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## P R O C E E D I N G S

MR. TALVI: Good morning. Welcome to you all and thank you very much for coming today. We have a fascinating topic today and a wonderful panel. The discussion will be centered around two very, very interesting reports, one by CAF, which is "Enhancing Productivity in Latin America: From Subsistence to Transformational Entrepreneurship," and the other one by the World Bank titled "Latin American Entrepreneurs: Many Firms but Little Innovation." The CAF report will be presented by my friend, Pablo Sanguinetti, who is the director of socioeconomic research at CAF. The World Bank report will be presented by Julian Messina, who is senior economist at the Office of the Chief Economist for Latin America and the Caribbean at the World Bank. The discussants will be Christian Gomez, Jr., who is the director of energy at the Washington office of the Council for the Americas, and my very good friend, Ernesto Stein, who is the principal economist at the research department of the Inter-American Development Bank.

So this is what we see as the situation in Latin America. I mean tail risks have apparently, according to market assessments, substantially diminished. The possibility that the fed will raise interest rates too soon and too fast, the possibility that the eurozone might go through a turbulent breakup process, the possibility that China might have a hard landing, apparently these tail risks as we call them now have in a sense dissipated.

On the other hand, we do have softening commodity prices, but still they remain very high. We do have tightening international financial conditions, but still the borrowing costs remain very, very low and capital inflows to the region are still very, very strong. So the external environment is still as benevolent and as favorable as it can be. Nonetheless, the region will be growing this year at a very disappointing 3 percent, which

is very close to the historical average in spite of these still very favorable conditions.

So I think that after close to a decade of certain complacency in which many countries of the region, especially those that are commodity exporters and less dependent on the U.S. business cycle, grew at twice the historical average pushed by favorable tailwinds. Now we are starting to refocus on what we should be focusing on through the whole decade, which is productivity enhancing measures to strengthen growth in the region.

So that's why I think we should all be welcoming these two very important reports around which we will center the discussion today because they are going to focus on a key element to improve productivity, namely how to overcome what I like to call the mini trap; i.e., the fact that the region is populated with very small and micro firms that are in many cases informal and that operate with very, very low levels of productivity and how to promote an environment that is conducive to the development of formal, innovative, medium- to large-size enterprises that will create good quality jobs.

So as I said, a really fascinating discussion ahead of us, and I would like to welcome Pablo to present CAF's report. Thank you very much.

MR. SANGUINETTI: Thanks, Ernesto. Thank you very much for all you to come here today. I'm very pleased to present this report here at Brookings. So we have very little time -- 10 minutes -- so I should rush. Ernesto will tell me when we have 3 minutes to end.

So this report, this case is related to issues on productivity, in particular to the issue of entrepreneurship. So we were saying that the main problem of Latin America is the lack of strong productivity growth in the last two years. What we say in this report is that to understand productivity, you have to understand how resources are allocated within firms and across firms. And to understand that process, we need to look

at a very important person, a very important actor, which is the entrepreneur, who is the one that creates enterprises and makes them grow.

So in this report we make an effort to understand why productivity would grow very little and to understand the role of the entrepreneur. We know that, of course, the entrepreneur does a lot of things for the firm so the firm can grow -- organize the firm, innovate, take risks, promote competition, and also could inspire a mentoring of other people, other future entrepreneurs. But for doing that in the right way, he had to have the abilities and skills. There is not such a thing as one million entrepreneurs. No, you have to have some special kind of abilities.

So in this report we make an effort at measuring entrepreneur abilities or entrepreneur talents in the sense that you have to have a guy that can manage firms, skills to do management, have a little bit of attitude toward taking risk, to be innovative, et cetera, et cetera. But also this guy has to have the right motivation, of course, has to have net worth of all the entrepreneurs, access to finance and quality inputs, and, of course, be in an economic environment that makes them to grow.

Now is the problem of productivity in Latin America due to the lack of entrepreneurs? So let's measure how many entrepreneurs we have in Latin America. Let's take first a very simple definition: Those people that manage their own business, whatever the size. If we do that and use the household salaries, we see that we don't lack entrepreneurs in Latin America. Actually, almost 33 percent of the economic population in Latin America run their own business. This is very high compared to the U.S. in which only 9.5 percent of the population run a business.

Now, of course, in this definition of entrepreneurs there is a lot of agility among these entrepreneurs. So let's take the definition and make it a much more precise definition: Those that employ other people. If we do that, then we see that among the

entrepreneurs that employ other people in Latin America is just 4 percent of the active economic population, and this is very close to the U.S. at 3.3. What you have in Latin America is a lot of self-employed, own account workers that manage firms with no employees. This is almost 30 percent of the active population. In the U.S. it is just 6 percent. So given that we have so many own account workers, of course, we have very little actual workers. These are only 55 percent of the population of the economic population against 80 percent in the U.S. And, of course, the firms that these employers in Latin America manage are much smaller. Only 9 percent of them have more than ten employees compared to 31 percent in the U.S. So the distribution of occupation of the people in Latin America somehow describes a division of firms in which you have an abundance of one-person firms or small or micro enterprises.

Now, this picture of a huge amount of micro enterprises in Latin America could not be a problem if this is just a picture at one time and then you see those micro entrepreneurs grow through time. So let's analyze whether these micro enterprises or micro entrepreneurs resemble those of large entrepreneurs. So to do that we did a survey in almost 10,000 households in Latin America in which we measured location, family environment, entrepreneur abilities -- how knowledgeable the people are, how much they are wishing to take risks, whether they are driven for business, et cetera. We also took the preference for salary employment. What we do is we take the reclassification of these micro entrepreneurs between large entrepreneurs, those that employ three or more people, and salary workers. When we do that, we get that only 25 percent of these micro entrepreneurs have features that are similar to employers in firms that have three or more employees. The rest, the 75 percent, are much more similar to salary workers.

So we would say that almost 75 percent of these micro entrepreneurs

are actually subsistent entrepreneurs. Only 25 percent are let's say opportunity entrepreneurs. Now, for this 75 percent we also tried to classify those who have the possibility to move to informal employment and those that do not, again comparing their characteristics with those of formal employees. And what we get is just only 25 percent of these micro entrepreneurs have characteristics -- education, innovation, motivation, et cetera -- that makes them similar to formal employees. The rest are just informal employees.

