



## **BUILDING HUMAN CAPITAL IN AN AGING MEXICO: Demography, the Future Workforce, and Economic Competitiveness**

**A Roundtable hosted by the CSIS Global Aging Initiative  
and the CSIS Mexico Project**

**October 29, 2004**

### **INTRODUCTION & OVERVIEW**

**Peter DeShazo:** Ladies and gentlemen, good morning. My name is Peter DeShazo. I'm the Director of the Americas Program at CSIS. I'd like to welcome you all to this roundtable on "Building Human Capital in an Aging Mexico: Demography, Workforce Development and Economic Competitiveness."

Good morning, I would like to welcome our Mexican guests and also thank the National Council for Science and Technology, CONACYT, from Mexico for its very appreciated co-sponsoring of this project.

Ladies and gentlemen, when I came in as Director of the Americas Program about a month and a half ago I was reviewing the list of projects that were in the works. When I came upon this one I was really intrigued by the name of "Aging Mexico". Somehow I thought of Mexico, with my Latin American experience, as the young societies with young populations, and to think of the problems of an aging Mexico seemed almost visionary. But indeed looking into the future, it's essential to see the kinds of geographic changes that will be faced by policymakers now and in the future. So this is I think an extraordinarily useful opportunity and very very interesting one. I for one am extraordinarily interested in hearing what the experts at this meeting have to say about this topic.

Again, I would like to welcome you all and I'm delighted to turn over the program, first to Armand Peschard as the Director of the CSIS Mexico Project. And then to Richard Jackson, the Director of the CSIS Global Aging Initiative. Thank you very much.

**Armand Peschard-Sverdrup:** Peter, thank you very much for joining us today for what I think will be a very interesting session.

First of all I'd like to thank all of you. I know that some of you in particular have had to fly in from Mexico to attend this meeting, and given the level of individuals that we have around the table I know that we all have busy schedules and that all of you have made the time to be here for what is an all-day session to discuss very interesting issues.

I also wanted to thank Richard and the Global Aging Initiative, given that it's the first time we collaborate together on a project. So far, so good. We've worked well together. Richard, I wanted to thank you and your team.

To echo Peter's gratitude towards CONACYT, obviously this project is being funded by Mexico's National Science and Technology Council which is the equivalent of the National Science Foundation here in the U.S., but it's also the equivalent of the White House Office for Science and Technology Policy so it has a dual role within the Mexican structure.

This week is Science and Technology Week in Mexico. As a result we weren't able to have our colleagues from CONACYT be here with us today, but to echo Peter's remarks I do want to obviously acknowledge their key role in this project.

It is a project that is comprised of three modules, two of which we've defined. One is on the session that we're here today on demography and human capital development, and then we're going to have another module on innovation technology, high technology, in which we're going to be collaborating with Jim Lewis who is the Director of the CSIS Project on Technology Policy.

This session is going to produce obviously incredible ideas and discussion. We are going to be transcribing the discussion at this table and we are going to try and rely on not just our research but on the discussion to produce a report. The report we're anticipating will come out probably in February and it should be, it's a report that is going to come out under the U.S.-Mexico Binational Council which is a council of luminaries from both countries which is a vehicle that we use to try and maximize the policy impact both in the U.S. and Mexico. Outside at the table we have some examples of previous U.S.-Mexico Binational Council reports.

Just in terms of the mechanics, I did mention that we were going to be transcribing and obviously as you all can see we're also translating the discussion. For those of you who are using the translation equipment I would just remind you to make sure that you leave it here before you leave at the end of the day. And in terms of the discussion I would encourage all of you to use the microphone when you have a comment to make. Not just because it will facilitate for the translators, who are actually listening to the audio through the system, but it also will enable us to capture your brilliant ideas when we transcribe the document.

Having said that, before I pass the microphone over to Richard, Richard and I thought it would be a good idea to just go around the table and have everybody introduce themselves.

I would also encourage you, if you want to take your jackets off and get comfortable please do so because I know that we're going to be here for quite a while so I would prefer that you be comfortable.

Why don't we go around the table. Richard, we'll start with you and we'll work our way that way.

**Richard Jackson:** Richard Jackson. As Armand [...Tape Skip...] the long term economic and social implications of the aging of the population around the world.

**Peter DeShazo:** Peter DeShazo, CSIS.

**Jorge Gallardo:** I'm Jorge Gallardo, the representative of CONACYT to the United States.

**Maria Elena Zuniga Herrera:** Elena Zuniga, Secretary General of the National Population Council of Mexico.

**James Whittaker:** Jim Whittaker, Director of Governmental Affairs and Education for Intel in Latin America.

**Jeffrey Passel:** Jeff Passel. I'm a demographer in the Immigration Studies Program at the Urban Institute here in Washington.

**Roberto Villareal:** Roberto Villareal, [inaudible].

**Sidney Weintraub:** I'm Sidney Weintraub, CSIS.

**Gary Martin:** Gary Martin. I work on foreign labor statistics at the Bureau of Labor Statistics.

**Paul Hewitt:** Paul Hewitt, Deputy Commissioner for Policy, Social Security Administration.

**Sylvester Schieber:** Syl Schieber, I'm Research Director at Watson Wyatt, a long-time supporter of the Global Aging Initiative.

**Steven Nyce:** Steve Nyce, Research and Information Center at Watson Wyatt.

**Joseph Duffey:** I'm Joe Duffey. Most of my career has been in traditional university positions as administrator and faculty member. The last six years I've been doing a very controversial thing, particularly in Latin America with a company called Laureate to try to attract private capital into the increase of opportunities for university education and with a large presence in Mexico.

**Lizete De La Torre:** Lizete De La Torre in charge of Government Affairs for Mexico and North Latin American for Intel.

**Susan Brandon:** I'm Susan Brandon from the Office of Science and Technology Policy of the Executive Office of the President.

**Elizabeth Gewurz Ramirez:** I'm Elizabeth Ramirez. I'm the Mexico Desk Officer at USAID here in Washington.

**Jaime Santibanez Andonegui:** I am Jamie Santibanez from Mexico, from General Achievement, Mexico's name in Mexico as the Impulse al hobanemprendio [ph]. We promote an education in terms of the entrepreneurial spirit.

**Arnold Packer:** I'm Arnold Packer, head of the Scan Center, recently at Johns Hopkins University.

**Phil McLean:** Phil McLean, CSIS.

**Scott Nystrom:** Scott Nystrom with the U.S. Senate Special Committee on Aging, Chairman Larry Craig.

**Roberto Newell Garcia:** I'm Roberto Newell. I'm the CEO of the Instituto Mexicano para la Competitividad.

**Eduardo Solis:** My name is Eduardo Solis. I am the head of the Office for Investment Promotion in Mexico.

**Miguel Angel Tamayo Taype:** Good morning. My name is Miguel Angel Tamayo. I am in charge of a national project on modernization of technical education and training in Mexico. I work for the Public Education Ministry.

**Manuel Izquierdo:** Good morning. My name is Manuel Izquierdo. I am the Director of Planning at the same unit headed by Engineer Tamayo in the Public Education Ministry.

**James Lewis:** Jim Lewis, CSIS.

**Edward Kadunc:** Edward Kadunc. I'm the Director of the U.S. Agency for International Development in Mexico City.

**Francis Horvath:** Francis Horvath. I work at the Bureau of Labor Statistics on national labor force issues.

**Luis Manuel Guaida Escontria:** Hello, my name is Luis Manuel Guaida. I'm here in my capacity as Chairman of the Human Capital and Labor Affairs Committee of the American Chamber of Commerce of Mexico. I also represent here the Instituto Nacional de las Personas Adultas Mayores, an institution in Mexico.

**Margot Gill:** Dean Margo Gill from Harvard University.

**Armand Peschard-Sverdrup:** Okay, we're going to open it up. Richard's going to give a brief PowerPoint presentation.

**Richard Jackson:** Armand and I thought that it would be useful to begin our discussion today with a brief introductory presentation that outlines the demographic challenge and also explains the connection between the demographic challenge, the aging challenge, and the human capital development agenda.

The purpose of the presentation is not to answer the questions that we're going to be discussing today but simply to provide a framework for our discussion and perhaps to provoke an interesting thought or insight that we can then come back to during the course of the discussion.

Mexico is still a demographically young nation preoccupied with a young nation's problems -- creating jobs, modernizing its economy, and raising living standards. Mexico, however, is about to undergo a stunning demographic transformation. Today there are nine times as many children, children and teenagers, under age 20 in Mexico as there are elderly age 65 and over. By mid century there could be as many elders as children.

Today, just five percent of Mexicans are elderly -- about the same share of the elderly in the population as has been true since time immemorial. But in the decades ahead that share will begin to rise at an accelerating pace. By the mid 2020s it will hit ten percent. By the mid 2030s, 15 percent. By 2050, 20 percent. A fifth of Mexicans will be elderly, one in five, and at that point Mexico will actually be as old a country as the United States.

I should say here that we're using UN projections to facilitate comparison between Mexico and the United States. I believe that the CONAPO projections are quite similar in terms of the final result in 2040 or 2050, though the aging trend gets underway a little bit sooner and proceeds a little bit more quickly.

**Voice:** Can we ask questions along the way? Versus what you've assumed about out-migration from Mexico. That can be one of the tools we can --

**Richard Jackson:** I'm happy to offer clarification of anything that requires clarification.

The UN projections assume, if I recall correctly, a continuation of the recent historical average. I'm unsure whether that is the average of the past five years or the past ten years, but they do assume a continuation of recent historical experience. So out-migration is fully reflected in these projections.

There are two forces behind the aging of Mexico. The first force is falling fertility. Mexicans are having fewer babies and this shrinks the relative number of young in the population. Back in the 1960s, indeed as recently as 1970, the fertility rate in Mexico was over seven. Since then it has fallen dramatically and the latest data from CANAPO puts it in 2004 at 2.2. In many urban centers it has already sunk beneath 2.1 which is the so-called replacement rate needed to maintain a stable population over time.

The fertility decline, of course, is not unique to Mexico. Fertility rates have fallen precipitously throughout most of Latin America and indeed East Asia, so Mexico is not the only developing economy to be experiencing falling fertility. In fact it seems to be an inevitable occurrence on the path to development and modernization. In fact both the UN and CANAPO project that fertility rates will continue to decline, ultimately reaching about 1.8 or 1.85 as urbanization continues and as educational levels rise.

The second force behind the aging of Mexico is rising longevity. Mexicans are living longer and this increases the relative number of old in the population. Since the Revolution in Mexico life expectancy has risen from the mid 20s to the mid 70s. Since World War II, since the immediate post-war years alone it's risen from the early 50s to the mid 70s, putting Mexico now on a par with life expectancy in the typical developed country including the United States.

This chart simply shows the numbers I've just been discussing.

Falling fertility and rising longevity are transforming the traditional population pyramid in Mexico, narrowing it at the bottom and ultimately widening it at the top. Longer life spans are a great personal benefit but they also pose an enormous collective challenge. The ratio of working age adults to retirement age elderly will decline. The cost burden on public budgets, on employers, and on private family support networks will rise.

Today's great powers became affluent societies before they became aging societies. Mexico may grow old before it grows rich. If so, and it fails to raise living standards in advance of the age wave, it could face later in the century an economic and social crisis of immense proportions.

The cost of Mexico's age wave, though, still loom far over the horizon. For the next 25 years the impacts of demographic change in Mexico will be mostly positive, helping rather than hindering economic development and income growth. Mexico in fact will experience what is sometimes called

a demographic dividend and this will continue for at least two, two and a half decades, providing a crucial window of opportunity to address the longer-term challenge.

The next few charts simply graphically depict what this demographic dividend is. The number of total dependents, aged plus children in Mexico, is falling like a stone. Think about it. What happens when fertility rates fall, the first thing you have is fewer children. You don't have more old people, at least not in significant numbers, until a number of decades have gone by. So this is what's happening in Mexico now, the total dependency ratio, the total number of dependents that the working population needs to support is falling rapidly. Note that the trend in the United States is just the opposite. Our total dependency ratio is now rising. Fertility fell sooner in the United States. Our baby boom is about to retire. The large generations in Mexico born in the 1960s and 1970s don't start retiring until the 2030s.

At the same time the share of population of [inaudible] will reach record highs. In 1960 the share of the population made up by adults age 20 to 64 was 40 percent -- less than half in the working ages. Today it's 50 percent. By 2020 it will be 59 percent, virtually 60 percent.

The share of the population in the working ages will rise dramatically. At the same time, though, the torrid pace of workforce growth that is posing such a challenge to job creation in Mexico will gradually but steadily decelerate. Between 2000 and 2010 the working age population is projected to grow by 25 percent, but between 2010 and 2020 by just 18 percent, and by 2020 to 2030 just nine percent.

Here in the last two bars you can actually see the out-migration you mentioned. Incredibly the workforce growth in Mexico actually turns negative, in part due to an assumption of the projections of continuing out-migration which may not be at all realistic. That's something we can turn to in the discussion. Whereas in the United States it remains slightly positive. But you'll see over the next few decades that Mexico's workforce growth will be decelerating, though it will still remain faster than that in the United States.

The demographic dividend could bring important economic benefits. As a larger share of the population is in the working years, and in particular in the high-saving middle age years, in the 40s and 50s, we can expect higher rates of household savings and perhaps higher rates of investment and productivity growth. At the same time the slow-down in the growth or the deceleration in the growth of the working age population could bring about a structural shift in Mexico's economy from labor intensive, low wage jobs, to capital intensive high wage jobs.

As I think the three demographic charts we just looked at suggest, there is also the possibility for important synergies and increased economic integration between a faster aging United States and an aging but still relatively younger Mexico. Not just in terms of matching jobs with workers, but possibly in terms of matching savings in the United States with investment opportunities.

As workforce growth and GDP growth slow in the United States with the retirement of its boom generation, investment opportunities may not be as forthcoming and savers may be looking for places to invest their money in faster-growing economies around the world. If not Mexico, then China.

To realize the potential benefits of its demographic dividend, Mexico must make the right policy choices today. While its population is still young and growing Mexico needs to complete its program of economic and political reform. Higher savings won't do Mexico a lot of good if there's no

way of intermediating the savings and channeling it to productive investment. Capital markets in Mexico remain thin and shallow. Somewhere here I have the figure, market capitalization in stock market capitalization in Mexico -- I don't seem to have the figure -- today is I think just a tenth of what it is in the United States relative to GDP.

By the same token if labor markets are inflexible this potential shift from low wage to high wage employment may not be forthcoming.

In the second market capitalization in the United States as a share of GDP, stock market capitalization, in 2001, 123 percent; in Mexico 90 percent.

Mexico also needs to put in place a broad-based floor of protection against destitution and old age. It took an important step in this direction in the late 1990s with the introduction of a system of personal retirement accounts in the private sector, but the system just covers the formal economy which means that it leaves perhaps a third of Mexican workers outside the safety net. And even among those who participate, not everyone is an active contributor.

The truth is that for many Mexicans the only means of old age support is the extended family. The problem is, of course, that Mexicans are having fewer children.

Finally, and most importantly, Mexico needs to invest more and more effectively in the education and skills of tomorrow's workforce. Fortunately, Mexico has begun to engage this human capital development challenge.

