also in Korea, you have a very difficult – starting with democracy – worse and worse and over time – the mid '80s you have a very big increase in democracy. And also here you have some more of the increase of the democracy where the students were to study before – about 10 years before. So here, it's not a causal relationship, but I think – I found it very interesting, like, a good sign.

Well, now, these are just anecdotal evidences – statistical and anecdotal evidence because in Chile I could go on and on with the Chicago boys and the role of that and that is in the paper. But I think that, as an economist, we like more hard recollections (?) of – (inaudible). And the main recommendation that I ran in the paper, and after I will talk about a little bit of the – the robust – (inaudible). The regression has democracy – the index of democracy – one if you are democratic; zero if you are not democratic. Democracy five years ago, you want to control for the fact that there is a lot of persistence in democracy in the sense that if you were democratic five years ago, probably you are democratic even now.

The number of students abroad – just a rough number normalized by the total population because of course if you are somebody and you have two students abroad then you have to normalize for the population. Index for democracy in receiving country: This is just a variable that I plotted before just to give a sense. And here is interaction between how many students and how – how is democracy in the receiving country with the idea that if you send a lot of students to very democratic countries, you are much better off than otherwise.

What is important, I put also country – fixed effect. Here I controlled for the fact that Switzerland is Switzerland, Zimbabwe is Zimbabwe. So all of this – this is quite important because we know that democracy had a long-term characteristics, long-term determinants and we have to take that into account.

(And time takes ?) effect, also that is important because of course the number of students abroad increase. Also democracy was spreading all around the world. So I could capture simply the fact that you have two variables moving over time in the same direction. So I control (put in time ?) fixed effect.

With the specification, I estimated – (inaudible) – with data at five-year intervals between '50 and 2005. And actually this specification is very similar to the specification which is used in the studies by Daron (ph), Simon, and of course also on the effect of democracy in

education and democracy. What I found is that actually I don't want to spend too much time – usually we spend more time on the technicalities that – but I think the regression I like the most is the correct one, is the system – (inaudible) – for a series of reasons that I will explain in a little bit.

And what it shows that – the number of students abroad is not so important, as we expected. What is more really relevant is that democracy in host country, and especially the interaction between democracy and those country, and the level of democracy – (inaudible). This initially is plagued by a number of issues, and the number of issues are reverse causality. Of course if you cut this movement toward democracy, you are – you tend to – in the paper there are a lot of issues about causality – robustness – (inaudible) – specification.

I will not spend too much time on this issue because I have three minutes – just for the paper if you like, but I think that it's – what I wanted to say that it's robust correlation; it's not just a fluke. It's – I tried to hammer it with different hammers, different – but it didn't break. What is somewhat interesting to talk about is possible mechanism. Well, there are several mechanisms why having foreign education could improve democracy at home. The first mechanism, which is (trivial ?) – transfer of ideas. You go abroad, you study abroad, you like the country where you are, you like the democracy where you are, you come back and you import the same ideas. This is actually the most trivial channel.

There's another channel, which, as I call it, the technocratic hypothesis, which is actually fundamental for the Soviet Union. You are this regime – also for Chile. You have a regime which had – which is not doing well economically – a ruling Gorbachev who wants to change the regime. So he wants to import some technocrats which are – which can – who can change the system. Of course good technocrats have studied abroad, and Yakovlev – when Gorbachev called Yakovlev in '85, '86 just to stop the perestroika Yakovlev says, well, I would like to help you but I study abroad. I don't tolerate dictatorial regime. I can help, but don't dream that I'm helping just to you help you with the economic. I work for you just if you put some conditions on democracy.

And this is part of the interesting story. And so some of the technocrats who studied abroad, I have some human capital that are available to the sell to the government not only at some price but with some condition. This played a very important role at the beginning of perestroika. Also for Chile you could argue that there was a case like this. Usually good technocrats are not able to – they want something else changed.

Contact with the – (inaudible) – another reason why studying abroad could have an importance. Well, take Burma now. You have the Nobel Prize laureate – what's her name – however, the first – (inaudible) – formation had served a lot in terms of contacts. So she's untouchable. No journalist – no military regime can touch her if not at a high cost. The cost is there because she studied abroad and she developed contacts with foreign journalists, she knows the language and so on. So the fact that having foreign links has a very important role in the democratic process at all.

So for her – from now, these are just benevolent reasons. Basically who study abroad want to import some value – who study abroad want to import some values at home. Here's nothing of benevolence. We know from several studies that actually educated people have higher return on capital under democracy than under non-democracy. So you don't care about democratic regime or nondemocratic regime, per se, but you care about earning more money. You go home, you are a doctor, you know that with a democracy you earn more money. So you endorse – you push for democracy not so much because you are benevolent but because you defend the return on your human capital.

Fifth, identity – and here has to do something with a work of actually – (inaudible). And we know that identity can play a bigger role in economical development. We know that identity develops as a critical age for many. And if during that critical age you're abroad, you develop a kind of cosmopolitan identity and you like to have also a – (inaudible) – you don't tolerate repressive – repressive bad regime. You want to have something – so it's something – it's linked actually to the first hypothesis. But it's more based on the lifecycles, even that you studied when your identity was formed, you want to continue with your identity also when you're – (inaudible).

Finally I think that the future agenda – I think that here there is a big role – this (data ?) has looked just at one place of where elites – because at the end of the day, educated people are just two or 3 percent of the population in many developing countries. But this paper, as other papers, is showing how elites can have a role on macro and institutional development. As a macro economy sometimes we ignore these – also developing economies ignore the role of elite in many case because it's difficult to measure. This is not because people think it's not important, but because it's very difficult to find good experiment, good data. There are – (inaudible) – so this shows – I think it's a first attempt of showing how a – (inaudible) – immigration of elites have a big impact on institutional framework later on.

Second, I think economists – we are – I think we have to admit that we have an admiration for engineers, especially (hydraulic ?) engineers. So we always talk about flaws, transfer or so on. The problem is that the main flows was taken now. We talk about brain drain, which sounds also bad. And the problem with the hydraulic approach to remittances to migration and so on is that we are missing an important fact that people and ideas can flow in different directions. Essentially you move abroad, but you can send ideas back. So I think that the hydraulic approach is good for many purposes, but here could be very limiting for us to really understand what is impact on development, ultimately also economics of migration of highly skilled people. So we are a little bit prisoner in terms of terminology and way of thinking of our – of the physiocrats (ph) which first I thought – important the hydraulic terminology to economics.

Okay, I'm done.