So this was stuff that we have are very consistent with other types saying that most of entrepreneurs in Latin America or the micro entrepreneurs come from unemployment, that these micro entrepreneurs have a low transition, low probability to employ one employee after one year. Also that most of these micro entrepreneurs have low probability to move to a formal employment. Now, this is not surprising. So the idea is that those micro entrepreneurs, most of them not only are not good at growing their enterprises, but also not good to have formal employment. So they have problems of employability.

In part this problem of going to formal employment is because in the region we have a low growth of formal employment. So it is a problem with the formal firms that grow very little. So in the book -- I don't have time to go because I only have 4 minutes -- we show that not only we have problems with these micro enterprises, we also have problems with the formal enterprises, those that have ten or more employees. For example, here you see through time a firm that was five years old and the size of the firm and you see how the firm grows through time. And when it was 40 years old in U.S. that firm is eight times greater, larger, in terms of employees. In Mexico after 40 years, it's just two times larger. So we have a problem of growth of formal firms that, of course, generates low employment and, of course, incentives for self-employment.

I don't have time to go to all the reasons why we have also a low dynamic of growth of formal firms. For sure, Julian will talk about that. This has all the reasons there. But let me go to what we -- given this reality, what do we need in Latin America to increase productivity? We need this productivity information that changed the structure of the population and also changed the size distribution of firms. What we need is to shift this amount of self-employed workers, most of them, 75 percent remember, to formal employment and, of course, we need firms to become larger in the region.

How we do that? Well, we need policies. And talking about policies, it's good to talk about what we call the ecosystem, which is integrated by four components: The first one, entrepreneurial talents or the initiative to identify the guys who have good entrepreneurial talent. We have to not only identify them, but also give them schools, teach them. Second, of course, we have to connect these guys with the innovation system of the countries. Third, of course, financing, not only -- here it's not important lending from banks, but also seek capital assistance. And fourth, we need to improve the employment capabilities of our population. Maybe some of these guys with high talent to grow a firm will have problems to do that because they don't find the workers. So we need that, too.

In the book we go through all these types of policy initiatives. I don't have time now to go into detail. What are the policy challenges for entrepreneurship and productivity given this diagnosis that I have been talking about? First, we have to increase employability of subsistent entrepreneurs. When these guys with high talent to create firms go to the labor market to hire people, they will not find them. They're all hiding in the self-own account activity, in the self-employed. And, of course, because they are managing very small firms with low productivity, through time they lose their human capital. So it is much more problematic to put that guy in a formal job. So that's

why we need to increase the probability of subsistent entrepreneurs.

Second, we have talented guys and we have it through all the income distributions. Already I showed you that 25 percent of the micro entrepreneurs have abilities to run a firm with capacity to grow. So we have to support these guys, including those among the micro entrepreneurs. The question is how we distinguish, how we identify them. So in the book what we say is that we need new tools. For example, doing this survey in which you try to measure these abilities -- you innovation and drive, management capacity, et cetera. You can do that. Some development banks in Latin America are now allocating micro grade using some of these instruments because this -- let me say some Argentinian things -- message of entrepreneurship could be hiding in a slum in a poor neighborhood, but they are good. But, of course, you cannot throw a ball to the guy to show the guy's ability. It's much more difficult to identify good entrepreneurs, but we need to do that.

And fourth, once we identify the guys and maybe we give them cooperation, we give them courses to teach them, how we help, for example, financial help, how we allocate that for each? Well, I don't have time to go, but in our book we show that firms that grow the fastest are the ones that are the youngest. Notice growth is not related with size, but with age. The youngest firms grow the fastest. So maybe we have to use age instead of size to allocate some of this support.

Let me finish in saying that abundance of self-employment and micro entrepreneurship is a phenomenon that explains in part the local activity, but this also is closely linked to the slow growth of formal firms and that the two issues are very much connected and we need policies that seem to break this vicious circle. Thank you very much.

MR. GRANOVSKY: All right, thank you very much. Thank you,



Ernesto, for the invitation. Thank you to the Brookings for having us here. Let me start saying that this is joint work with Daniel Lederman, Jamele Rigolini, and Samuel Pienknagura, who is here in the audience, and has benefitted from the contribution for a large number of co-authors and friends, including all the support from Augusto de la Torre who is our chief economist who is here also in the audience and will take all the difficult questions later when we have the discussion.

So we are going to start with a motivation that is very similar to what Pablo was just putting forward. I'm going to just present them in a slightly different way, but the main messages are very consistent. We're going to start by just postulating with this graph, that development is associated with occupational change. As countries develop we do observe at least two things that are very clear in the data. One is that people move away from agricultural jobs and this we know from the work of Madison and the people who have documented later on.

The second thing is perhaps less commonly cited, but is the fact that, and Pablo was mentioning earlier, is that people move from all sorts of informal types of employment, typically self-employment, into dependent employment, into wage employment. And this is the yellow part in this graph that as you see grows as countries are richer. How does Latin America look like in this particular landscape? Well, Latin America looks like in the middle of the road. We still have a very large number of own-account workers, more than 25 percent of all workers in Latin America are own-account workers, and people who work in micro firms and don't receive Social Security through their jobs, so people that we can label as informal workers. We have them in some countries like Peru, Paraguay, Colombia, more than 50 percent of the workforce is actually employed in micro firms that don't offer benefits to those workers. Very few people except for countries like Uruguay, Chile, and Argentina workers are wage

employees. That's the red line in that graph there. So it's no wonder that policymakers have worried about informality and this has to a great extent determined our policy agendas. And simplifying a lot, our policy agendas have tried to transform that yellow line, which is the yellow part of the graph, which are the people who are working in micro enterprises into formal enterprises that are big. So we are moving into a world of yellows into reds. That has been our policy focus.

Now, contrary to popular belief, I'm going to put forward two factors I think are very important. First of all, informality and smallness are not synonyms. There are plenty of formal firms which are tiny in Latin America. Actually, the vast majority of Latin American firms that have registered and paid taxes have less than five employees, more than 90 percent of them. More than 50 percent have zero employees. So making the parallelism of being informal and being small is perhaps not entirely correct.