Spending on education has risen in recent years and Mexico now develops a relatively high share of national income to education -- 5.9 percent in 2001, according to the OECD, which is actually slightly above the OECD average of 5.6 percent. The government's education program calls for raising this share to between seven and eight percent over the next few years. A very ambitious, in fact perhaps an impossible goal. But clearly this is an issue that has gained the attention of policy leaders in Mexico.

**Sylvester Schieber:** Do you have any idea what the comparable investment rates are in China and India today?

**Richard Jackson:** I believe as a share of GDP they would be towards the low end.

I was going to end, Syl is perhaps anticipating a caveat that I was going to make at the end of this presentation which is that the correlation between spending on education and rates of economic growth is not necessarily a hundred percent clear in all cases. I'm not sure if that's where you were heading.

**Arnold Packer:** I believe the Indian rate is around three percent.

**Richard Jackson:** China's is probably similar.

As you can see, though, the only Asian tiger we have data for here is South Korea, but I believe the number would be similarly high in Taiwan or in Singapore. The rates of investment are very high in these fast-growing emerging market economies.

At the same time the number of years Mexicans spend in school has been steadily rising, from 4.6 on average in 1980 to 7.8 in 2002. Note that these figures refer to the entire adult

population, age 15 and over. If we were looking at younger cohorts in their 20s and 30s the average would be significantly higher. In fact as most of you probably know, school now through lower secondary, that is through what we would call middle school in the United States is now mandatory, and rates of enrollment up to age 13 or 14 are now approaching universal. So these numbers will continue to rise in the future.

That said, Mexico still trails the developed countries and indeed its competitors in East Asia in most measures of human capital development. Only a minority of Mexicans complete high school or college. Twenty-one percent, and here we're looking at the population age 25 to 34, 21 percent of this age bracket in Mexico have a high school, that is an upper secondary educational degree. Just 11 percent a tertiary or university degree.

If we had data for 20 to 25 year olds these numbers would be higher, but they would still fall far short of the OECD.

Even among those students who do go on to upper secondary and a university education the performance by Mexican students is disappointing compared that of other developed and developing countries.

What we're looking at here are the results of the OECD's Piza Assessment of Educational Attainment for 15 year olds. The test was given to students in 41 countries. There's a reading test, a math test, a science test. The first column is the mean score. This is Mexico's ranking out of 41. Thirty-four on reading, 35 on math, 34 on science. The second column shows the ranking at the 95th percentile of test scores, so even better-performing Mexican students are doing relatively poorly compared to better-performing students in other countries.

The United States is in the middle of the pack. Back in the late '80s and early '90s there were a series of international tests that showed the United States actually very far down the queue, but in the most recent tests it has moved up.

Which brings me again to my caveat. There isn't a necessary correlation between -- let me put it differently. Human capital development is obviously not the only factor that affects economic growth. Institutional and cultural considerations come into play too. You can have a highly educated workforce but if labor markets and capital markets do not permit investment in globally competitive jobs, do not permit labor mobility, do not link up savings with productive investment opportunities then the human capital can't be effectively deployed.

Similarly, and this is something perhaps my old friend and colleague Arnie will want to come back to during the course of a discussion today. But measures of formal educational spending and attainment aren't necessarily the best measure of human capital development either.

One of the fascinating statistics I came across in preparing this presentation was that the highest scorer on tests in Latin America is guess who? Cuba. So the highest scores in terms of formal educational attainment don't necessarily imply the fastest rates of economic and living standard growth. Nonetheless, few would argue that human capital is crucial to the development equation, and few would argue that failure to invest effectively in it threatens Mexico's economic dynamism, competitiveness, and long-term living standard growth.

There is little doubt when you look at the numbers that Mexico is lagging in the global development race. What this chart shows is the percentage change in per capita living standards

over a 20 year period, 1980 to 2000. The increase in China, 400 percent; in South Korea, 235 percent; in Mexico, 16 percent.

**Paul Hewitt:** Looking at this chart you can see that the countries above, and I'm not certain about Chile, but certainly the Asian countries have been in their demographic window for a while. They are far ahead in terms of the decline in child dependency and so forth. So in a sense you're just looking at countries population-wise that are in a different phase.

What's interesting is that Brazil and Argentina, which are somewhat older populations, particularly Argentina, than Mexico which has had during this period a very young population, a very high child dependency rate, have performed so poorly. So Mexico might not, by this standard, look so bad --

**Richard Jackson:** Paul makes a very good point. China, South Korea, and the other East Asian tigers are at least halfway or more through their period of demographic dividend. They face their age wall in which old age dependency costs ramp up steeply, starting in 2015 -- just ten years from now. Mexico doesn't get there until the early to mid 2030s. So Mexico in a sense is positioned at the beginning of a period where, final slide, Mexico stands at an historic crossroads where if it makes the right decisions, if it navigates the demographic transformation successfully, it could position itself for a medium term future over the next 15, 20, 25 years of rapid rise in living standards.

So that's the framework for the discussion today. I've raised a number of issues without, I think, being impertinent enough to suggest the answers. You're the experts. That's why we've brought you all here today. Thank you.

**Roberto Newell:** Could I pose a question? We've framed this, or you've framed this as if we should think of it as a looming crisis out there on the horizon. While it's always cool to get our juices going with a looming crisis to engender some preoccupation on our part, it might be equally productive or perhaps even more productive to look at the next 20 years as a period where we're almost inevitably going to have high productivity increases and as a consequence almost inevitably going to have high growth rates, and if that's the case shouldn't we be thinking about how do we make the most of the coming 20 years which I think puts a different focus on the issues here. It might lead you to a different set of policy considerations.

I'd hate to have us go away having only focused on geez, what do we do to avoid the crisis that's 25 or 30 years out in the future and waste the opportunity to have this quality of people talk about how to use the next 20 years to the most benefit.

**Richard Jackson:** I didn't for a moment mean to imply that the only reason we should be concerned about raising living standards in Mexico over the next 20 years is to prepare for a crisis that's going to happen 30 years from now. The development agenda has its own powerful rationale.

I think that the looming aging challenge makes that rationale, makes the development agenda still more urgent and I think usefully, also provides a way of focusing attention on the issue if we link these two up. I think that linkage is real. I would be cautious in assuming that rapid productivity and economic growth over the next 20 years, however, is guaranteed. I really do think that that depends in part on the kinds of decisions we're going to be talking about today.

Let me give the floor back to Armand here to kick off the first session.

**{PRIVATE }**

## **SESSION 1: Navigating Mexico's Demographic Transition**

**Armand Peschard-Sverdrup:** I just wanted to follow up with Roberto's remark. We thought that it would be important to kind of frame raising the issue of obviously the demographic dimension that Mexico faces. Not because we necessarily want to create alarm, but we do want to raise awareness over what the demographic reality is in Mexico. But as you can see from looking at the agenda, we then shift from looking at what is it that Mexico can do and what is it that Mexico and the U.S. can do together in trying to identify whether there's any complementarity from a policy standpoint, from an industry standpoint in trying to move forward together.

So I hope the agenda addresses your perspective, Roberto, as well. We don't want to just bog down on the demographic issue, but we also want this to be obviously constructive. But we thought that it was important to at least frame it within the context that there is this demographic dimension in play.

I would say that most Mexicans are probably unaware of this and I would probably even argue that most members of Congress are unaware of this given the fact that we haven't really seen the type of boldness that one would expect out of a divided Congress.

Why don't we start and open it up for discussion. Roberto?

**Roberto Villareal:** I strongly support the view of my colleague Roberto Newell. But in your answer, I think the matter is not just focusing on the demographics vis-à-vis the productivity on capital intensity issues. It's also on the demographics, perhaps the emphasis is not exactly [inaudible]. I reacted very negatively to that slide saying that great powers. Power is a concept that is not very much related to the rest of the presentation and it brings about some ideology. But anyway, then great powers became [operating] societies before they became aging societies. I guess you can also make other comparisons. The future demographic structure in Mexico 50 years from now will look very much, correct me if I'm wrong on this, very much the demographic pyramid [inaudible] after a war. There are many other cases of war experiences in the world that we can compare not just precisely to great powers, but particularly saying that Mexico may grow old before it grows rich, I strongly agree that's a very large or exaggerated -- I think we have to bring this matter into more workable approaches on the table.

I'm also very much surprised that in the entire presentation and after 20 or 30 years of living in a global world these issues are very much focused as a Mexican issue. Not very much a North American or a global issue. So I think that we could also improve the approach.

**Roberto Newell:** Let me build on my hypothesis that there might be some use in at least changing the flavor of this setup a little bit. If we just simply inertially experience the same productivity growth that we've experienced in the last ten years in Mexico we're going to have 2.5, three percent per capital growth rates in the sectors that are growing most rapidly in the Mexican economy and that gives you a pretty significant lift into the future and there's nothing obvious out there that says that that trend is going to die. I can come back, by the way, and counter-argue with myself on this one, but I think if we're using trend numbers to look into the future then we should also look at what would be trend breakers.

Labor participation rates, particularly female participation rates in Mexico, could dramatically change the growth rate of the Mexican economy if they change significantly and they're likely to change significantly because the women's participation rates in education are rising very dramatically as I'm sure any of my colleagues from Mexico could share with us.

That being the case, it really is almost in the cards that Mexico's going to grow 4.5, 5 percent per year just intertially. If that's the case, that also means we're going to double our income levels per capita over the next 20 years. If that's the case, I would ask the question geez, what are we going to do with that huge growth dividend that's out there? How do we make sure that we capture it for the best upward pop imaginable? That would lead me in an entirely different direction than if we're saying gosh, there are going to be a lot of poor people at the end of this, how do we make sure that we've created the annuity streams that keep those people alive in the year 2030? I think it's a different question, and if you ask the different question you might actually come up with a better set of public policies than if you focus overly much on what would be the structure of our labor force at the end of this.

Eduardo pointed out something very important to me, I really think it changes the flavor of this entire presentation.

The population structure that's carrying the rest of the economy is not dramatically different at the end of this 2050 projection than what it is at the beginning. What has happened is there are a lot more older people alongside of the younger people in the structure, but not a dramatically structure of dependents versus producers, and that suggests then it doesn't get a whole lot heavier to carry that burden in the future. What it does is it really reshapes the question in terms of so what are the opportunities we should really be trying to take advantage of during this period?

I promise to be quieter after this.

**Armand Peschard-Sverdrup:** Roberto, we definitely encourage people to voice, even if they have any concerns or with some of the points that we've made, or with some of the points that other discussants make. We don't want people just nodding in agreement. We actually do want to get a discussion going and a healthy discussion. We welcome that. So don't feel bad. I will point to you again, don't think that I won't.

Eduardo?

**Eduardo Solis:** Thank you very much.

I think that Roberto Villareal raises also a very important issue here, and I understand that part of the discussion is going to take place this afternoon when we discuss the bilateral implications of these today inverted age pyramids, so for the United States and Mexico. But I think what Roberto brings to the table is even the way we structure today's discussion leads us to think that we are starting perhaps the other way around. Today's opportunities precisely arise from the fact that first of all we are tremendous trading partners of the United States, geographic location and inverted pyramid, age pyramid, brings a very specific situation between Mexico and the United States where somebody told me and I'm sorry I don't have the number with me, but it was not just somebody, it was the head of CONACYT, I heard Jaime saying today in engineering and technology careers at the university level we have half of the university level students of that in the United States. We always think of the United States as at least five, six times Mexico, but in fact when it comes to engineers and other technical careers at the university level, it so happens that we have half of the students that the United States has today registered at that level. Meaning opportunity is right there. We

know that for each engineer in the United States retiring, not one engineer will come after him to get that job because there isn't enough engineers in the United States to fulfill the engineers retiring.

A huge company in the United States, which by the way is also a large company in Mexico, Honeywell, has 5,000 engineers in their aeronautical division doing prototype design work for Honeywell, 5,000 engineers. The leader of these engineers, a lady, will tell me Eduardo, my problem is that five years from now 20 percent of my engineer universe, the engineers that I have, 20 percent of them are retiring in the next five years. The average age of their engineering department, the 5,000 engineers, was 55 years old.

We have an engineering office. It's called Advanced Engineering Center of General Electric doing the same work, prototype for General Electric, which is similar to what she has in the United States. Six hundred engineers in Caretero, 27 years old is the average.

There you have an issue, you have an opportunity. How do we take this opportunity having this age differential in the pyramids? And the approach that both Robertos put on the table I think that should be considered because it changes, and I'm going to use the same word that my friend Robert Newell used, the flavor of what's on the table today. How do we -- I understand the challenge, but where do we start discussing the opportunities? There is a tremendous opportunity out there to be taken, not because of Mexico by itself, because as Roberto is putting on the table, because of this global world we have a tremendous opportunity to grow together with the United States, whereby the United States may not be able to do it by themselves because of this problem of the United States. What's a challenge and an opportunity for Mexico today is a problem of the United States today. How do we go about that instead of leaving it to the end, putting it in the front? It's a great opportunity. Thank you.

**Armand Peschard-Sverdrup:** Let me follow the order, and then we come back to you. I would like to go back to our agenda to have a structure because we're going into all the problems.

**Juan Manuel Guaida:** So you would move to return to the demographic issue?

I am asking Armand to allow me to move to order because we have a very well-structured agenda with organized topics and all of us are very interested in the context of the meeting but what I see is that we are touching in somewhat scattered fashion all of the issues that we have before us. I would propose that we return to the agenda with the timetable that has been set and this way we can better organize our thoughts and participation. Thank you.

**Maria Elena Zuniga Herrera:** Thank you very much.

I would like to go back somewhat to the initial purpose as I understand this working meeting has begun with the demographic focus. I think what it is very relevant to point out, but I think the conceptual framework behind how we can look at human capital formation and how to emphasize what economic development model we need to seek has to be based on demography and I think this is something that this vision of the future, this vision of the aging structure changes that Mexico is going through allows us to focus on possible scenarios that we might have for the future which are given by demography but which we may also choose by different types of societies if we take appropriate decisions.

In Mexico from the standpoint of population policy, we are seeking to build awareness of what this demographic aging process means and what opportunities it gives you, both challenges and opportunities.

We know that Mexico has since the fertility reduction began, there is a reduction of dependency rates, and somehow over the last 20 years Mexico has to some degree enjoyed a demographic dividend. To the degree in which the dependency ratio has reduced and the working age proportion has increased, it has been precisely the two decades in which employment has grown the least and where on the other side our economy has been less able to generate the jobs that the population requires. This is leading to an increase of immigration, a very fast increase in the labor working age population that leaves the country for employment opportunities.

What we see here are two very dire situations. On the one hand while it is true that we have had a demographic dividend, this demographic dividend has not crystallized and we are exporting it. Secondly, to the degree that our economy does not grow, this population on the labor market is fundamentally finding employment in the informal sector. We have never seen the informal sector grow as it is now. We are thinking that up to 60 percent of the population employed in economic production does not contribute to the social security network and therefore will have no option of obtaining a retirement or pension when they come of age to retire.