The second issue is that how formality occurs, how do countries generate more formal employment, in general has little to do with the micro firm that grows a little bit, becomes formal, and it starts offering good jobs. It has much more to do with people moving from these micro firms to medium and large firms or are the ones that are offering the good jobs or are the ones that offering the jobs that have benefits and so on.

Another way of saying this is what this graph shows; that is very simply that the countries that have managed to increase formalization the most during the last decade are the countries where the medium and large firms have grown fastest. And as I said earlier, it is important to understand why formalization occurs through moving into these formal and large firms because these large firms are actually the firms that are offering the best jobs in the economy. They are more productive as this graph shows in the edge. The advantage of medium and large firms over micro firms in a whole range of

indicators, large firms are more productive. They export more. They are more likely to innovate, to produce patents, and not surprisingly to a similar type of workers they pay higher wages. On average, a medium and large firm -- a large firm pays an average 60 percent more to a worker in Latin America than a small firm.

So somewhat provocatively in this report we start with the following postulate: Maybe we need to rethink a little bit our entrepreneurship policies if we want to direct them towards high-growth potential. So going back to my graph earlier, maybe it's not a question of making those little informal firms, the ones that are in yellow and orange, grow a little bit. Maybe it's a question of understanding why the red firms, the firms that are large and offer formal employment, do not offer sufficient employment. So if you wish, what we are trying to put forward is that entrepreneurship policies should be about making these firms grow.

Now, the key issue is obviously how to make them grow. And in order to understand how to make them grow, we are going to be looking at entrepreneurship and the entrepreneurial act. Naturally, since we are talking about why these firms are actually not growing enough, we need to think about entrepreneurship and the entrepreneurial act in a very broad sense. And this is what we put forward in the report. We're going to use a very broad definition of entrepreneurship that was coined by the great Austrian economist, Schumpeter, in 1911, which is about newness. It is bringing new things. That's our entrepreneurial act. So he's not only creating a new firm, he's being in an existing firm, but entering an export market. He's starting to export, or being an exporter and starting to export to another country, or being an existing firm redefining yourself, finding ways of producing more effectively, more efficiently. All those aspects are going to be what we are going to be looking at in this report.

And I'm going to try to summarize the main findings in five messages.

The first is that no matter where we look at, our firms are, as Pablo was saying, very small and they grow not fast enough. This is looking at the firms that are large today in Latin America. What we see is that when we look at them when they were young, when they were just born, they were small compared to East Asia and high-income countries, but more importantly they grow. But after 40 years they never catch up. They keep on being smaller than our competitor firms.

Now, why is this happening? Why is it that the successful firms, the established firms, are not growing enough? Well, we're going to argue -- and this is our second message -- that they don't innovate enough, they are not sufficiently innovative. And they are not sufficiently innovative in no matter what dimension you want to look at it. Here we just show the percentage of firms in Latin America that are introducing new roots, so that they are coming up with new iPods or new versions of iPods or new versions of agricultural products. As you can see in red, all our Latin American firms are on the left. Latin American countries' firms -- and these are, again, medium and large firms -- tend to be less likely to introduce new products than firms in other parts of the world.

Our firms invest very little in R&D compared to other places in the world. Actually, the little R&D investment that Latin America features is mostly public. It's low and it's public. There is very little private R&D in Latin America. And when we look at process innovation, we actually look at how managers run their firms. And what we find is that using a set of objective indicators of management practices, Latin American managers are very far from the frontier. This just shows the average score in the countries we have data for. Now we have Colombia and it looks very much like Brazil. You see the U.S. on the right-hand side, basically the U.S. being the country where the firms are better managed, and you can see that Latin American firms with the exception

of Mexico are towards the left, towards being less better managed. And then again, this is a representative sample of firms between 100 and 5,000 employees. We are not talking here about the tiny guys. We are talking about the big employers. They still do things at subpar. They still do things in a different way than they do them in advanced countries.

So it's not surprising that if we look at objective indicators of performance, Latin America is not doing well in terms of innovation. This is just patterns, which is something that we can easily measure. And we are always below our predicted -- those dots are our predicted -- what our predicted patterns should be given our GDP per capita, given our level of development. We are not only below the median of those countries, we are also very low compared to our GDP levels.

The third message is that as we move up the ladder, we don't do much better. If we look at our super stars, our exporters, they are less likely to innovate than exporters in other places in the world. I have to say that these exporters react to the conditions they face. In 2009 a lot of firms in Latin America entered exporting markets because they couldn't sell things in their local markets because of the crisis. So they do react, but obviously they don't react enough. They are lacking the incentives to move there. And if we look at our super stars, the multinationals, the multi-Latinas, we see that in this indicator of performance they are better managed than the local firms. It's no surprise there, but they are worse managed than multinationals from other countries. So then, again, we are not scoring as well as other countries even at our super star level.

Now, I have to finish this sort of set of diagnostics with the same aspect that we believe is important. And this is the fact I would like -- this probably has something to do with the culture, but culture cannot be all. What this graph shows is that even formal multinationals, even American multinationals, when they go to Latin America,

they behave differently. They are less innovative than when they go to other regions of the world. So there's something in the environment, in the Latin American environment, that is actually preventing this innovation to happen.

To sum up our main message, we seem to be barking up the wrong tree. If we want to actually understand why Latin America is not generating good jobs, we need to understand better why our medium and large firms are not thriving, are not creating more employment, are not growing faster. We believe this innovation gap is structural and goes beyond culture. And obviously in the report there is much more information than I could present here. There is a lot of originating these messages that I'm giving and there is a lot in the right set of policies to promote and enable an environment that would generate sufficient innovation or the incentives to innovate.

Let me highlight two. I'm going to highlight two aspects which seem to be true across the board in Latin America where policies could enact in order to generate a more innovative environment. The first one is competition, but it's not any type of competition. It's competition in non-tradable sectors. Competition in tradable sectors is actually quite high in Latin America after the liberalization of the nineties, but it's in the non-tradables where we do observe a very, very high concentration. This is important for the incentives of the non-tradable firms to innovate, but it's also important because most of these services, most of these non-tradables, are inputs in the process for those firms that are exporting. So very little incentives on that side in terms of forces to push firms to innovate, and second, very little raw material for innovation.

We know that Latin America made a great effort in expanding education and that has to be prized. We know that Latin America still has to do a bigger effort in improving the quality of the schools now that actually we have guaranteed sort of universal access at least in primary education. But what the report brings about is one

aspect that is less known is that Latin America doesn't seem to have the right mix of skills to generate innovation, and in particular we do produce very few engineers compared to any other country in the world. And engineers seem to be important not only to be in our R&D departments, but also to be in the positions that generate the type of innovation that we are thinking of. Thank you.

MR. TALVI: Thank you very much, Pablo and Julian. This was really a lot of food for thought. So I would like to start out by asking Christian and Ernesto to comment on the presentations. Then we'll have an inter-panel exchange of ideas. So I will give Julian and Pablo the opportunity to respond to the discussions and then we'll open it up for questions from the public. So Christian.

MR. GOMEZ: Thank you, Ernesto, for this invitation to be here. Pablo and Julian, thank you very much for these two excellent presentations.

I'm going to focus today on the opportunity of entrepreneurs because I think some of the programs that are out there in Latin America that kind of focus on an entrepreneur that actually has options in the formal sector I think is something very interesting.

Some of the points that I took out of the presentations are, you know, there's a stagnating productivity growth, which I think goes to the heart of what's going on here. And if you look at the distribution of firms in the marketplace, you see kind of a very skewed size as was mentioned earlier with a higher concentration of micro enterprises.

I think entrepreneurship actually has a role to play here in terms of helping firms grow, helping to build skilled labor, and kind of bring some of these informal enterprises into the formal sector. And I think entrepreneurship actually has the potential to lead to economic expansion and stimulation.

The problem I see, and this was alluded to in some of the reports, was

we have entrepreneurial capital and we have entrepreneurial talent, but this capital and talent is not actually being brought to bear in a manner that's effective. And we heard it today, innovation I think is key; disruptive innovation where you go into the marketplace, you come up with a new idea, and you execute it to reach an audience. And R&D -- Latin America invests one-third of R&D compared to China. I think that's something that speaks for itself and the multi-Latinas are no different.

I want to point to a couple of programs that are taking place. One is Startup Chile and I'm sure you've heard about it. But basically the Chilean government is investing \$12 million to bring in entrepreneurs from around the world, giving them \$40,000 to start their own -- come to Chile and work on their business plans and start their startup companies. Because I think this addresses some of the major issues and this is mentioned in the CAF report; there isn't access to capital. Venture capital just simply doesn't exist in the region. People aren't willing to -- venture firms aren't willing to give money as they would in Silicon Valley to firms that simply are unknown to them. So I think low-capacity universities -- but you are seeing elements of things going in the right direction. For example, in Chile you're seeing the time to start a business actually ends up being one day as opposed to in some countries like Brazil it can take months to start a business. It can take months to open up a bank account. And the Pacific Alliance, which is the alliance between Mexico, Colombia, Peru, and Chile, has actually looked at entrepreneurship as an area to focus on and they've set up an association for entrepreneurs, which I think is a step in the right direction.

And I think there's so many market opportunities in Latin America. If you look at financial services, you see there are 9,000 banks in the United States, but if you look at countries in Latin America, you might have 20 banks. They're closing at 2:30 p.m. There's an opportunity there for disruption for that innovation ecosystem. And I think



speaking to some of my colleagues from business school who actually went down to do Startup Chile, I think what really they got out of it was those connections, the ability to work with others to kind of set up that ecosystem. They called it Chilecon Valley. It's really something that is unique and there are programs similar to it that are going up in Argentina and Brazil. A contact of mine said Chile is not going to live off of copper forever. There needs to be innovation.

So I think just to close, there are structural problems when it comes to as was discussed in engineering and science development in countries, infrastructure. And I think it's difficult for entrepreneurship in Latin America to grow organically. I think there needs to be a push from some of these programs as an example, but I think there is hope and I think there's a lot that can be done in terms of building that ecosystem for opportunity entrepreneurs. Thanks.

MR. TALVI: Thank you very much, Christian. Ernesto.

MR. STEIN: Thanks, Ernesto. Thank you very much for the invitation. I want to start by congratulating Julian and Pablo and the teams at the World Bank and the CAF for two excellent reports on an issue that I think is very, very important, the issue of entrepreneurship.

It is a very well-known fact that the stagnant productivity in Latin America is behind the relatively poor performance that Latin American countries have shown in terms of growth on issues of entrepreneurship such as the creation of firms with high-growth potential or the scale-up of high-productivity firms like Julian was mentioning are central to the region's performance both in terms of productivity and growth.

The reports have many similarities, but they also complement each other very nicely I think. They both have like an analysis that is very rich in the use of available data, in some cases producing new impressive data like the case of the CAF survey, for

example. Both are theoretically grounded in models of occupation and choice where a person is going to choose whether he's going to be self-employed or a wage earner or an employer. Both recognize that there is a huge heterogeneity in the nature of firms and entrepreneurs in the region and in the world. Latin America has a very large number of firms. Latin America -- and this may be a little surprising -- has even a large enough number of formal firms, but all these firms are born very small and they don't grow fast enough to overcome their initial smallness.

And at the same time the reports have different emphasis. The CAF one emphasizes more the role of the entrepreneur. Who is the entrepreneur? What attributes distinguish an entrepreneur from a wage earner or from a self-employed? Does Latin America resemble, for example, a city like Los Angeles in terms of the attributes that the population has in terms of their entrepreneurial ability? And it also emphasizes relatively more micro enterprises. And the World Bank places its focus on top-end transformational firms, not just new firms, but also existing medium and large firms, with a lot of emphasis on internationalization and in particular on innovation.

Both include very detailed analyses of firm dynamics, which I think is very important because some findings in the realm of firm dynamics lead to very important policy conclusions. First, it is not the small firms, but rather the young firms that generate net employment in the countries, and this has evidence behind it from the U.S. and from the region. And since Latin America has a lot of programs focused on small and medium enterprises, then the question becomes very relevant. Should we shift our focus not on policies toward the small, but rather policies toward the young? And both reports I think would agree with this statement, and I also think this is a reasonable thing to do.