In that sense these two situations are making it clear that if this remains over the coming two decades which are the two decades of opportunity of crystallizing the demographic dividends, we will find ourselves by mid 2020s perhaps in a far more critical situation in terms of unemployment, in terms of economic inequality and poverty. In that regard I think it is an opportunity to discuss and analyze from the demographic standpoint what opportunities Mexico has. What does it have for development and for cooperation with the United States, because undoubtedly this demographic and social future of Mexico affects both Mexico and the United States. Thank you.

**Armand Peschard-Sverdrup:** Thank you very much, Maria Elena. I think we're seeing the value of having a multi-disciplinary, interdisciplinary group keeping into account the differences of points of view.

**Arnold Packer:** Thank you. I don't want to enter into the debate as to whether the glass is half full or half empty, but I do want to make perhaps the glass more cloudy.

I think Mexico has already seen the effects of competition from China and I think in the globalized economy one cannot look only at Mexico and the United States but must look at the global economy. Between China and India there's 1.3 billion people still living in rural areas. The overall productivity of Mexico and China and India requires that those agricultural sectors become more productive, releasing hundreds of millions of people who are looking for jobs in the modern economy, and I think you must look at what's going to happen to the global workforce. It is not the numbers of engineers in Mexico that may be only relevant, but the number of engineers that India and China are producing where 40 percent, in those two countries, 40 percent of the world's population now live.

**Sidney Weintraub:** I do want to enter into a little bit of the discussion that's been going on on growth and productivity increases and Mexico's place in the world. I too, by the way, was troubled by the graph that showed the development growth of China and the other countries, that was fine, but the attributions to the demographic dividend struck me as a little bit much. There are so many other factors involved in each and every one of these countries.

I was troubled by what Roberto Newell said, that policy doesn't matter essentially. Inertia will bring growth rates sufficiently high to be able to increase the economic growth over time. The other things will take care of itself. Productivity by itself will increase four percent a year. I don't have the slightest idea how [inaudible]. I don't have the slightest idea how you can reach a conclusion that policy doesn't matter. I've sort of asked myself why hasn't Mexico grown in the last 10 or 15 years,

and they haven't. When you translate some of those growth rates in real terms per capita Mexico is about where it was 20 years ago. Maybe even worse off. I think the reasons are policy, much more than demography.

I guess what I'm really saying is I do think we have to look at the demographic aspect, at the institutional aspect, and we have to look at the policy aspect of the situation, and I think we have to look at more than North America [inaudible] because the competition is worldwide. Mexico doesn't know how much the United States will grow, and right now the dependency in the United States is overwhelming.

In other words, I think both sides are over-simplifying.

**Armand Peschard-Sverdrup:** Thanks, Sidney.

**Sylvester Schieber:** I think we need to think about the relationship of what is happening Mexico and Mexico's demographics over the next quarter century in a larger world economic context.

If you look at the working age population in Mexico today it's almost exactly the size of Germany. By 2030 we would expect the Mexican working age population to be about twice the size of Germany.

In terms of growth of the working age population, here I'm taking people between the ages of 20 and 64 off of the UN numbers, the numbers that Richard used. Between 2000 and 2030 we would expect the Mexican working age population to grow by about 35 million people, comparable to the United States' expected growth of this period. To put it in the context of the other member of NAFTA, over this same period we would expect Canada to grow by about two million people.

I was up in Canada yesterday, it's always very educational to ride around in taxis because you find out what the local people are really thinking. The people in Canada are terribly dismayed right now that the policymakers in the United States seem to be paying absolutely no attention to them, and they're worried that we are indeed paying more attention to the other party in NAFTA.

I think the reason is because of this potential growth in the labor force. Now having said that, there is potential opportunity here for Mexico and it's not just for Mexico, it's for the United States and the other developed economies of the world to be able to tap this potentially very significant labor resource.

Germany and Italy and Japan, all the developed economies of the world, the United States to an extent but not as much as these other countries, are going to need to be able to find places where they can invest excess capital because in many cases their labor forces are now shrinking. It seems to me the question here is as you're going through this demographic transition you're going from a situation that we were in in the United States 40 years ago toward the situation that we're in today over the next quarter century. How you can entice the capital, this excess capital that's going to exist around the world and raise your own level of living and also benefit the rest of the world. It seems to me we really need to think about this whole demographic situation evolving in a much larger global interconnected context than we have.

One of the big problems here in the United States today, any of you who haven't benefited from the wonderful discussions we've been having in our presidential election, but one of the major concerns here is about off-shoring of jobs. I believe this has totally missed the context that we're not simply shipping capital elsewhere around the world because we can find cheap labor, it's because of the point that Eduardo Solis made here a minute ago. In the United States and the other developed

economies of the world, we're no longer generating the resources that we need to meet our own economic needs and somehow we have to think about this as a marriage and make sure that it's beneficial for both parties. If we don't, the developed economies over the next 25-30 years are going to suffer because they won't get the resources they need and the developing economies are going to suffer because they won't have the resources to bring themselves to the situation where they can afford much higher aging dependency rates in the future.

**Edward Kadunc:** I just wanted to make a couple of points. I think what the presentation shows us is that there are opportunities and there are challenges there, and I agree with Roberto in that sense, that you need to look at both sides of these kinds of issues. Immigration, for one, is a point that is both a point in Mexico's favor as well as the United States' favor.

To some extent Mexico is doing what Europe did in the 19th and 20th Centuries which is to export its less skilled labor to the United States and raise up the standards of living in the personnel who are staying in Mexico, and so to some extent that's providing a safety valve for Mexico and a pool of workers for the United States which is beneficial for both countries even though we're still having a hard time recognizing that.

A challenge to me I think is the assumption that Roberto made about economic growth continuing with some inertia just simply because of growth in the size of the population. I think what we've seen recently is that Mexico's growth is being pulled by the growth in the United States. What we're not seeing in Mexico and what I think most people agree needs to happen is the growth within the Mexican economy of goods and services for Mexicans and not products necessarily for export. I think that challenge is beginning to be recognized by both countries because we now hear government officials in both Mexico and the United States talking about a North American competitiveness model. Not a Mexican competitiveness model, not a U.S. competitiveness model, not a Canadian competitiveness model, but a model which takes into account the advantages that the three countries have to offer in producing goods and services for its own internal consumption and for export. I think that's a very healthy change in the way we look at these issues.

Another challenge is the reform of the health and pension systems. Mexico depends very heavily on public sector support for health services and for pension. There has to be continued reform that's already started and has produced some good impacts. There has to be more reform in that area in order to shift some of the burden out of the public sector and into the private sector so we begin to see a lessening of that burden on the government. Otherwise the whole of the government's operating budget is going to be consumed by pension and health care costs. This is a very serious issue that must be addressed.

Lastly I think one which impacts the creation of goods and services and on growth is the energy sector. How is this very difficult issue which is tied up with a lot of history and a lot of very important national concerns going to be addressed in a way which protects what Mexico sees as its vital interests and yet opens investment up in order to take advantage of the potential that Mexico has.

**Armand Peschard-Sverdrup:** Thanks, Ed. Luis and then Jaime.

**Luis Manuel Guaida Escontria:** Thank you.

I think it is very important at this stage of the meeting, this workshop, because in many ways we are focusing both on the issues and the various alternatives for solutions which will allow us to analyze in greater detail the issues that we face.

I would like to somehow express the point of view of this problem from the private sector's point of view in Mexico. Many of the issues which have been raised, particularly by my Mexican colleagues, I would like to further clarify.

Of course we have a number of challenges and opportunities that go together. First of all, there is much clarity that we have a young workforce that we need to train and educate very quickly. Unfortunately we have an educational system, a formal educational system which is deficient, to put it somehow. The training of Mexican youth, and we were seeing this in some of the previous indicators, do not meet the required characteristics to join in an optimal fashion the labor force. Here solutions have to be found by the private sector to retrain these young workers so that they have sufficient training to enter the labor force.

On the other hand there is a clear demographic tendency towards aging. As we have seen, we are in a lucky stage, theoretically speaking, with this demographic dividend as it has been called, which gives us a special opportunity. Nonetheless, the great challenge is how to take advantage of it. During the same historical period of this demographic dividend we in Mexico face a weak economy with GNP growth which is very limited and also a high rate of unemployment which would not allow us immediately to take advantage of this demographic dividend. A weak economy and a lack of employment is precisely the core problem when you're dealing with the demographic dividend.

On the other hand, as has been stated already, we have two very significant situations. The informality or the informal economy. We do not know with certainty its size, but serious independent observers report that approximately 40 percent of the gross national product could be in the informal sector. It is a high ratio, and this is an area in which we would also need to see how to involve this productive force which at a certain point does not contribute to the social security network or to the other budgetary aspects of the budgetary process.

We have the immigration issue, which of course from an economic and demographic side is a relief for the Mexican economy, but on the other hand if this demographic dividend is going to be better employed by the United States than by our country; and secondly, if there is an eventual return of this migration back to Mexico, those skills and that training which the Mexicans have acquired in the United States, can it be tapped somehow in our country?

A very significant issue which I understand cannot be a topic of this meeting for its very nature but I would like to state it anyway, is that the real solutions to the demographic problem in Mexico and the economic problem in Mexico, are rather in the political area than in the theoretical area. That is in Mexico we need to effect a number of changes and reforms which unfortunately have not occurred with the swiftness required for many rather political reasons.

So for the private sector, trying to summarize, the equation is very simple. We have a young population, a very significant young population that has to be trained and developed, but at the same time we need to create employment because that young population with adequate training simply has no opportunities and thus paradoxically our situation, and I close here, our situation is different from industrialized countries where there is an aging population and no young population to continue economic development and to contribute with their work and resources to the pension funds of the retiring workers. We are the opposite, but we do not have an opportunity within our economy to take advantage of this demographic dividend.

So in brief, the great challenge is what to do with our youth and how to do it quickly and efficiently on the one hand; and on the other hand, what to do with our economy and do it quickly and efficiently.

**Armand Peschard-Sverdrup:** Thank you very much. Jaime?

**Jaime Santibanez Andonegui:** Thank you.

I think all of us are here in the spirit of producing conclusions and in that regard seeing the nature of Luis Manuel Guaida who is a lawyer, he is instructing us to follow a method which will somehow lead us to the questions which were generously circulated among the presenters. But then in that spirit of summarizing and perhaps also moving on to the next issue I would like to point out that I think all of us agree and that the demographic dividend is an opportunity but is also a tremendous challenge.

Both I and many of you who are probably at this table, it occurred to me that when we began dealing with the demographic dividend my first impression was great joy and satisfaction because I thought well, we have the opportunity of the century here. But then a grave concern and dismay because this challenge also implies a huge challenge.

Then we come to a third stage with serenity and patience because the demographic dividend will not be the only element to influence the economic order, nor are we going to remain idle. This table is precisely part of that. To move ahead of time with knowledge of what may occur and what may be modified.

I think that faced with the phenomenon of the demographic dividend we need to consider three main components. One is the economic component, the other is the educational component and the last one I would truly highlight, the issue of governance which includes the policy dimension. I don't understand to some point why our colleague, Luis Manuel Guaida, says that this table should not point out something in the policy arena. I think we can and it's important to do so because the purpose of this work session is for this to reach congressmen and people in decisionmaking positions also in that arena.

I think the demographic dividend then is a great opportunity for Mexico but which also involves a great challenge. It doesn't seem easy to me, for instance, how to better activate the labor force in Mexico. I understand that nearly half of the Mexican economy to give it more precise figures given by Maria Elena Zuniga, 44 percent of the labor force is in the informal sector. Also according to the [CANAPO] figures, that 44 percent, eight percent within it is hired verbally, not formally. Within this context I don't know how we can create that 1.1 million jobs that we need per year, nor does it seem easy. It does not seem simple.

On the other hand in the educational arena I think it is well known by all that Mexico has a terrible inertia in terms of educational deficiencies and to carry this issue to the cross of my parish and what I do, I think we don't have an education system in Mexico that promotes entrepreneurship, and this is to the detriment of taking advantage of the demographic dividend. In terms of governance I think it is also necessary to indicate that without the reforms, I highlight what my colleague has said as well. Without the structural reforms that Mexico requires desperately and which I hope will crystallize soon, without that this demographic dividend will not be employed.

So this is a history of light and shadow. We can be pessimists, optimists; we can see the glass half full, half empty, but ultimately I think we need to be realists and focus on these three points in order to be able to take advantage of this great opportunity.

**Armand Peschard-Sverdrup:** Thank you very much, Jaime.

Paul, and I haven't forgotten; then Miguel Angel.

**Paul Hewitt:** Thanks, Armand.

I would very much like to go back and touch base on some of the questions that were asked for this session, particularly will there be a shift from labor to capital intensive, and will there be rising rates of savings and so forth.

I think the great advantage of participating in an event at CSIS is that you really do have the opportunity to do a lot of international comparisons and learn from the experiences of other countries, so let me just start out by saying that I think the starting point of Mexico is very favorable. If you look at where China started its demographic transition, and I would argue that this chart here on the number of dependents per working age adults shows that Mexico is really at the very earliest stages of its demographic transition. China was much much poorer. I think the last time I looked the median income in Mexico was somewhere around \$6,000. When China started it was around \$250 so Mexico is still on a per capita basis six times richer than China at about the same starting point.

Mexico will age just as rapidly as China has. Over the next 50 years, according to the United Nations, it will age about 20 years. The median age will rise by 20 years which is huge. But think about where Mexico has been.

I think in 1970 Mexico was the world's youngest country. The typical Mexico was 16 years old. It was a teenager. And we know something about countries where the typical person is a teenager. They have a lot of wars. If you look at the Arab countries, Iraq for example, the typical person is 18 years old; Saudi Arabia, 18 years old; Palestine, 14 years old. So you look throughout Africa and you see a lot of very very young countries. What we know about these young countries is that of the 25 youngest countries in the world, 18 have had major civil conflicts in the last ten years. So Mexico benefited greatly from being close to the United States because we were a safety valve. We absorbed all of these young who might have become the critical mass of disaffected people so that was extremely valuable.

I think though as we look at this chart going forward and we see the dramatic declines in child dependency what we really see buried in these numbers is the emergence of an era, the era of Mexican women. The demographic dividend not only allows families to spend more on health care and education and so forth per child but it also frees up women to participate in the labor force. So it's not just going to be the expansion of the working age population, it's going to be the expansion of workers. You're going to see a huge expansion in hours worked. I would argue that we won't see particularly during the early phases of the demographic transition a rising capital intensity. What we will see is GDP being propelled in large part by a rise in hours worked.

I don't know what the savings rate is in Mexico. I think it's not as high as in China where it's 43 percent according to the last number I've seen. It may be closer to India where it's 20 percent, but I don't even know if it's that high. Perhaps somebody here can illustrate.

That suggests that there will be a shortage of capital in Mexico and that foreign direct investment, perhaps even portfolio investment, particularly FDI, though, is going to be the key to any kind of capital-led growth, and that means of course that policies will indeed have to reduce political risk.

But going back to the comparative side, if you look at China and India you see two very different models of growth. Both are growing quite rapidly now and a lot of it's a productivity story as people move out of the agricultural sector. But India's growth seems to be based on the growth of services, and China's is based on the growth of manufacturing. China's is more capital intensively and they have attracted a lot of FDI. India has not yet done that. But India's great advantage is that the unifying language of India is English. This is why they're excelling in software and some of the other services that they're providing. So I would urge my colleagues from Mexico to not forget that as the European Union itself is finding, is that English is the common language of business. As this education process goes forth not simply to deal with America but to deal with the Europeans and other advanced markets it's going to be extremely important for Mexicans to be educated and be able to be bilingual in English.

**Armand Peschard-Sverdrup:** Thanks, Paul. Miguel Angel?

**Miguel Angel Tamayo Taype:** Thank you.

I just wanted to start out by saying that, because of some of the data that we were shown in the presentation at the very beginning, I wanted to make a comment in that regard. I also wanted to talk about some things that may tie into the recommendations, the policy recommendations that we're going to provide this afternoon.

This has to do with what my lawyer friend was saying, Mr. Luis Manuel. In the presentation we were saying that the rate that Mexico has for education, for education investment, is lower than the OECD and I think it's important to look at that. We have to look at who is investing, who is spending the money. In Mexico the federal expenditures for education of the federal government and the states is far greater than the standards set forth by the OECD. So we also have the private sector. The private sector makes investments in connection with education.

When we think about Korea and we compare it with Mexico we can see that the investment rates are quite similar. When we add the participation of the private sector into the educational arena then we can see that there's almost no difference. I'm talking about at 4.5, 4.6, even 4.9. But in Korea, and reference was made to Korea, when the private sector is added to the public sector, investment in education goes from 4.5 to 11 and something percent. But I think it's really interesting to analyze this. Do you think this is one of the reasons why the quality of education is an important element in these countries?

When we looked at the PISA results in the presentation, I think these are forced in a way. I don't see what relationship there is between the efforts made and also the educational efforts and I think that difference is important.

There is a second issue I wanted to raise, and we wouldn't want to only focus on that initial impression that we had. We have to look at tertiary education and educational rates of course and schooling rates, but that's not the only thing. We have to think about developing capabilities, building capabilities. Capacity building is important. And I think this ties in with what one of the discussants said in connection with the needs of the state and I had four points to raise and this is number three.

I think there is another issue that I wanted to discuss in relation with education and demographics. We have to look at the different characteristics that poverty rates have in Mexico. Poverty in Mexico and everywhere else has its own dynamics. It is very difficult for a poor family to come out of poverty. Poverty pulls the family down.

So perhaps older individuals in Mexico, if they are included in this poverty group, I'm sure that the amount of poor people that are older are going to increase because poverty pulls people down. It's like a gravity force that pulls people down.

As an aside I wanted to say that perhaps we may want to discuss about how to change the intangible assets or how to take advantage of the intangible assets that Mexican workers have without investment. How can we do that? They have manifest capabilities. They should officially be recognized because they have intangible assets and those assets are important, and assets should be turned into capital so that they can have better opportunities in the labor market.

The last point I wanted to say in closing has to do with migration, obviously. For us, it is a point of concern and also we feel that it is something that needs to be discussed here at this meeting. Because of the inertia that exists in the educational system here and everywhere else in the world, in Mexico we have made efforts to change this but when it comes to basic education there is a large percentage of people that drop out. We're talking about 750,000 young people that drop out of school -- 750,000. One-third of these people can become part of what we call the compensation efforts in Mexico. It's called adult education, that's what it is basically, under the INEA in Mexico. So that's only one-third.

The remainder either come to the States or die. If we are trying to advance economic growth in Mexico, well, we have to think about all these things. This situation is going to bring about very serious and grave consequences if it doesn't get changed.

Also I wanted to talk about the people that drop out of school, the young people that drop out of school and become part of the informal sector. They become at risk youth. Sometimes they are part of the informal sector and I think policies should be designed to integrate these young people so that they can be part of a value-added active economy that will improve their lives.

**Armand Peschard-Sverdrup:** Thank you, Miguel Angel. Your comments were very very interesting. I just wanted to tell you that perhaps those will be discussed in depth in the next session.

The 750,000 young people that you mentioned, are these secondary school students or are they primary school students? You talk about 750,000 dropouts. I can tell you, if you give me a minute I can tell you that I think it's both primary and secondary school, 750,000. But I'm talking about Mexico, only Mexico, right?

**Miguel Angel Tamayo Taype:** Yes.

**Armand Peschard-Sverdrup:** But it doesn't include tertiary education?

**Miguel Angel Tamayo Taype:** No, just primary school and secondary school. That's it.

\*Missed a couple of things in Spanish

**Richard Jackson:** Mexico indeed spends, compared with OECD countries spends rather heavily on education. In fact the spending which is now at about six percent of GDP is actually a bit above the developed country average. And looked at from a different perspective is a share of government budgets. Mexico is the heaviest spending of all OECD countries. Mexico spends about 25 percent at all levels of government, of public expenditures or on education. So Mexico spends very heavily. Of course the question before us today is how can it spend more efficiently?

There's another sidelight I'd like to add here which is that the problem may not be where most people, certainly most Americans, would assume it is. If you look at where Mexico is spending its money on a per capita basis, it's spending it on upper secondary and on tertiary education. The ratio of per capita spending or per enrollee spending on tertiary to primary education in Mexico is about four-to-one, compared with one-to-one in the United States. So this is an issue that I hope we can discuss and address. Perhaps the problem is not so much when people get, when students arrive at a more advanced stage in education but in the resources and the systems that are necessary to bring everybody up to that.

Thank you very much for your comments.

**Roberto Villarreal:** I think we can also benefit a lot from the general approach in human capital presentation if we go into the details. I'd like to point out the three directions in which disaggregating the (inaudible) ideas or analogies can be beneficial.

First when you look at the same statistics that you have on your presentation by age groups, income groups or sex groups, you come to very different diagnosis.

First by age groups. The schooling indicator that you use of course is the national average and it has an [IAEMA] problem that is terrible. When [inaudible] average that is overwhelmingly strong.

If you look at how schooling is evolving in the younger generations you get a very positive picture. So in that average you're also considering the schooling of people that are now 40, 50 or 60 years old that are not increasing their schooling in any way and you're averaging that with the schooling levels of teenagers and youngers that are increasing very rapidly. So disaggregating by age groups is very beneficial.

Second, by income groups. When you look at the 20 percent richer population the picture is entirely different to that of the middle 40 percent or the lower 40 percent. And in our own analysis we actually look at these three groups as three different countries faced in different positions in their development growth. The 20 richer percent of the population is very much like a developed country. The 40 middle percent has dramatically changed over the last 20 years in their demography and their education. The number of members per household, dependency ratios, the fertility and mortality rates are entirely different in that group from the poorest group.

Then most of the aggregate picture is very much biased by the situation of the 40 percent poorer population. So a differentiation of policies when one would consider the three groups could be very appropriate.

And finally, by sex groups, I also agree with what was said before. In the female population we are looking at schooling advancements much more impressive than of the male population. This has a very positive feedback in terms of increasing fertility, in terms of education of younger generations, educated females have the largest impact on education of the younger generations, and on the economic participation of females. So the problem of employment creation is not just an average problem, it's very much an increasingly female problem because women are participating more and more and institutions do not permit them to engage in the formal economy in the same way as [inaudible] males.

The second comment on which I think participation can be improved is in terms of dynamics. I want to refer just as an example to a graph made by OECD that impressed me very much. It's in the internet and I will share with you later on. It compares the average schooling of the young adults

in the thirty countries of the OECD. I mean the number of school years completed just in the group between 19 and 34 years of age. Of course Mexico is in the lower end together with Turkey, but the graph compares the average schooling of that younger population at two points in time separated by 20 or 25 years if I recall well. There the second problem is that Mexico is among the countries that has improved less over the last 25 years. A problem that we share with the United States because in that graph it shows the relative advancement of education in young adult population in the U.S. compared to Germany, to Korea, and even to U.K., other countries have performed better than the United States. But the graph also shows that Korea and Spain are the most outstanding cases in increasing their human capital in the productive population. We don't want so much to concentrate on the human capital of other populations, but very much in that productive process. And Korea and Spain surpassed by far Japan in one case and Italy and France and other countries in the European Union.

So we have to look at what policies they put in place to make a dramatic change in 2025 year period. And again I want to emphasize you have also seen the problems vis-à-vis other OECD countries.

Lastly and most interestingly what kind of policy reshuffling do we have to consider in Mexico to meet this situation?

I want to refer to two broad categories of policies. One on social protection, the other one on education in particular. On social protection I was discussing with some colleagues last week that we have inherited from the 20th Century a system that more or less wants to give the same protection to all population in the country against risks. Take for example social security or payments, but given that we have those three large population groups, the poor, the middle ones, and the richer, and that they go into different demographic transition phases, I guess as an hypothesis that we have to think seriously social protection, social security pensions, for the younger population. It is very inefficient to ask for young workers say in ages 18 to 30 to save for the long run for pensions when they still have 55 years of working life ahead, while at the same time the [urges] of investing those savings in productive investments that would increase their income in the next 15 years is to some extent not addressed [inaudible].

My impression is that we have to provide those younger generations with the minimal protection for health expenses and not to over-emphasize investment for retirement because that can go very much into education that will benefit more them in the next 20 years. Particularly if we account for the *cuota social* that the government is providing for patients of that generation, that will benefit them 50 years from now, and if we will direct that into scholarships for people that are abandoning the schooling system, that would be a much more productive way of using financial resources of the government considering the demographic transition of the country.

So that paradigm that pensions and social security are just imperfect institutions now have to be rethought. In terms of other priorities, as providing social protection in education. And again, thinking about reshuffling policies, but just within the more complete subject of education. I think we also have to rethink the paradigm of school education vis-à-vis open flexible systems, particularly for adult education because in the graph that I mentioned we are lagging well behind all other OECD countries in the young adult population, ages 19-24 or 34. The school education will do nothing to the country in that very large segment of the population, and what we are doing for adult education is really very weak.

So we have to readapt policies not just in the details but in growth features.

I think finally that disaggregating the data, looking at the dynamics and also considering policies in a very detailed way put us before a picture in which we can harness the future very much and not just conclude that very large problems are [inaudible],

**Armand Peschard-Sverdrup:** Roberto, thank you very much. Those are good points.

In trying to adhere to the schedule -- Well, Scott I'm sure is going to have something to say with regards to demographic and aging. We'll let Scott go. Ed, I don't know if your comment also was relating to the theme of the first panel, the demographics and aging. We'll include these two comments and then what we'll do is we'll break for a few minutes and then we'll resume. So Scott, and then Ed.

**Scott Nystrom:** Thank you, Armand.

I work at the U.S. Senate Special Committee on Aging so you would think I would be more of a demographically oriented person, but I'm also an economist, a market process economist. I'm reminded, first of all let me say I'm very optimistic about Mexico. I think it's a very resourceful people, very entrepreneurial, very hard working, and I think they will come through it. That doesn't mean there aren't challenges and I think the challenges, obviously are demography. But there's another challenge too that I think is maybe even more important. In fact I would suggest that we're asking the wrong questions in terms of defining the problem as demography or increasing age dependence with regard to Mexico. I'm also reminded of the commercial where they've got these three guys standing around a box that needs to be shipped and they go, "We're doomed. We're doomed." And someone says, "Well, let's just ship it with this company." There are answers, but I think we have to think outside the box.

Let me start by stating a couple of premises. Markets adjust; government ossifies. Markets are dynamic and flexible; governments are static and inflexible. Anyone who's tried to get a piece of legislation passed through the U.S. Congress understands that. We had Alan Greenspan talk about global aging a couple of years ago, and we had Paul Hewitt and Syl Schieber testify as well at that hearing. Historically he told us, the first point I want to make is on the productivity issue. Historically he said that labor shortages lead to greater innovation and higher productivity rates and he cited the American West where there was a shortage of labor and they were just that much more resourceful and inventive. That's just human nature. So to say that productivity rates will go up because there's capital flying around, that doesn't necessarily hold true. There are other dynamics that feed into that.

Demography is a window on this issue, but I also think that the key to addressing, and I think this is where we're asking the wrong questions. We're not defining the problem correctly. It's not demography. The key is to addressing the challenges of a growing age of dependency ratio in Mexico within a context of the informal economy. We've had estimates of 30 to 60 percent of the Mexican economy being in the informal sector. The informal economy has been studied extensively by a gentleman named Hernando de Soto, not the Spanish explorer but the Peruvian scholar, and he's doing groundbreaking work. He very well may win a Nobel Prize in Economics for his work. He's been identifying and quantifying obstacles to the informal economy in many Latin American countries, in countries in the Middle East.

One example he gives is in Lima, Peru. He said in order to start a small business in Lima, Peru it takes 300 days working six hours a day to get the licenses, to get the permits, to go through all the red tape and all that. Why is anybody in the formal economy in that kind of a system?

The other angle on that too that he notes is that poverty, the class struggle is not rich and poor. The real class struggle is between the entrepreneurial class and the political government elites who have a vested interest in controlling the economy to their advantage.

I know this is provocative, but I think this is important. You can't accumulate capital without clear property rights and enforceable contracts, so you need a legal system that reflects that and that is fair and honest in the perception of the entrepreneurs and the workers.

You also get in the informal economy a more short-term view. If you think U.S. corporations focusing on quarter earnings every so often is a short term, imagine these small entrepreneurs who are sort of in the informal economy. They just want to keep what they've got and not have it absconded by legal items, legal activities.

I would argue that you can spend all you want on education but it's probably wasted without reform that gives incentives to pulling the informal economy into the formal economy.

With that I'll close. I think it's an idea worthy of discussion in this context because I think we may be defining the problem incorrectly. Thank you.

**Armand Peschard-Sverdrup:** Scott, very interesting comments, particularly from someone within the static government structure. [Laughter].

Ed?

**Edward Kadunc:** I wanted to address one of the points that we're here for the discussion which is will smaller families want to invest more in the education of their children. I just wanted to point out something that I think that's very interesting that's happening in Mexico right now. To answer the question sort of in the short term, probably not. Probably what you see is the urgency of primary needs in poor households are going to take precedence over the benefits of investing over a number of years in more education, particularly because the benefits are relatively low at those levels.

So what do you do in order to encourage that lower 40 percent that Roberto was talking about to stay in school and to benefit from education? I think it's worth pointing out the Mexican government has a very interesting program which they're implementing now and which is having a very positive effect which is called "Oportunidades" which is a program that pays families for children who stay in school. They give them a monthly stipend for a child, and there is a relationship between checking with the school in terms of attendance and the payments that are being made to the families. This has dramatically increased school enrollment rates precisely among this group of population which is the most vulnerable to the pressure of trying to seek outside employment at an early age.

The program's been expanded to include high school age children now. That I think is a very big benefit that is going to accrue to the economy over the next few years as we begin to see these people come out of the educational system.

That benefit, of course, is facing a challenge as well which is that when they come out with an education they now have to have a job because if they don't they become either disaffected or Mexico is educating individuals to work in another country because these people will seek other economic opportunities.

So I think it's worth highlighting this very effective program that they've put in place which has attracted a lot of international attention also because of its impact, and to call attention to the fact that having done this, jobs need to be created also.

**Armand Peschard-Sverdrup:** Thanks, Ed.

I would like for us to kind of just break for, to try to adhere to the schedule a little bit. Jaime and Eduardo, if you can hold off, when we break for ten minutes and resume at 11:15, give people an opportunity, the restrooms are down that hallway and feel free to grab a coffee, and we'll resume in ten minutes. Thank you.