But there is another finding in the firm dynamics, which is that not all

young firms grow fast and even the typical young firm doesn't grow fast. And if you think about it, it's not surprising. Even the formal young firms -- I mean there's lots of residential construction firms, legal services, dentists, auto mechanics, et cetera. From the get go, they never thought of the firms they were creating as particularly innovative or they never considered these firms as firms that would grow.

So it's not surprising and the finding is that the reason that young firms predominantly contribute to net employment is that the top of the distribution grow really fast. The ones that grow the most grow really fast. So from a perspective of creating jobs and creating hyperactivity jobs, maybe the efforts should focus not just on creating firms, not even on creating formal firms, but rather on creating firms with high-growth potential and also growing perhaps hyperactivity firms that already exist. But I'm going to focus, because I don't have much time, just on the creation of new firms.

Now, the creation of jobs is not enough reason for policy intervention. In order to intervene, you have to be grounded on some market failure. And if you think about -- and this is something that perhaps both reports could have had more detailed analysis of -- if you think about it, the freedom to take advantage of business opportunities is at the core of the advantages of a market economy and presumably an entrepreneur with the right skills will identify the high-growth opportunities and will pursue them. So why doesn't the market do this by themselves? That is a question that always one has to keep in mind.

And it turns out that there are at the initial stages of a firm arriving with market failures of different types. You have problems of, for example, the first entrance into a particular market, into a particular sector, may have high social returns, but low private returns perhaps. You may have issues of coordination, which are discussed in particular in the CAF report. You may need different actors with different skills to be on

board in order to take advantage of an opportunity, and the coordination among them may not be easy. You have issues of market failures in the credit markets associated to the low pledge ability of the assets, and this is particularly relevant for new firms. The old firms can collateralize their shares or a building, but new firms cannot do that. And all of these market failures are particularly prevalent in the case of more innovative, more transformational firms. Like, for example, the auto mechanic may not find it as difficult to find financing as Robert Schiller, to use the example in the World Bank, someone who comes with a transformational idea, but which is like an intangible asset that he cannot collateralize.

And so both because of the high-growth potential and because externalities are particularly relevant in more innovative transformational firms is that the focus should be I think on these firms, on these high-growth potential firms.

But now comes the million dollar question, which is how do you identify these high-growth potential firms, or as Pablo put it, how do you identify the entrepreneurial message? And so the CAF suggests that perhaps the survey can be used in order to identify entrepreneurial abilities. Perhaps you can do that, but I think that the key is not necessarily to identify exactly who are the winners, but rather to put policies in place that either leverage private sector capabilities to screen and identify the most promising firms -- I'm thinking of policies in support of inter-capital industry, policies in support of incubation, et cetera -- or you have to put policies in place in which firms with high-growth potential self-select into these programs. And I'm going to give an example of a program that is not consistent with this, which is probably the most popular type of program we have seen in Latin America, which is reduce the barriers to start the firm. If you reduce the barriers to start the firm, if barriers are high, if you have someone with the entrepreneurial ability of Bill Gates, probably he will go in regardless because his project

is going to be so good that even if costs are a little high, he will be in. So when you lower the costs, what you get in are the marginal firms and probably the firms that enter -- and there is evidence and actually we have a report at the IDB on productive development policies and there is one chapter on entrepreneurship. But like we discussed evidence that when you do this, the type of firms that enter actually their productivity is lower than the productivity of already existing firms. So this doesn't seem to be the type of policy that you want if you want to target the really high flyers, so I'm not surprised that that is what the World Bank finds.

Just going back to Messi, I think this is a very relevant metaphor. And it's not just about identifying the talent. So Messi obviously was very talented, but like most Latin American firms, he was born small. And he would not have grown enough in the absence of intervention. So the team where he started, they did not provide the growth treatment that he needed in order to become great. Barcelona did and the rest is history. So Barcelona plays a role of a venture capitalist or an incubator. They not just identified Messi, but they mentored, trained, identified complementary assets, et cetera.

So just to finish and to go back to market failures, which I think are really important. I'm sure that Julian and Pablo are going to join me in hoping that Barcelona's efforts provide a big externality one month from now when Argentina wins the World Cup. Thank you very much.

MR. TALVI: Thank you very much Ernesto and Christian for the very good and interesting comments. I think I would be interested in hearing -- I mean two things come to mind after hearing all of you. One, as Julian said, there is something about the environment. It's not that we lack entrepreneurs, so what is it about the environment? I have my own take on that, but I'd prefer you to try it.

What is it about the environment that prevents good firms from growing

into medium and large innovative firms and providing good quality jobs? Might it be that there's a macro aspect to this? I mean the fact that we are commodity exporters and, therefore, subject to terms of trade shocks? That we are very open to capital and, therefore, prone to be the recipients of hot money? And all these kinds of shocks create a lot of volatility and relative prices that would not allow you to be able to invest in technologies that need very long-run commitment, but you need this malleable kind of technologies and projects that need a very rapid kind of return. So my question would be maybe the problem is the macro and level in the environment?

And the second question that pops to mind is getting a little more detail in terms of the policy suggestions. I think Ernesto started a little bit in that way with the analogy of Messi, but I mean I hope you're not right, but what do we mean exactly by promoting young rather than small firms? It's just to kick off the discussion. You can feel free, Pablo and Julian, to answer what Ernesto and Christian just said, and then Ernesto and Christian, feel free to elaborate on these questions, too. So, Pablo.

MR. SANGUINETTI: Sorry all of you guys to bring this soccer thing while we are in the World Cup. So let me start with the first thing that Ernesto set up about environment. Of course, in Latin America the environment is not that nice compared to the U.S. or European countries in terms of macro-stability, financial markets, et cetera. And actually in our report we distinguish, for example, that the program of not having the medium and large firms with hyperactivity is not because the rate of debt of firms is lower in Latin American compared to U.S. It's not the problem. Maybe the problem is selection. Yes. Many firms that burn maybe are the ones that are not potential with hyperactivity and maybe some of the ones that die are the ones with low productivity. Well, in Argentina it's not surprising. We see that the average activity of the firm that dies after three, four, or five years are not the ones with low productivity compared to ones

with hyperactivity that survive. And this is related to your issue of stability. You know, when we have a financial crisis, everything goes down the tubes and even good firms can do that. So this is the thing about the environment.

The second thing you mentioned is policy suggestions. So as Ernesto was saying and also Julian said that it's not that we lack people with entrepreneurial talent. We have people. And, of course, the population, we mentioned that compared to Los Angeles, and we have people with entrepreneurial thinking. We have people that have management capability compared with Los Angeles. The problem is that many times we don't allocate these guys to the job they should be doing, creating firms. And let me tell you an example.

We did an interview in not only the population at large in 17 cities in Latin America, but also in four top MBA schools in Latin America. And we asked these guys, these people that take these courses, whether they think they'll open a business in the next three or four years. Most of them didn't. They want to get a good job at an international company. So in that sense somehow we see that because of the environment, because of culture, some of our countries are too conservative in the sense that being an entrepreneur is not seen as good as being a doctor or a lawyer. And even if you're from the low class, you may find some discrimination things to being an entrepreneur.

So for those reasons maybe we have a problem with allocation of talent in the population, and good talent is not allocated to great firms.

MR. TALVI: Julian?

MR. GRANOVSKY: Now, I agree obviously with what Pablo has just mentioned and thank you to the discussants for a great discussion. I think the issue of the environment, so understanding the diagnostics is fundamental to actually make

prescriptions for the policy. So the two questions in a way are part of a whole issue. And I agree obviously on the issue of misallocation of talent, but the way that we think about the environment is I think about it in three dimensions.

I first think about the incentives. So a person to create a new firm, there has to be some profits to be made. If you had an incumbent firm doing all these innovations that I'm talking about, changing the way you organize the firm is costly. It takes a lot of effort. So you have to have some incentives as well. If you are sitting in fat rents because there is very little competition in the market, you are making good profits. You don't have that drive to actually innovate. So the first thing, you need to have the right incentives in my view.

Once you have the right incentives, then you need to have the right tools. And I think in our report we bring forward two dimensions in which we are lacking in terms of tools. One is that entrepreneurs are not very good in terms of our managers are not very good. And more importantly, there is increasingly more evidence that they don't know that they are not very good. There is this very nice paper where they compare objective measures of quality of management with subjective assessments. There is virtually no correlation. So people don't know that there are other ways of doing things, there are more efficient ways of doing things, so there I think there is a space. There is a market failure there. There is a space for some mentoring, some policies that sort of help people to move forward.

But also the second dimension of tools is human capital. When we talk to entrepreneurs in the region, they tell us I created the firm, I grew, and I got to 20 employees. And then in order to move forward, I needed to start organizing the firm completely different. I needed to hire a sales manager. I needed to hire an R&D manager. And I don't find these people. They are not there. It's very hard to find these



people. So you need to find other tools.

And finally the third dimension is profitability. Once you have taken the risk, you have to be able to enjoy the fruits of your risk taken if you are good. And there I think the question was very well put forward by Ernesto. I think there is an issue of macro-stability, which is a dimension in which we think we have actually have improved a lot. So I would claim that we are much better off today in terms of generating an environment that puts the conditions for the profitability in the right set than say ten or 15 years ago.

MR. TALVI: Okay. Ernesto?

MR. STEIN: You asked about the environment and in particular about the macro, but there's obviously many dimensions to the environment and I want to mention just a few. Like one of them that I want to stress, I mean there are many that could be important, but has to do with some aspects of the institutions. For example, let's say that you have weak creditor rights and weak minority rights. So the problems of pledgibility of assets and the problems in the financial markets will be particularly severe. So that will mean that it will be hard to get outside financing. And so either you are not going to start some firms that should be started or maybe what you're going to do is to rely on your friends and your family in order to get financing from the family. So perhaps because of that I would conjecture that in Latin America perhaps the prevalence of family businesses may be higher than in OECD countries.

Now, once you have a family business -- so family allows you to overcome these institutional problems so you can get started, but the same things that allow you to overcome these problems then are a constraint when it comes to scale-up because your cousin and your uncle may not be good middle managers. So as you grow, you don't have the relevant people to help you scale-up and perhaps the market for

middle managers is not there. So that's one aspect.

Another aspect could be related to -- and this is a conjecture -- our university system. So many times in order to -- like a jack-of-all-trades tends to be better entrepreneurs than specialists because you need complementary skills. I mean if I come up with an idea for a cream, for example, and I invent it, I still need someone who's good at marketing and I need someone who's good at other things. So if I'm a jack-of-all-trades, then I may be a better entrepreneur than someone who has very specialized knowledge. And the education assistance in Latin America I don't think tend to produce jack-of-all-trades. They tend to produce specialists.

And also when I was studying economics, for example, I was surrounded by other economists. And in the U.S., for example, you're on a campus where you're surrounded by engineers and lawyers, and business and marketing majors, et cetera. So even within the same person, you don't have the skills that are necessary and maybe some countries provide a better environment for people with different skills to interact and come up with ideas that can turn into successful businesses.

And the last thing I wanted to say is that I agree very much with this idea that in order for the business sector to thrive, you need a good ecosystem. And that ecosystem is very multidimensional and deeply interactive. If you don't have venture capital in a country, it's not that you're going to say okay, so I'm going to start a venture capital industry because that's what I need in order to get started. The problem is that you don't also have incubation, for example. So if you don't have good incubation, then the venture capitalist will not have enough deal flow and so nobody will get into the business of venture capital because they're not going to be successful. And so you need to advance many times in many fronts at the same time and if you don't, then policies may be unsuccessful.

So it could be that like the policy space in Latin America is more sparse than in other places and you need sort of a big bang or some coordinated action on several fronts in order to get the ball rolling. And that is I think an important aspect of the environment.

MR. TALVI: And Christian, would you like to --

MR. GOMEZ: Yes. Human capital is mentioned, but I'd like to bring it up again. I think in certain countries if you take top graduates of MBA programs who are actually from Latin America, you're actually seeing these graduates going to investment banks in New York or London instead of going back to their home country to invest. You do have examples of folks who are going back down to Latin America, but I think it's really difficult I think to scale-up a company when qualified, for example, engineers that are in Brazil, there is a challenge there in terms of allowing them to go to a startup and putting aside an opportunity at a large, multinational, firm. And I think that's something that is to be considered. There's simply not enough qualified talent for the opportunity entrepreneur to go around.