(Break taken)

## **SESSION 2: A Highly Skilled Labor Force: The Key to Enhancing Mexico's Competitiveness**

**Armand Peschard-Sverdrup:** The second session, obviously is a highly skilled labor force, the key to enhancing Mexico's competitiveness.

I have asked Luis Manuel if he would be kind enough to at least open it up with some comments to help us get the discussion going with regards to the second subject.

**Luis Manuel Guaida Escontria:** Thank you, Armand.

We were discussing briefly before the session began that the first portion has been very interesting because it has somehow allowed us to get a general overview of the issue and concerns that bring us to this meeting. These following sessions will allow us to focus more precisely on the issues and discussion.

By way of introduction I will gladly try to enunciate some ideas around the topic of this second session in the spirit of merely kicking off the discussion and further detail on your part by you who I assume are experts on the subject, and all of you know more than I.

An important matter that was established already was the issue of demography and demographics in Mexico and the window of opportunity that we have with this demographic boom which could and should be better utilized. Nonetheless, something which is also clear, given the problem we have of a weak economy and a high level of unemployment, is that paradoxically in spite of this demographic dividend we will find ourselves in a similar situation to those of developed countries demographically and economically speaking. That is these countries -- the United States, France, Germany, England, just to point out a few -- have an aging population with which the economically active population, young workers, have a lower relationship relative to that population of older workers.

In Mexico the current trend is different, although we know that by about 2050 we will be in a similar situation. Nonetheless at this particular time, even though we have a young population we don't have jobs. So from the standpoint of retirement, pension funds and social security, the contribution of those who do work is less than it should be. That is we also have the problem of workers contributing in a lower proportion than those who are at the retirement age. This is a demographic, social and economic paradox that we need to solve somehow and is the topic of this second session, the development of those skills and capabilities, which however, has to be also coupled with job offerings.

The weakness and lack of growth of the Mexican economy you all know very well. We have low rates of growth of the gross national product; a very high unemployment rate; a depressed labor market which is the key problem I see from where I stand.

It is said among the many figures that are thrown out that in Mexico the Mexican population needs somewhere around \$1.1 million jobs per year. That is Mexicans who enter the labor force require a million plus jobs and the Mexican economy not only has not been able over recent years to

meet this employment demand, but in fact we have had a decrease of job offerings over recent years. Also wages in general. There's a very low purchasing power which is part of this equation.

Consequently what is required is to create economic development in parallel to the creation and development of skills and knowledge of our workforce.

An interesting point in the Mexican equation would also be labor legislation. Our labor legislation on the one hand has a positive view that establishes as an obligation of all employers to give training and development to their own workers, and this is complied with in principle very well. That is when a worker finds a job and enters into a relationship with a Mexican company this company, and usually they do meet the obligation of training these workers, and that is a source of development of our human resources. Nonetheless, all of those who do not have a stable working relationship, speaking in terms of informality and in general, do not have access to such training.

Labor legislation itself seen from the negative point of view establishes a number of limitations or obstacles for the development of job creation and without going into greater detail at that time, this is being worked on in Mexico. There is a suggested reform that has been before Congress for about a year now but unfortunately has not yet been passed.

Also labor unions are another ingredient within the equation. There are very progressive labor unions, very proactive unions who understand the problem and have been open to seeking solutions and have helped to find solutions to the development of human capital in Mexico. However there are traditional labor unions who see this with a very closed mind and oppose change because they fear a loss of privilege and that is another one of the obstacles.

Some final ideas as a proposal for the discussion, of course, the development of the Mexican economy is absolutely necessary and obviously all of us agree with that and we would have to see what can be done in terms of human resources.

Another thing that would also have to be dealt with and understood is the negative perception there may be of employers relative to aging workers. As you know, it is thought sometimes mistakenly that the older worker, the worker who has entered into a greater age is less productive and that they generate greater expenses as far as health and retirement costs and represents a greater cost for training or retraining. This perception may be mistaken and would have to be changed.

Productivity depends to a great degree also on the skills and competencies of workers and in our country it is usual that older workers do not update those skills and abilities. We would also need to look into how to provide that ongoing education and retraining.

On the other hand, promoting and facilitating workers to continue working for a greater time would on the one hand alleviate some of the very grave stresses on our pension system and would also contribute to economic growth.

It has been said here in the previous session, the initial part of our session, the matter of investment in education and training and development. Of course a very significant part of this equation is not only investment in resources but also what is the relationship between investment and results. In education recently in my country there has been a public discussion on an increase to investment in scientific development in which it is sought to dedicate one percent of the gross national product to scientific research. However, the great question is what can be done with these resources, how do we measure, how do we best conduit and make effective the investment of our wealth in formal education, scientific development, and development of people.

Finally, also as a general idea we might think of the creation or development of a working group, a task force among various government agencies as might be, for instance, Education Ministry, Labor, Economy Ministries, of course with participation of employers and labor unions as well as all of the development agencies or academic institutions like the National University, Colegio de Mexico, the National Council of Science and Technology, to seek pragmatic solutions that are measurable and to the point and which address the immediate problem which is how to develop these young cadres and how to create opportunities because, let us not forget, and I conclude here, that the issue is not only to develop this young workforce but how do we offer them opportunities so they in turn can contribute to the economy.

Consequently the problem we have in Mexico goes outside somewhat of the ordinary. It is a unique issue of having this demographic dividend and not having economic opportunities and how to rationalize very clearly and pragmatically the resources that we may be employing at a given time.

**Armand Peschard-Sverdrup:** Thank you very much Luis Manuel.

You talked about the creation of a task force. Was that a recommendation?

**Luis Manuel Guaida Escontria:** Yes, it's actually a proposal that we have from the business standpoint, if you will.

**Armand Peschard-Sverdrup:** Arnie and Jaime, or Jaime and Arnie, you can fight it out -- [Laughter].

**Jaime Santibanez Andonegui:** Thank you very much for giving me the opportunity to speak. This is a very open-ended question as the answer will be.

Human development policies, have they been actually successful? Well, if we look at the past few years I've seen that there has been a substantial effort made and I think the dividend is going to be good, but we can also look at the glass as half empty.

I wanted to underscore something that I think we should consider from now on in both countries. I think Mexicans are participating more and more. Mexicans are becoming involved in processes. We're trying to be inclusive and we've tried to be part of the decision-making process. I think the U.S. Congress is going to see that Mexico is going to be going to be more competitive, more participatory and more inclusive.

I think this is really important because when we are thinking about developing social capital for the future that kind of structure has to be all inclusive. We tend to think that the government is the one that develops social capital. I don't think that's the case.

I was talking during the break with a colleague of mine from the Public Education Secretariat and we were saying that these policies are not generally designed by the government but by society in general. So actually I think the participation of Mexicans in the process is really very important because social capital will be developed by all of us.

I wanted to underscore something else. We talked about labor force, we talked about employment, we talk about the need for job creation. I think we need to add one point in our agenda. I think there is one national security point which is actually the need for promoting the culture of business in Mexico. I think we don't have a business culture that's strong enough in Mexico. My friend from the Public Education Secretariat was telling me sometimes we cannot find

counterparts in the business sector, and I think he's right. So I know that we are perhaps washing the dirty linen in public but I think this is a good place to talk about this.

I feel that the business sector is not structured properly and it's not really representative of every element in the sector. We are working towards this. We are looking at the business institutions. We want them to be more democratic, more derisive [ph]. But one thing is true. We need to do this both from the viewpoint of business culture and also from the viewpoint of society in general. We want every Mexican to have more business culture, especially young people in schools. We are trying to promote job creation, of course, and we are also trying to create jobs.

When we talk about creating employment we're talking about a very vague concept. When we're talking about creating jobs then we're talking about a link between the business world and the labor world. Mexico is a potentially very rich country and in order to bring that potential to the fore we need better business.

**Arnold Packer:** Thank you. I'm glad I let Jaime go first because he has set the stage.

I believe that some figures that Jaime put forth were that 44 percent of the GNP or the labor force, I guess it is, of Mexico is in the informal sector. One wonders about GNP figures and how hard it is to collect data about the output of that informal sector, but the point I want to make is that the informal part of human resource development is most likely at least as large proportionately to human capital development as the formal sector. It has been so for a long time. The apprentice system is one example. The importance of mother's education is another example where the mother's education comes through not necessarily genetically but through her ability to educate her children not only before they go to school but even during the school years.

I think one of the important things is to figure out how to encourage learning on the job by which I do not mean sending people to training classes, although that's important also.

Now this is not done in the United States very much either. There are not portable certificates that go from one company to another. The best example we have is in the information technology sector where the industry recognized the inability of colleges to do what was necessary and Microsoft and Sysco and everybody else have established their own standards. They have not let themselves be bound by professors' tenure regulations. If you want a Microsoft certificate you do it Microsoft's way or you don't issue the certificate and if that requires professors going to learn how to teach, that's what has to be done. There is the business sector stepping up to, in a very practical way, how you develop the human capital that that industry needed in order to develop.

The IT sector is the biggest and perhaps most important, but it is not the only one. Licenses -- this is interesting in the way it was created. The American automobile industry, and I think it was with an incident with Sears where Sears was fixing cars not up to standards and there was quite a scandal. Out of that came this licensing by the industry through a not-for-profit to license automobile mechanics. I think it's ACE but I may have the letters incorrect. In which you get a certificate part by part on the car. You get a general certificate and then a sub-certificate for brake systems or electronic systems.

So here is a very concrete way, I don't think the government was involved in creating that at all. In the IT sector the industry received complaints from the retailers of computers that they were sending their people to a different school every day for every different computer. So with industry support they created an organization called CompTIA which is a not-for-profit created by the industry and CompTIA issues certificates that presumably certifies your ability to work on computers irrespective of the manufacturer.

So I think one needs to recognize that what you don't need is necessarily only more education, but you do need something that I've called a learning society and a recognition that learning occurs in which no statistics are generated and you never see it in the data but it is real just as the informal sector in Mexico and the United States too, for that matter, are real

**Armand Peschard-Sverdrup:** Arnie, thank you very much.

Before I pass the microphone to Eduardo or to Miguel Angel I have a question that might be actually for both of you.

The points that have been made so far really focus on how relevant the educational system is, not just towards the economy but how relevant it is to the demands of a knowledge-based economy. We've talked a little bit about the interaction between the private sector and the educational system and the question that I have, and it could be for either of you since Eduardo is from Economia and Miguel Angel is from Education, is if you can tell us a little bit about, because I'm interested. I don't know the answer to this. Tell us a little bit about whether the private sector and education do interact in Mexico. If so, to what extent, and how do you interact? How influential the private sector is in policy formulation. Whether in fact Luis' recommendation of there being a task force being created, whether in fact there's a valid recommendation or are there mechanisms already in place that enable these sectors to communicate and jointly formulate policy?

**Eduardo Solis:** Thank you very much.

Before I deviate to try to answer my question which by the way I think Miguel Angel will be better equipped to do, let me focus on two areas that I think is important to key in. One is building upon what Roberto Villarreal was saying with regards to making sure that the analysis has to be made considering not only income cohorts but also age and sex cohorts to make better policy recommendations.

I will say that by the same token is the regionality issue. It will not be the same that you will recommend to Nuevo Leon, for example, or to Jalisco certain recommendational policy than what you would recommend to Chiapas, Oaxaca, or Tabasco, south, southeast of Mexico. Really, not only do numbers differ as they do differ from considering income, but they do differ from region to region.

Not only will you see for perhaps obvious, for some people it may not be that obvious, but it is rather simply to understand that you will see differences in wages at the lowest level of entry into the formal production companies. Wages are essentially different in the north than in the south. In the south of Mexico you will see wages that are less than half of what you see in the north, and that in and of itself, and that's why I wanted my intervention to be before the break because still I'm in the previous session number one where when you're saying will this change the intensity of use of labor force. I will say that is already happening. Regionally you can see this already happening. You don't see a textile company in Apodaca, Nuevo Leon, just outside of Monterrey, or is Zapopan Jalisco just outside of Guadalajara as it used to perhaps ten years ago. No textile company, no labor force intensive process will be taking place in these areas because it doesn't make sense. At \$2.80 or \$3.00 an hour fully loaded wage it will not make sense.

But instead the last two years we have granted new licenses for maquiladoras, 13 licenses for maquiladoras the last two years in Campeche. In Campeche, just an hour and a half from Yucatan where they take the product out of Mexico from the Progreso port right there in Yucatan.

Thirteen new maquiladoras, all textile maquiladoras. Well, if you compare \$2.80 or \$3.00 an hour to \$.80 or \$1 an hour, it makes sense to go to Campeche and bring these textile companies.

Or harnesses companies in Chiapas, for example. Yes, we do have harnesses in Chihuahua, but those harnesses are for the F-16s here in the United States, by the way. Much more value-added, more engineers, more high tech technicians working there.

So we do see already these differences, and as a way of looking at it, as Roberto was saying in the income case where you have the high income, middle income, and you can already see three things happening, changing. The same is going on regionally wise. The same is going on.

Heading the investment promotion effort in Mexico myself, I cannot bring some of these high tech investments to the south, southeast. They may not have the engineers or -- They do have engineers, but not the amount of engineers that they may need. Should they come to say Nuevo Leon, in Nuevo Leon we have 44,000 registered students just right there in engineers and other technological university careers. So they'd rather go to other areas in Mexico where they will find these engineers, and of course where higher tech, higher value-added kind of processes land. Not in the south, of course.

So we already see these things going on. We already see more and more these places taking on the jobs that are right there in the United States, where the United States is leaving, our north is picking up. Where our north is leaving in terms of processes, not all of them go to China. Many of them go to the south, southeast of Mexico, especially when North America is the main market.

So you ought to see this.

In terms of what Mr. Packer was saying, again Miguel would be very equipped because he is the head of this office, I think it's important that this group notices the fact that we have a tremendous program. This is perhaps its seventh year I think, where we've put already more than \$400 million. This is a program that heads Mr. Tamayo. The program is precisely education for life which may not come from formal universities, from formal schools. It can, but it can also come from what you learn on the job, from experience, and this is what is called the standards for labor competence.

We have at least 600 creative standards. These standards, by the way, according to our standards in metrology federal law, these are standards created as you have ISO standards or voluntary standards, these are labor competency standards where the private sector, and I'm sorry Mr. Guaida is not here, because precisely what he was asking for is what is going on in this group, where private sector, the federal government headed by Labor Ministry and the Educational Ministry, we tailor-make standards according to demands from the industry. And we go and create these standards where for example today if you want to be a welder, in the United States you have the American Welding Association standard and you may have American Welding Standard A, B, C, or D. For us, we take this international standard and we accommodate to companies in Mexico needs. This standard is already there for either someone who may have not gone to school to comply with if there's a third party who certifies that he complies with the standard and he gets a certificate of standard.

Schools are going that way. Technical schools. Technical schools are heading towards getting their programs according to the standards.

Now we have two processes going on. One is for those standards that are created we need to get more and more certified people so that we can tell companies, listen, not only you have a welder here, but you have a certified welder. That is going on.

The other thing that is going on is we need to create more standards in other areas. We have 600 standards already published out there. They're created by companies and the government together according to the needs, and there's more than 240,000 people already certified through this program.

The program used more than \$400 million already to create the infrastructure, to create where it is heading. The very next step is to promote the program so that we make use of this as a tool to really pump up the technical level people in Mexico. I think that is where government, private sector meet together to make sure that these standards meet our needs or their needs, the companies' needs. I'm sure Miguel will expand on this but I think it's very important because it builds upon what Mr. Packer said.

**Miguel Angel Tamayo Taype:** Thank you.

Perhaps to structure my intervention it has to do with the question that you were making. If this recommendation that came out of from the business group relative to creating a task force with certain public agencies, whether it exists or doesn't exist in Mexico, and the answer is in the affirmative. It does exist.

But aside from that answer, both the question and the answer illustrate a huge problem we have in Mexico. Very significant efforts are made but are not socialized, are not made use of. Eduardo Solis was commenting regarding the program that we initiated in Mexico some eight years ago with World Bank funding. Indeed, in response to the diagnostic that we have heard from many of our colleagues present here relative to quality and relevance of Mexican education, that's what this program was created for. And throughout this time that was spent with this partial support from the World Bank that Eduardo told us so far we have spent some \$400 million, and just recently we obtained another credit from the Inter-American Development Bank for six years, another \$150 million plus a matching amount by the federal government in order to achieve that technical education and training in Mexico become more relevant and flexible to the specific needs of the national productive apparatus and its various sectors. I will explain how this is achieved.

It is also of use for -- We have in Mexico close to 34 million people above 15 years of age who have not finished their basic education. Those people who have not completed their basic education do not return to school. They do not go back into the formal education track. They do not wish to. Those people are part of the economically active population in Mexico and consequently that economically active population in Mexico, productive population, which is estimated at about 42 million people, a little over a half, do not have that basic schooling. Many of them work as owners of the small shops and this is a problem because the policies in support of small and micro companies through credit and subsidy are never successful because they are given to people who lack the skills to positively manage a company, and obviously oftentimes these policy efforts are sterile.

To this part of the diagnostic I would add that, it comes from the birth of this program, that when the question has been posed to the employers why do they demand higher qualification from students who for the first time come through job training, obviously and fairly so they tell us well, the educational sector, they graduate youth who don't know anything, but when we ask the educators, the educators answer that the employers don't know how to ask for things. There's a communication problem between the demand and the supply.

This situation leads the program to be centered on seeking points of reference which are expressed by the employers themselves in the productive sector. These points of reference have to be clear so that the educational supply can be geared to meeting them. That may be a kind of a hinge between the needs and what the educational sector can accomplish.

This in terms of our program is called a technical standard of labor competency. The standards then are issued by the productive sector and are captured by the education system to meet them.

It is a program which has made progress, a program which has given proof of its impact, but of course it is not all that was expected from it. This final part of my intervention at this time, I will explain why and what needs to be done.

It is unquestionable that in all of this we are inclined to think of the alignment of policy instruments, what the Economics Ministry does, the Labor Ministry, the Public Education Ministry, what the National Council of Science and Technology do. One is inclined to say let us join efforts and align. Obviously that is positive. But there are situations in which I do believe we need to emphasize greatly such as the following.

No effort made even within this program to improve education and training can be successful unless it is synchronized. And I'm not saying aligned, but synchronized with the technological development policies.

What has happened and I believe is repeated throughout the history of many countries, is that educational plans and technology development plans were designed for different countries even when these plans are applied to the same country. There is no communication and I sense that, for instance, the efforts that Eduardo makes when I have -- I have been agreeing with Eduardo on many occasions on the efforts to attract direct foreign investment in Mexico which is very important in order to through this investment create employment and technology transfer and so forth. Obviously this cannot be successful even though they may be successful in the short term, unless a trained labor force exists to absorb it and move into the innovation stage and where also as part of these efforts certain sectors, public sectors as well, begin to focus the training on specific processes which are required by certain unique companies, and I think Mr. Parker was making reference to this point.

It is a demonstrable fact that when investment is made in training for specific process today, that investment does not offer returns because obsolescence of the process accelerates. We have a problem here in terms of the type of training which needs to be acted on, particularly at the government level, and recommendations which appear to be true and proven attempt to create capabilities, for instance, in problem solving, learning to learn, teamwork, working in mixed social environments and so forth rather than giving them specific skills for specific processes.

Now everything that I am relating here, all of this is picked up by the program and again, I say it has not had the success that we had hoped for in terms of socialization because there is a lack of mechanisms which could, for instance if I had met Mr. Luis Manuel before, we could have talked about it and I would not have made that question, or you would not have made that question and I could have told you, listen, we already have this. Help us, we can work together. And likewise with many others. I think that's why this meeting, this forum is a wonderful opportunity precisely to promote the good points and advantages of this program on a topic which is so important to Mexico such as how to take advantage of this young productive force to make it more productive through innovative instruments which are not aimed merely at increasing school participation but at creating capabilities which are another way of developing courses of education.

We have 613 standards. Each standard has units of competency. Those competency units are subject to modular courses and obviously issue certification to persons who pass the test and meet the standard which is set by a third party organization such as ISO. So the problem is very important.

We think this instrument is a viable option with very specific characteristics which I would be glad to explain further or I can mail them to you.

But my participation at this point is in response somewhat to your question of how much this is known or whether it exists in Mexico? Yes. Does it involve the productive sector or not? With this instrument, it does because it answers their needs. There is a need for greater participation by the private sector as well, but above all, that the interlocutors in the private sector be identified because there are various chambers, various bodies which are not necessarily in agreement with what they express and demand and which oftentimes do not reflect the true needs of the businesses. It's a problem that merits greater discussion.

**Armand Peschard-Sverdrup:** Jaime is eager to add something, and Eduardo.

**Arnold Packer:** Can I just ask a question? I think Miguel Angel actually has touched on the nerve of this discussion and I have two questions.

Clearly, and I don't know if I should speak in English or in Spanish. What you identified indeed is the challenge that you have in the Education Ministry, not just identifying the needs of the economy regarding productivity but also the challenge you face in identifying the needs that will transform the economy into an economy, a knowledge-based economy, an economy which is perhaps geared more towards science and technology. How, and I'm not sure if you say this in Spanish, how do you reconcile -- okay, you understood me. In that group that you mentioned with Education and the private sector, how do you reconcile the productivity sectors and the perhaps needs more towards the future in terms of transforming the economy into a economy more based on science and technology? Because obviously if the inter-relationship is only with the productive sector which has not reached that stage of productivity, for instance in biotechnology or other sectors which are perhaps more based on science and technology, how do you reconcile that?

**Richard Jackson:** I just want to add a word because my question is really a very similar one and I think builds directly on what Miguel was saying. Namely, a first step perhaps is to recognize what the needs of business are today and to design training programs and standards that meet those needs. But today's needs won't necessarily be tomorrow's needs. Is there any way that we can project the skills, demands, the mix of skills demanded by tomorrow's workforce? I know this is something that Arnie worked on back in Workforce 2000 for the Labor Department. We have a guest with us today, Jim, who works on that directly now. And I want to be sure, I know we have some people who are eager to add a point but I want to be sure we come back to this before we close out the session.

**James Whittaker:** We've talked a lot about challenges but I'd like to compliment and commend a lot of the work that the Ministry of Education, Ministry of Economy have done in terms of helping to develop skills for the future. They have been very receptive and open and aggressive in trying to use information technology in the K-12 environment for kids in the future to learn skills. Together in cooperative work we've trained about 250,000 teachers in K-12 schools on how to use IT effectively. It's not teaching teachers how to use IT, but it's rather teaching teachers how to use IT effectively to teach history, education, language, whatever it is.

But in that manner, millions of young Mexican kids are being exposed to the Internet, being exposed to use of technology which will be extremely important for them no matter what they do in the future. So there is an aggressive program out there that is being very effective. It's in all 31 states plus Mexico City.

So there are a lot of good things going on as well. We in the private sector, I'm with Intel, I work Lizete De La Torre is my colleague, working very hard trying to bring about policies and programs. So there are a lot of success stories that we can all build on and we as a member of the private sector would welcome many others in the private sector to join us and contribute where we can. Thank you.

**Richard Jackson:** We'll return to that issue perhaps in a moment. I know there are a number of people who had their hands up waiting.

**Armand Peschard-Sverdrup:** Ed, you had a question, and then we'll turn to Jaime.

**Edward Kadunc:** Thank you.

One area that I haven't heard mentioned here and I think it's worth pointing out as very important is the tremendous amount of collaboration that's going on at the university level between U.S. and Mexican universities. The tremendous number of universities in the United States and Mexico who are working, many of them outside of government structures but many of them with the support of CONACYT, to set up joint relationships, and the richness of those relationships in Mexico I think are contributing substantially to the interflow of information and technology, and are bringing in the private sector in some cases, and I'll take this opportunity just to do a little propaganda for USAID.

We have a program which is a \$50 million program to finance joint university partnerships between U.S. and Mexican universities who would jointly identify research topics and very often bring in the private sector into these sorts of relationships in order to enrich the type of training that's being provided and to make the training relevant to what the private sector is looking for.

What we're seeing in these partnerships which typically last two or three years is that after the funding that the U.S. government is providing ends, the relationship continues and it continues to grow. There are other ways of financing and supporting these things, so I think we need to keep in mind that the university relationships are growing and deepening in Mexico and they're becoming very important outside of and within the governmental structure.

**Jaime Santibanez Andonegui:** I wanted to point out that in terms of this link between private sector and education many things can be said, but generally I believe that this has been a history in Mexico of a kind of a marriage which for many years was a marriage of convenience where one part did more than the other, but in recent years, and I think it is worthwhile to point out, has been changing its modus operandi.

I think ultimately what we're talking about is developing human capital and I think we all agree on that, and we all agree that developing human capital in education is key. And within that, a link between school and the private sector. And the school and the business in Mexico I think that for a very long time have had a not very ideal marriage, but this has been changing over recent years.

I recall the anecdote of an Under Secretary that's a friend of ours who said James, it's not that the two sections are divorced; it's just that they never really got married. I think it has been a

difficult marriage, but lately things have been changing. We need to point out the efforts of Conalab [ph] or the technological universities, particularly in terms of the technological system. We have seen a great change, but the change is not occurring through institutional channels. And perhaps Miguel Angel Tamayo will correct me if I'm wrong here. I could say that the change has been anti-like -- institution by institution, city by city, have had to seek links with the private sector. Why? Because the educational institution is the one that needs to seek a link with the private sector and not the other way.

I have asked myself this question in my 25 years of experience at the agency I now work for and the answer is clear that there is not enough business culture for the businessmen to know their interest. So when it comes to link up the educational sector there is a clear perception that I am an educator, but when it comes to linking up to the business sector we find that most of the business force, which are small businesses of very small scope, there is not a business culture. So hardly can the motivation be found there, or rather a link that takes the business to the school. Generally it's the other way around. But I'm optimistic and I think that this link has begun to occur and will continue to occur increasingly over coming years and taking better shape. But we should in Mexico promote the business sector in general to find better ways to link up with the educational sector.

**Luis Manuel Guaida Escontria:** I think it is very important to give this meeting of so many people and so much time a sense of purpose and seek results and practical achievements. So continuing what Miguel Angel was saying and then Jaime about what to do, how to do it relative to my overall initial suggestion. Of course, Miguel Angel, there have been many efforts in this regard of linking and coordinating especially. However if we observe the results as you yourself said have been poor relative to the investment of time and funding.

When I was speaking of this very specific proposal of a task force, I should say firstly that the paradox would be that in order to solve a problem -- It goes back to the old saying, if you don't want to solve something, create a commission. But no, the idea would be more a kind of commission that would focus on detecting why it hasn't worked but in a very dynamic, aggressive way with a sense of urgency that the problem is overtaking us and that this investment of resources and funding and talent, there is an investment of knowledge, what to do to truly achieve results.

As Jaime was further fine-tuning, the problem can also come from the private sector. Briefly, what we would have to do is to teach a group of elephants, and I include among those elephants the private sector, to teach them to run a 100 meter sprint. How to achieve in a very specific way a coordination of results and efforts? The final result will be development of human resources, human capital, but we need it right now.

So the idea is perhaps kind of a commission which would be a liaison among the sectors and which will truly help solve the problem. That as far as the task force we were talking about.

Two additional comments. If we are developing human capital it behooves us to refocus on the competency not only in terms of formal education which is basic, but beyond that what is the market requiring and how can we further that development?

James was mentioning just a moment ago the modern information technologies such as e-learning and distance learning, how can we take advantage of such technology with this sense of urgency for development?

I'd like to plant a third point which has not been mentioned because we are dealing with this, but it is migration also in terms of human development. On the one hand all of us know very well the trend and reality of this huge migration of Mexican workers towards the United States. The big

question in terms of human development, regardless of all the rest of the context, is what is going to happen to those Mexican workers working in Mexico? Are they going to stay here? Are they going to eventually return? And more importantly, if they do return the knowledge they have acquired, how can it be made use of? Oftentimes it is thought that migrant workers of the United States are people who are simply in the agricultural area or flipping hamburgers but there are also workers who are acquiring technological knowledge which can be made use of. If they are creative in the United States which on the one hand undoubtedly for the U.S. economy, given its demographic development is solving part of its problems, population program relative to the economy, well that growth of Mexican human capital in the United States will remain here. But if eventually it returns, how then can it be made use of? That's another issue that I think we should also keep in mind.

**Jorge Gallardo:** What I just want to add that CONACYT is following regarding this matter.

The first one is we are developing a database of persons who have had scholarships here in the United States or anywhere else in the world to match the job with the job offerings and the people who have the skills to comply with those. Many times that is a problem that we are having in Mexico. The people who are skilled in something do not find a job because they don't know it's open in some other places. So that's what we're trying to do with this database of scholars, of persons who have had scholarships.

The second one is we are expanding or increasing the number of agreements between CONACYT and international universities, many of which are here in the United States that are exactly trying to develop the labor force or well, educating the labor force for the future in the proprietary areas that Mexico has in science and technology such as biotechnology, information technology, biomedics, geonomics, nanotechnology. But also we're attending the need of the industry, giving scholarships and fostering scholarships in those areas in which the industry has more needs for labor. That's what we're doing in this matter in CONACYT.

**Roberto Villarreal:** I find many points of agreement between what most of the participants have said and I would like to come to CSIS territory in terms of strategy and international cooperation which may indeed have some effect on migration as was mentioned towards the end.

I think that indeed human resources, knowledge, technology, and competitiveness are different sides of the same polygon, it's just a matter of determining which side we're looking at it from. But the way in which this occurs in large companies, generally the formal ones or the small ones which are usually informal, without a one-to-one correspondence between size and formality, is very different.

In some areas such as large companies I see that we have common challenge between the United States and Mexico and I am reminded of two books which from my standpoint are very important which were produced by MIT. One ten years ago, "Made in America: Recovering the Competitive Edge" by Richard Lester, Bob Solow, Susan Parker; and another one which is going to press in a couple of weeks also by Richard Lester and Michael Piore, "Innovation". Both highlight the issues of international competitiveness that U.S. industry has faced with its Asian and European competitors and which are not merely issues of low cost or high cost, but issues of innovation technology and human resources. And there is particularly a sentence in the book "Made in America" which I think has not been sufficiently assimilated in both countries by the private sector and the government, even though ten years have passed.