MR. TALVI: I'm now a little bit confused. I mean it's well known that if you form human capital and you don't create the opportunities locally, basically you are going to end up with capital flight, in this case, human capital flight, so immigration. Are we talking about the -- I mean I thought we said that we had a lot of entrepreneurial capacity in Latin America, and the problem was at the lower levels of income in which the lack of employability of the self-employed micro entrepreneurs was the problem. So mobilizing that large amount of people that are self-employed, but lack the skills to be formally employed, is somehow preventing firms from actually growing into larger, more formal firms. So where's the problem? Where is the constraint?

MR. SANGUINETTI: You say in Latin America we have people with

talent for entrepreneurship. Yes, but this talent has to be noticed and you have to be growing in the sense you need to get the networking, to get the people to get your ideas a little bit more consistent. You need to learn which people who could produce an input for you. You could get with other people that have other skills that complement yours. You are good at thinking, but you are not a good manager as Ernesto was saying. So these all are like micro failures that need institutions and many of them are private to get this guy known and also with an investor, et cetera. So this is one thing. Now, so these talented guys will go up a little bit and create the firms.

Then there is another problem. When these guys get the financing, get ideas, get the connection with the markets, they will want their firms to grow, to produce more. And then they will go and ask for labor and it's not there because it's hiding in the self-employed. So first you need to disincentivate young people to go through let's say self-employment with their father or whatever because in there they will look to human capital. So you need these guys to go to formal employment. And the ones that are already in self-employment, that's much more difficult to do these kinds of transitions.

That's why the ecosystem has a fourth component that so far has been missed, which is labor training, talent for labor, I mean capacity to get the labor. And you may say well, this is basic. You know, people go to school and you see, most of the firms in Latin America complain that the young guys that go for a job -- it's not a problem that they don't know math or literature. The problem with them is the social and emotional capacities. Sometimes they have not a good relationship with other people. They cannot work in teams. They cannot be respectful, so many of these basic things and these basic things are lost with the self-employment. So this is a big thing.

MR. TALVI: Anybody want to make a comment? If not, we'll open it up to questions from the public.

QUESTIONER: You know, we have been discussing these reports with our colleagues of the CAF for several months now, so every time there's a discussion there are new insights.

I want to mention two things that have been lurking in this conversation, which I think are really important. One is what causes what? You think of small firms, informal firms, and there's a big school of thought led by the excellent work of Santiago Levy that essentially says we have a lot of smallness in informality and as a result of that, we have low productivity. I think what we're saying in the report is that that may be completely true, but there's the other angle that needs to be studied. Maybe we have low productivity and because we have low productivity, we have a lot of small and informal firms.

And one way to look at it is to think all the entrepreneurs that Julian and Pablo are mentioning in Latin America, they are very numerous, but they come from a pool of different people than the pool from where entrepreneurs come in the U.S. In the U.S. being an entrepreneur has to be compared with working for Google or working for Apple because the cost of being an entrepreneur is very high. It has to be better than being employed in a fantastic firm; whereas in Latin America, you become an entrepreneur because you have no choice often. So it's not the particularly highly talented worker that abandons Apple in order to become an entrepreneur; it's somebody that has very low skills that has no chance of getting a good job and so has to open a little kiosk in the corner of the street.

So it seems to me that what we're suggesting in our report at least is that something is wrong with the growth atrophy of the larger and middle firms, something happens in that level that makes these firms unable to generate sufficient jobs. And so that direction of causality seems to be interesting to study a little more. So that's one.

The second point I wanted to make is that when you think you know what can policies do, I find it very interesting in this type of event where we have been discussing our report to listen to the young entrepreneurs. And we have had several events where they speak and they are great at identifying where the shoe pinches. For instance, there was one young entrepreneur from Brazil in one of our presentations who was saying listen, I understand exactly what the World Bank is saying in their report because the moment I get to 14 employees, I have a hard time going beyond that. Because when I have more than 14 employees, I have to have a manager for marketing. I have to have a head of accounting. And I just don't find these people.

So this is one way of saying it seems that our firms that hit bottom with constraints very early in the game because of problems of skills, because of problems of finance, because of contractual problems. Other entrepreneurs say it's the tax system sometimes. So I develop a firm. The firm gets to a certain size. If I stay below that size, my tax rate is lower. The moment I go above that size, the tax rate jumps a lot and so I tend to stay low.

So I think the discovery of what stunts growth has some macro factors, some overarching factors, and has some very country-specific factors that the policymakers need to discover with the help of these young entrepreneurs.

MR. TALVI: Thank you. We have one more question there. We are running short of time, so I would appreciate it if we can be brief on the questions.

QUESTIONER: I'm Tony Else at Johns Hopkins. I have one question and one comment. On the question there seems to have been so many comments without direct attention to the problem of the informal sector, which is so endemic in Latin America. And, therefore, what needs to be done to diminish that and reduce that so as to free up and make possible this transition that was mentioned so often between the

informal and the formal?

The comment I have is related to defects or problems in the institutional environment. And I wonder if one of the issues is the lack of government attention to the potential of deliberation councils, which were such an important element, for example, in East Asia. They were guided by a high level focus of the government on promoting high-technology firms. There were important councils between business and government to really focus attention on all the gaps that have been mentioned here as a way of really promoting more focus on these market failures. Thank you.

MR. TALVI: Thank you. We'll take two or three more questions. Down there and there.

QUESTIONER: Hi. I'm Colin McCormick from the Global Green Growth Institute. A brief question about the role of the consequences of failure for entrepreneurs: In the U.S. an entrepreneur who tries, but fails, to start an innovative firm is not -- their career is not over. There's tolerance for that; they can return to the financial markets; they can try again. What role does that play in Latin America? Is that a barrier or a challenge to entrepreneurs to taking risks and is there tolerance for failure in that way?

MR. TALVI: We'll take your question.