But Bob Solow and others say we have to treat labor not as a cost but as an asset to develop. And that's the issue of competitiveness that many of our large businesses have. I'm somewhat skeptical that in truly large corporations we can change the mindset to see labor not as a

cost but as a competitive asset. I am pessimistic in the sense that perhaps for 10, 15 years more, large corporations both in the United States as within proportion the Mexican ones, will continue to see labor as a cost and will be going to China and other countries and will continue sending us products which are the lowest cost. But where the opportunity can be seen to see labor, the human resource, as an asset to develop is in medium and small companies. There are many medium and small companies on both sides of the border, in the United States and in Mexico. These companies, particularly if we can develop that entrepreneurial mindset to give it a somewhat different flavor than that of business, we need to promote public policies which make us more competitive as an integrated region of North America.

Here perhaps there may be an area of cooperation and strategy for both countries which might be framed in the context of the partnership for prosperity or the alliance for prosperity which has been in force throughout the governments of Presidents Bush and Fox on various areas and which could perhaps deal with how to develop a binational strategy in which universities, private sector, and governments of both countries participate so that small and medium-sized companies on both sides of the border can invest and fully realize their comparative advantages in human resources. This is a great area of international cooperation that can be made use of.

Finally I would like to highlight that the issue of education in this regard is significant but in very complex ways. Because although education in discussions such as today's, we tend to look at it as geared towards the development of capabilities, in practice it often functions as a screening mechanism and sorting out which contributes in part to the informality of the economy.

In the Mexican case particularly we see that people who have less than secondary education end to work more in the informal sector in small companies whereas those who have higher levels of schooling than secondary or high school education are the ones that usually find employment in the formal sector. There is a struggle to find employment in the formal sector because they are better remunerated because the productivity is greater, but not necessarily because that productivity comes from the human capital, but because these are companies which are part of a different economic system. To advance in education only to accredit a level of screening which allows you to access the formal sector does not necessarily contribute to competitiveness. On the other hand why if the large formal companies are more productive, generally because they have access to a formal financial system, we may have better human resources in the small and medium businesses, but the way the financial system works today those will not be fully productive employment because there is no credit towards small or micro businesses. Here President Fox is developing a new set, a new universe of financial institutions which he calls social banking and these are micro-credit institutions but with a very different sense of the Asians and Pakistan and so forth. Because Mr. Fox's emphasis in the sustainability of these financial institutions and the repayment of credit, but unless we understand that the problem of human resource development and informality is tied to other system elements and we only bet on education, let us hope that it is not merely to finance a discrimination system where those who have the higher level of education get other types of employments and those who do not do not, but does truly lead to the issue of capabilities and the development of entrepreneurs and businessmen, and I think this is truly necessary for competitiveness in North America and I see a possibility of joining the efforts of all universities, private sector and government agencies on this topic.

**Armand Peschard-Sverdrup:** That's a theme we'll certainly return to after lunch in our third session.

**Roberto Newell Garcia:** I just wanted to keep the same order so to keep the democratic aspect of things. Yes, this is important for democracy in Latin America.

I have two comments. Okay, there's a whole story about democracy in Latin America and all that, so I just wanted to reverse the order in which I was going to make my comments and I'd like what my namesake said.

We talked about education as a system that gave a certain capillarity to the social structure, if you will, where you have a certain stage of development that then goes on to another stage of development, and then there is a link between all these sectors or segments and for us not to have pigeonholes in each one of these structures of our social structure.

So I think this dovetails into two large structures that we have. The informal structure of the economy and the formal structure of the economy.

In the past those two sectors were fed by a good educational system, but now things are changing. So I think we have two large sectors of the population and perhaps we don't want to have those two sectors totally miscommunicated or incommunicated. I think that sometimes we need clear public strategies in our country in this regard and we want connection between these two sectors because if not we're going to have large problems in the future.

So if we look at this from a regional viewpoint like Eduardo said in his comments, I think that we are going to see that there is a large gap between the northern part of the country and the southern part of the country and I think this is another cause for concern when it comes to the inherent stability of our country.

So perhaps if we could include those elements in the paper that you are going to prepare, I think that's going to be good.

We have a lot of figures coming from Mexico and we see that there is a lot of difference and there's a lot of variety in Mexico. So that's one thing.

The second thing is quite different. In the materials you gave us there's a question that was posed and I think it's quite interesting, and then Richard made a comment at the beginning and I would like to tie the comment into this. He said that we spend four times more money in the tertiary sector of education or the university sector vis-à-vis the primary school or the lower levels of education, this compared to the States, of course, and this is due with the financing model that we have in the public education in Mexico.

So I wanted to ask whether the expenditure and the spending that we have in the government, the spending that we have is productive and is intelligent. My scenario, my hypothesis in this case is that university education in Mexico has to do with trade unions and trade unions that are self-serving. I don't think this is quite connected with the large educational mission that the country has.

If we look at the formal sector we'll look at institutions such as the Tecnológica de Monterrey, and these institutions are fulfilling great missions. The University of Del Valle de Mexico started as a business but right now it's being quite successful both as an educational institution and as a business. Many people are graduating from this university and they're being accepted by the labor market.

So I was wondering whether we need a voucher system where students are going to be vested with their own future instead of feeding large corporate institutions and I think that this is what happens because sometimes these institutions make up for a big part of the Mexican spending.

Then we talked about one percent investment in research and sometimes we wonder if these people are only looking for just economic elements.

I just wanted to say that this paradigm is an incorrect paradigm. If we see that Mexico, if we feel that Mexico is a big Gulliver that is tied down by Lilliputians, well, if we look at Mexico as a country full of dwarfs perhaps we should inject them with hormones. Are we Gulliver that is tied by Lilliputians or are we just dwarfs that need to be given hormones to grow faster?

I don't know if we have an idea as to how to design public policies in this regard.

**Voice:** Thank you, Roberto for talking about trade unions. I'm glad it was you and not me who touched upon that issue.

**Richard Jackson:** Just a clarification. The ratio of four-to-one on tertiary to primary is per enrollee. I didn't of course mean that it's, that three-quarters of the overall educational resources go to tertiary education.

**Margot Gill:** I'd simply like to pick up on this question about investment in tertiary education. This is something that Roberto and I had a few moments of conversation over break, and really in response to Armand and Richard's questions about what is it going to take in terms of participation in a knowledge-based economy. It requires a new set of human skills. Fundamentally and most importantly, it requires higher education skills. This is about investment in tertiary education. I think some of the answer for Mexico, but more globally, is cooperation among the major research institutions.

So I would cite, and it is with much gratitude, Harvard's interest and again gratitude for what is a recently signed agreement with CONACYT. We think there are opportunities for the major research institutions, whether it's the University of Texas or the California system, but the private institutions in this country as well, Harvard among them, investing in cooperative arrangements with institutions in Mexico. I think as we look ahead and the fundamental questions are higher education in the United States and again globally, in terms of the human skills, the new human skills required for a knowledge-based economy, again, fundamentally this is what tertiary education is about. Higher education skills. It's about skills in terms of greater intellectual independence; it's about skills that will allow for flexibility and learning beyond what is the traditional classroom. But again, I would come back to these are the skills, these are the opportunities that we must attach to tertiary education and to our research institutions.

Separate from that comment is I hope that there's an opportunity to think about the challenges that higher education -- secondary and tertiary education faces in Mexico. I think here as I look at the tremendous expansion, the major mega institutions, UNAM among them, have had to go over the last generation, and as we look at the numbers ahead, I think that some of the challenge is not just about growth and about expansion, but about differentiation of institutions within Mexico and within the Mexican higher education system.

That too, I think there are some good models in Spain, good models in the United States that I hope are part of the ongoing conversation with the United States and Mexico higher education.

**Maria Elena Zuniga Herrera:** Thank you very much. I just wanted to take this opportunity to make a brief comment in connection with the challenges vis-à-vis human capital, and this has to do with demographics and also with the demographic dividend.

I feel that the young generations, these are the generations that are going to crystallize the demographic dividend. I think these generations are going to be part of the demographic dividends in the next few years. I think also that according to the opportunities they have and the opportunities they can enjoy to work, to invest their savings and to have better capital for the future for their old age will all have to do with the policies we apply in our country in the future throughout this century. Throughout their working life these people are going to then become old and they are going to make a very important part of the demographic makeup of Mexico. So I think it's very important for us to focus on our young people right now, on our youth right now. That's very important for Mexico right now.

Also I wanted to remind you that in the last 30 years we've seen important advances in the educational efforts and in the educational system in our population. We've been able to guarantee basic education up until secondary school, so we've seen that our educational system has increased from the '70s which was only three years of education to about eight years right now.

So I think we're really far behind, we're lagging far behind other countries and I think that perhaps even this decade we wanted to get to a full secondary system in education, compulsory education. But also we need to see that the educational demand is going to increase about 10 percent in the next ten years and then in the educational coverage for the secondary school is going to be up to 20 percent. I think we would like to achieve what we call universal coverage for education, meaning everybody being educated.

I think the focus of this meeting should be the high school education, middle school, and university education. If we think of this educational moratorium as we call it in Mexico where people are between 16 and 17 years of age. When you were 16 or 17 years of age 50 percent of our youth drops off, when you're 16 or 17 years of age.

So I see sometimes at that age there are no opportunities for the young people and that's a critical stage. This is a stage where people need to get more theoretical knowledge and perhaps they should go to preparatory school or have university education. I think this is really evident and we can see this in rural Mexico and in many other sectors in Mexico or areas in Mexico. So when we're thinking about people that are between 14 and 15 years of age, and not just about that, that's when people begin to drop off school. They start becoming adults. They become parents, mothers, fathers. They have to start working. They have to leave the parents' home. So we need to have options for these large sector of the population so they can be ready to work and they can be trained to enter the workforce. So I think this is going to strengthen this concept that we have.

There are different sectors, different segments in other populations. We have 50 million Mexicans that are poor and some of them are extremely poor. So basic education does not mean they're going to have better, for example, better promotions or a better income system.

I think that people that finish high school are going to be able to take better advantage of their educational system.

So apart from thinking what the market needs in connection with human capital, I also think that we should think what is it that the human capital needs to go and enter the labor market? What are we offering? What can we give the people so that they can have better educational opportunities and better labor opportunities? We have a large number of people that sometimes are marginalized and cannot really have access to good education and good human capital.

Thank you.

**Armand Peschard-Sverdrup:** Thank you, Maria Elena. Your comments, of course, have raised other comments by two or three people. Two people and myself, that's three people.

We have touched upon this, but I don't think we have discussed it in depth. We need to go to our lunch break, but I do have one question. And Miguel Angel and Roberto if you could be very very brief, we're running out of time. Please, I want us to focus on what we can do together and that we can do after lunch, of course. I'm talking about both the U.S. and Mexican.

We've discussed this high drop-out rate in Mexico. Who is responsible for the training and the retraining effort of the human capital in Mexico? Is the Education Secretariat responsible for this? Is the private sector going to be responsible for this? Or do you think that segment has fallen through the cracks?

**Roberto Villarreal:** The answer is two-fold. I can give you a formal answer which is based on the law. The Labor Secretariat does on-the-job training which is people trained on the job, but in case of the Public Education Secretariat there is a mandate and the mandate is that it needs to bring about training for the job. It's not on the job, but for the job. That's my answer. I'm being very brief. That's what you said, so that's what I'm doing.

**Miguel Angel Tamayo Taype:** One of the two comments that I have I'm going to make after the lunch break, but the other comments is that Roberto, Maria Elena and myself we talk about education as a social mobilization structure and also this permeability between the formal and the informal sector.

This is a very complex issue and we have actually moved along Mexico in a pendulum motion, so in the '50s and in the '60s we've seen stability and governability in the political sector and all that was linked to sustainable growth. So every generation reached better standard of living than the generation that preceded it. So this broke in the 1980s with the crisis. So it is not true that the generation right now, our generation, is better than our parents' generation.

Now that is in connection with the economy, but educationally yes. The numbers are better. There's 70 percent of the people that have achieved better education than their parents. This is 70 percent. So we've seen that the governability and also the stability of the system is yielding results and the results are being yielded in the field of education.

Now better education is not translating into better standards of living so we talked about screening, we talked about legitimacy, we talked about expectation building. We've seen all that. However education is not improving wealth. So the challenge that we have is to turn education into production and having the possibility of people to be socially mobile and for the system to be viable.

**Luis Manuel Guaida:** I'm going to be very brief. Miguel made a very relevant clarification and this ties into your question. You were talking about the dropouts, right? People that left school at a very early age. You have a formal answer and you have also a real answer.

What happens in reality is that the dropout drops out because he or she wants to have access to work. He or she wants to have a job. When you are trained you need to be trained by someone, and the one that trains you is the employer. So we need scholarships and people to be trained on the job and scholarships and things of that nature. So when a person starts working for an employer he is legally and actually obligated to train that person for that person to be able to do the job he was hired for. I think this is an area of opportunity for training. I think sometimes we have people that don't even have formal or basic education and this is a good opportunity for them to get some kind of education.

**Armand Peschard-Sverdrup:** I think you can go for lunch --- among yourself, and I will interrupt and resume when I think we've had enough time. Thank you.

(Break for lunch)

## **SESSION 3: Implications for the U.S.-Mexico Relationship: Challenges and Opportunities for Policy Convergence**

**Richard Jackson:** I think we'll get underway, the third session. I thought we had a very fruitful conversation this morning. We started out with some broad questions related to demographics and economic development and then we zeroed in on the human capital development challenge in Mexico and talked a bit about what Mexico's doing right and perhaps what additionally it needs to do.

In the third session this afternoon we're going to start out by looking a little bit at what the demographic transition in this period of demographic dividend implies for the U.S.-Mexican relationship. In broad economic terms first of all, and then as the conversation progresses, presumably we'll focus in also on possible cooperative ventures in education and human capital development.

I would like, if you don't mind, Syl, if you could say a few words just to kick this off. I'd very much appreciate that. Thank you.

**Sylvester Schieber:** Thank you, Richard.

If you look at the demographics of the United States compared to the demographic of Mexico, Mexico will be facing some serious aging issues 25 or 30 years down the road. The U.S., in some regards, is on the cusp of those already. During the 1990s when our labor force seemed extremely tight the labor force in the United States grew at a rate of about 1.5 percent a year, maybe a little more than that. During this decade it will grow at a rate of around one percent or so. During the 20-teens probably somewhere between a half percent a year, maybe seven-tenths of a percent a year. And if the businesses, if the commercial sector of this economy is going to continue to grow, it's either going to import more resources or it's going to move capital where there is surplus labor elsewhere in the world.

If you look at the U.S. situation, the U.S. situation is the most favorable among all the developed economies of the world because of our high fertility and immigration rates. During the next ten years it is likely that the Japanese, the German, the Italian labor force are going to start to shrink -- a really unprecedented phenomenon in modern times.