QUESTIONER: I'll try and make it quick. Joe Domus with the State Department. It sounds like one of the main themes is policy matters and you need to get good policy in place, and you all gave recommendations. I think Christian in particular gave concrete examples. But do any of your organizations or others have sort of a compilation of best practices in the policy realm for governments to help accomplish what you're talking about here?

MR. TALVI: Over here, please?

QUESTIONER: Thank you very much. Rosin from Development

Outcomes. Congratulations because I think it's fantastic to finally have data on some of these subjects that everybody talks about. I'm not so sure I agree so much with the policy recommendations, and I would like to comment on several issues. One, what guarantees that improvements in productivity are not going to increase concentration of capital and less on labor because the assumption has been a little bit disconcerting. And second, a trillion years ago when I studied this stuff in South America, after we had a whole year of methods of the project analysis in the last class they told us how people actually make decisions. And it was at time of recovery of capital, which is sort of the contrary of what we're looking at here. So what needs to be done so that the capital becomes more of the capitalist? That's really the question. Thank you.

QUESTIONER: Hello. Usman Ahmed with eBay, Inc. I was wondering - - thanks for the studies -- I was wondering if in the breakouts of micro entrepreneurs and their potential growth if there was any sectorial studies done to see if -- because I work in the technology sector and in the technology sector we're actually seeing through Startup Chile and other programs kind of a pretty good growth of micro entrepreneurship through the technology industry, so just wondering if there was data on that.

QUESTIONNER: To follow up on Joe's question, have there been any efforts by a Latin American state to emulate best practices in nonprofit programming or higher education programming?

MR. TALVI: So I think we took a very large amount of very interesting questions, so I'll give the panel an opportunity to address them. Why don't we start in reverse order? We'll start by Ernesto, Christian, Julian, and then we'll close with Pablo.

MR. STEIN: Okay, so let me maybe take a few of these. With regard to the connection between productivity and smallness and informality, I think it could go in both directions. But many of the things that you discussed, many times things go from



policy to informality and smallness to productivity. And many of the examples that you discussed go in that direction, for example, the entrepreneur who once he goes above a certain level needs to pay more taxes or needs to -- or some regulation gets him forced that doesn't get him forced when you are small. And so in the model that you have in the report that nicely shows how that leads to more informal and small firms entering through the effect on the wages, et cetera, and less formal and large firms getting in. So I just wanted to mention that.

I think the question about the private and public councils I think is an interesting question. A lot of that goes on in Latin America. We see a lot of private-public interaction in these types of issues where the focus of the discussions -- well, sometimes in these interactions, the focus of the discussions is on obtaining subsidies for the sectors. And those I think should not be encouraged perhaps, but many other times the interactions are structured in such a way that the focus is on identifying some public inputs or some collective goods that need to be put in place in order for firms to be able to thrive. And many of these often happen in the context of cluster development programs, for example. And we see a lot of those in Latin America, many supported by the IDB, I'm sure also supported by other organizations, by the World Bank and the CAF. And a lot goes on in terms of identifying missing public inputs and then trying to get the government to deliver on those missing public inputs.

Now, one thing is the identification and a different thing is the delivery. It not just matters whether you structure this conversation in order to identify what needs to be done, it also matters that then the public sector is structured in such a way to be able to deliver on what gets identified and that is a big if.

The consequences of failure I think are very important and I think are different in Latin American countries. There is a stigma associated to failure that you

don't have in the United States and that obviously not only is a problem once you're in, but also discourages entry to begin with.

So let me leave it at that.

MR. TALVI: Christian?

MR. GOMEZ: I was going to look at the question of firms that fail and I think the way I see it is there's an ecosystem in place that has developed over the past ten or 15 years where it's become actually more acceptable to start a startup and then have it fail. Now, it's not to say it's like being in the Silicon Valley where entrepreneurs have social networking websites where they can meet up with other co-founders, et cetera. It's very hard to find people to go in on a venture together, but I do think it's getting better.

MR. TALVI: Julian?

MR. GRANOVSKY: There was a question about what needs to be done to reduce informality. That is one of a million other questions in my view in the region. I think it's probably going to be a mix of things we typically say, making a different emphasis. There's no denial that if you have tremendous perverse incentives to become formal, then formality is not going to flourish. So removing some of those perverse incentives are probably likely to produce informality. But if I had to bet on one particular set of policies, it's an environment that actually will bring informality down.

I think we do really need to understand why is it that our large and medium firms are not thriving and why is it they are not generating employment. When you ask -- it was already mentioned by Pablo -- for people who are self-employed in Latin America what was the reason for becoming self-employed? Well, of course, a lot of people say I wanted to be my own boss. That's true here in the U.S. as well. But much less common is the answer, I saw a great business opportunity as opposed to sort of

what you observe in high-income countries and so on. Very often is, I was afraid of losing my job. I couldn't find a job. So then, again, we need to understand how to generate the incentives for these people not to actually go into the informal sector, but to actually get a job in the formal sector.

MR. TALVI: Pablo?

MR. SANGUINETTI: I was going to -- one question about this best practices. Already was mentioned the Startup Chile, but, for example, in Buenos Aires, they integrated four parts of the ecosystem. So they give promise to promote independent talent so they give you some courses how to run a business, some teaching of marketing, et cetera, but also they put you with mentoring. Mentoring is very important. So a guy with experience gets a group of future entrepreneurs and they talk with them about their business, so mentoring is very important.

Also they have some kind of capital; they give them some money. Also they connect them through the chambers of firms, et cetera. And also, finally, they help them about human capital management. So I would say that the best practices are those programs that connect the full element of the ecosystem.

Let me tell you, many times this is not good to do it at the national level because those two guys -- you know, you need to be close with them, especially in this space. So they have played a good role doing that together with the private sector of a city, of a region, et cetera. So I think that is the way to move. And at that level, the local level, there has been a lot of innovation about this.

MR. TALVI: Thank you very much to all of you. I'm very happy that we had this discussion. I mean basically what we need to take out of this is that the quest for Latin America becoming more productive is multidimensional, complex, probably trial-and-error kind of dynamics, and I'm glad that we are beyond the recipe ideologically

oriented in which we were in the early nineties.

So thank you very much for coming and see you next time.

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