The likelihood is that these economies are going to tap the labor resources of other economies where there is surplus labor and that surplus labor is concentrated in societies that are still growing, less developed economies, countries like Mexico, countries like China, like India, Indonesia, the Philippines, Brazil, a variety of countries around the world. The Middle East, Northern Africa, many countries.

The point is some countries are much more hospitable to commercial investment from the developed economies than others, and in that regard Mexico is in a reasonable position. Because of the situation of the United States there is I think significant potential for a symbiosis, an improved symbiosis to develop between these two economies.

But for the resources to go to an economy like Mexico it seems to me there are a number of things that have to be in place. We were talking this morning a great deal about education, and toward the end of the morning there was an observation made that educational attainment in Mexico

has been increasing. I guess I would argue that it is not necessarily the fact that attainment, educational attainment in Mexico has been increasing that will be important, it is how it has been increasing or the level relative to alternative sources of surplus labor that might be found elsewhere around the world. And in some regards it's not the reality of the situation that's important as much as the perception of what the reality is that may be important. I think for many of the people who might have surplus labor here and elsewhere around the world to invest elsewhere, there is a perception that segments of India and China are making much more rapid strides in terms of developing their human capital than possibly Mexico and some other developing countries.

In terms of immigration, that second question in this session, from Mexico to the U.S., I think almost certainly it will decline. To the extent that fertility rates have been falling off, the natural growth in the economy in Mexico, and I would expect there will continue to be some, over time the demand for labor is going to begin to catch up with the slower supply coming on-line and that's going to be an important factor.

I think another important factor in terms of cross-national immigration from the less-developed countries to the more-developed countries is that in the coming decades many of the fixed costs associated with working in the developed societies are going to increase. If you go to Japan and you look at the recent changes they've made in their national retirement system, the workers there are going to be facing significant increases in their payroll tax over the next couple of decades. These are costs that workers have to pay as they move into these developed societies if they want to work in the mainstream economy.

I think there will be a growing question on the part of the developed economies and how they can bring in these workers from outside their own environs and impose on them fairly high fixed costs to support retirement systems for people who are not part of their family. It's one thing to pay high payroll taxes because you've got your mother and your grandmother who were dependent upon the social security programs and the medical insurance programs; but to bring someone in who has no attachment to those people and expect them to pay extremely high costs when they can stay in their own economy and pay much lower costs is going to be a larger and larger challenge that the developed economies face, and I expect that we will see a natural decline in immigration to the developed economies because of that.

The issues about immigration and education in this whole equation I think are important but there are some other issues that we touched on briefly here this morning and they should not be dismissed or ignored. That's the issues related to conflict rights, conflict resolution, perceptions about corruption and so forth that exist in various economies, and Mexico along with many of the other developing economies, again, it may be more image than reality but these are issues that do need to be addressed.

I guess in closing my opening remarks I would say that we ought to come back and think a little bit about the opening premise that Richard put on the table about the ultimate aging of the Mexican society, and I would just suggest to you that it's something that is off in the distance and there's a lot of opportunities between now and the point that you get to significantly increased retiree burdens or total dependency burdens in the Mexican economy. There will be a period of a couple of decades where there's a potential dividend that will be realized, but I think there's a natural tendency on the part of all of our societies to ignore these problems until they're truly upon us. Then they seem to create much worse problems than they need to.

You can look at both Germany and Japan who have delayed to the point where their retiree burdens are just exploding upon them. Both of them have addressed their pension issues within the last year or so. In both cases they have adopted policy measures that will not only reduce benefits

for retirees in the future, they will significantly reduce benefits for people who are already currently retired and that seems to me to be one of the cruelest ways to deal with policy issues that we can anticipate.

These are what I sometimes like to characterize as predictable surprises. We know that they're going to happen but we're very surprised when they descend upon us. To the extent that it's relatively certain that the demographic pattern that is evolving in Mexico and many of the other developed economies of the world, are going to lead ultimately to some of the same phenomenon that we're now experiencing in the developed economies of the world. I would just suggest that you kind of pay attention to the lessons that we're learning here and see if you can't keep from falling into the same traps that we have fallen into.

Everybody ultimately is going to have their own choices to make, but if you look at our own recent campaign, I guess not quite recent yet -- many of us wish it was recent. But our evolving political campaign here, the inability of politicians in these democratic societies to deal with these issues until they're a crisis suggests if we can get way out in front of them we would all be much better off than we are in waiting until the very end.

**Richard Jackson:** I know that Arnie had a question left over from the last session. If you can think of some way to tie it into this session --

**Arnold Packer:** I'll try. Let's see if I can't do it.

I think in general sometimes these discussions are at a too macro level and some opportunities are missed because of that. Referring to the last session, this idea about the employer sector getting together with the education sector, I've yet to meet Mr. or Mrs. Sector, and those abstractions, the head of HR goes and says what he wants, but it's the relationship with your boss that counts. So what both countries -- Mexico and the United States -- are missing, is feedback from the supervisor to if not the teacher, at least the head of the department and perhaps even the teacher. That is the idea of setting up standards, the standards are always going to be out of date. The people who go to the standards meetings from the employers are rarely the line vice president who's really got to get a product out and it's a new product. Unless the supervisor knows, for example, that there's supposed to be teamwork and checks back and lets you know whether teamwork has been taught as a reality as opposed to an abstraction, you don't get any real change in the real situation.

Now to try to tie it to this situation. At a meeting of NAFTA down in Mexico City some time ago there was talk about sector approaches. It gets a lot less abstract. For example, look at the health sector where the United States clearly has a shortage, especially at the nurse level, and there is the surplus of labor in the Mexican side. The problem sometimes gets down to can we teach enough English to the Mexican nurses so that they can pass the licensing exam for a nurse in Texas or California which are state-based? Can the Licensing Board, realizing there's a shortage, and realizing that many of the patients in the Texas and California hospital system or health care systems only speak Spanish -- but the Licensing Board is kind of over here and the education system is over there and what would seem like a natural match in the health sector goes unmade.

So I would suggest in both cases, in the last session and in this session and especially in the next session, we get beyond the physics of the problem and down to the engineering of the solution, past broad generalities and think specifically about what does the teacher do today or tomorrow with the student. Not what the Board of Education does, what does the supervisor do to his or her subordinate and how does it look in a hospital, in an engineering organization, on a sector by sector

basis. You're more likely to see movement from broad compensation to implemented in the society solutions.

**Richard Jackson:** A point well taken, unfortunately I studied physics and not engineering. Syl?

**Sylvester Schieber:** I think we should also look at the policy mechanisms that exist. To the extent that nurses are coming into Texas and California from Mexico to take the State Boards one way we might deal with that is to administer the State Boards in Spanish. There are certainly large populations in both of those states and throughout much of the rest of the United States that are primarily speaking in Spanish these days, so there is more than one way around it.

Now there are certainly issues still on the floor, depending on what hospital you're in, but if we're going to continue to be, in the United States at least, at some juncture we may need to address this whole issue of the languages we speak. But the fact of the matter is on the ground we're speaking many languages in this country today and we need to figure out how to adopt new policies to make that work more efficiently.

**Arnold Packer:** I was just going to respond. That conversation came up and the problem was the doctors are giving instructions in English. But your point is well taken. These are not overwhelmingly difficult problems and you could teach enough of what you needed to and change the licensing if people would get down to do something about it instead of talking about it.

**?? Jaime Santibañez:** I think Mexico and the United States for many years have been those distant neighbors that the author once said, but these years have gone by. NAFTA has brought us closer together. I think in the light of what the demographic dividend can represent and offer us, it will be very important that we be sufficiently imaginative and creative to find more points of convergence than differences and work together on a more common path and to be sufficiently bold in terms of coordination or joint projects on educational matters.

I feel, and I don't know if any of the colleagues at the table might give me the light, but I feel that in terms of an economic relationship, social relationships, things are easier or less difficult than in the terms of relationships between educational sectors. I join Arnie in his opinion that there is no such thing as a Mr. Sector, Mrs. Sector, and in that sense following along those lines I would propose the creation of tighter relationships between non-formal education between the United States and Mexico because perhaps in the formal education arena things may seem difficult, but making alliances in terms of formal education I think is more complex than in the arena of non-formal education with programs that both of us could run simply because we are interested parties in this common territory which goes on both sides of the border, may improve their human capital. I think this is sufficiently important to bring us all together here at the table to the creation of networks not between sectors, but the students with the teachers from one side or the other.

So we need to draw attention from both sides of the border to create more alliances and a tighter relationship between the two parts.

It is true that we need to go to lobbying, particularly with the educational institutions, but it is also true that we need to work further on pressure coming from other elements, and here I quote from my organization where I work in uncountable, very positive experiences when we have worked with young students, teachers in schools on both sides of the border, and we have done this without having to think about sectors but only that the two sides need to face the future and we need to face it finding more points of convergence than differences, and working in bold and imaginative terms.

**Edward Kadunc:** -- pay attention to a couple of the words used in these points that are here which is synergies and bilateralism. To some extent what we've been talking about so far is how the U.S. market benefits from labor, possible labor that's coming from Mexico. When we look at relatively unskilled labor, the cost to Mexican society is relatively low although there is an investment in at least primary education that's taking place there so that is a cost that Mexico is contributing to the United States, a way of reverse foreign aid.

When you're talking about more highly educated people such as nurses, you're talking about a much larger investment in training and you're talking about a much larger impact on the Mexican economy. There are some countries now, in Africa, for example, who have been exporting nurses to the U.K. where you're seeing whole hospitals, large hospitals, with one nurse on staff creating a very serious problem.

So I think we need to think about this issue of bilateralism and how we are looking at a problem that we manage together or an opportunity that we manage together so it's done to the benefit of both countries and not just the one.

The other point I wanted to bring up was the idea that as population growth slows there will be a larger absorption of labor into the Mexican economy and a smaller amount available for export. I think that obviously is true, but we need to keep in mind that there's a large degree of informality in the Mexican labor market right now. There are a large number of people who work outside the formal sector and it will take some time for those people to be able to be absorbed into the formal labor market before the surplus will disappear, until that's effective. That's important.

**Armand Peschard-Sverdrup:** Thanks, Ed.

Paul, just a second. Before I pass the microphone over to you I did want to see if -- We've got two folks from the Bureau of Labor Statistics -- Fran and Gary. And unfortunately the person we had invited from the Mexican Secretary of Labor ended up having a last-minute scheduling conflict and was not able to attend today's session. But you know here in Washington there's no such thing as a free lunch, so taking advantage of that premise I'm going to try and see if I can get either of you to contribute to the discussion and give us a little bit of your perspective, focusing on the bilateralism and synergies. If the Bureau of Labor Statistics looks at this issue bilaterally, I'm sure you have, if you can just tell us a little bit we would greatly appreciate it.

**Francis Horvath:** The United States has been interested in nursing issues and the nursing shortage in the United States. I hadn't really thought about a relationship to Mexico, quite frankly.

One thing that was concerning me in this morning's discussion and in the discussion now was more of a focus on manufacturing and technology issues as opposed to service sector issues. In the United States the service sector is extremely important and the engine of most of the economic growth that we have and there really wasn't very much discussion of service sector issues in Mexico and the importance of enhancing the service sector as opposed to manufacturing. I was thinking that Mexican manufacturing has suffered from the same sorts of things as United States manufacturing in competitiveness. Those were my thoughts on that.

**Armand Peschard-Sverdrup:** I don't know if either of you are responsible for labor projection modeling. I know that in talking to, I think it was in talking to Elizabeth she had mentioned to me that there had been some conversations or a dialogue between the Department of Labor and the Mexican Secretary of Labor, or at least there's been some informal chats over labor projection modeling. I'm just wondering if you can at least, I don't know if either of you can talk a little bit about that. If you know where the Mexican projection laboring model is, whether there's any lessons

learned from either, both from how Mexico views it, how the U.S. views labor projection modeling? Any comments before we pass the microphone over to Paul?

**Richard Jackson:** This gets back to my question of this morning as well. Is there any way that we can project, are there any efforts underway to project the future occupational skill requirements of the labor force? Do we have some knowledge on that that perhaps might be useful to share? I don't know of anything on that account that's being done in Mexico, but I know certainly that the Bureau of Labor Statistics has done that in the past for the United States.

**Gary Martin:** Had we known this would be your main interest we would have sent somebody from the department -- There is a department that projects the labor needs for the coming years. Neither of the people you've got here today -- I handle a lot of inquiries on foreign labor issues, foreign labor statistics, but we primarily focus upon those countries who have similar standards of labor statistics that we can make legitimate comparisons of their economy and ours. And that doesn't happen to include Mexico, unfortunately. We get a lot of questions about Mexico, but because of things we brought up, the large informal sector, when you start comparing things like unemployment which I've written a paper about, it doesn't transfer very well. We've gotten a lot of requests to compare productivity. Mexico's not one of the countries that we include in our comparative productivity because we're very careful about trying to make sure that everything is comparable from one place to another. We're finding it very very difficult to get comparable statistics.

We get a lot of inquiries about immigration. Again, and it comes to foreign labor statistics because of questions about immigration, but we don't collect statistics based on nationality, and it's probably -- Maybe we need to get a little more pressure from outside and we'll begin to look at things that way. But we have to send them over to what used to be INS and now is CIS, people probably confuse them with you now. It's under Homeland Security now. But they keep the statistics based upon nationality. But the BLS simply doesn't have data that way. We have data according to the nation of birth, but that doesn't tell you about their citizenship, whether they're U.S. citizens or whatever.

So the Bureau of Labor Statistics is just right now not oriented that way to look at interaction between U.S. and Mexico in terms of population movements and the like. Maybe we need to, post-NAFTA maybe we need to be doing more of that but we really are not set up that way at the moment.

**Richard Jackson:** Gary, thank you, and Francis, thank you. Paul?

**Joseph Duffey:** This is not an observation I intended to make but it occurs to me as one that ought to be on the table.

First of all let me say that we're all trying to think, led by this institution, pretty far in advance, and those of us who have been around for a while know how risky that is in terms of surprises. I will not go into great detail in the effort that I'm involved in now, not one I had ever thought I would be involved in, where in fact as a profit-making business in private education we are demonstrating that investment in human capital, that those who invest in Mexico could also invest in the development of Mexico's human capital and don't have to do it as a sacrifice.

That's another issue. I'll be glad to talk a little bit about that.

But I also think there's something else that must be in a contrarian way at least before us. Both our societies have not insignificant segments of the population that we're leaving out when we

think about the development of the future workforce. I'm referring to the large pockets of poverty in this country growing and in Mexico. At this point relatively benign in terms of creating social friction or difficulty, but clearly there, there's a younger think tank near here called The New America Foundation which next week is bringing together writers to talk about the worsening crisis of Hispanic families in the United States, one particular segment.

It may well be that we will continue without that being for you or for us a source of major social disruption. We manage it now pretty well. We have the largest prison system in the world and we have a very significant number of Africa American young men there who shouldn't be there. I'm saying there is an element in both our cultures and societies that we might talk about together of the problem of chronic poverty and the lack of development of human resources that that encompasses and that should also be a part of the way we think about the future.

**Paul Hewitt:** I actually wanted to address a point that was made a few moments ago. I would note that I happened to be meeting -- on the point that was just made I happened to be meeting with a group of Chinese who had come over to learn about the pension system, and we had a table not quite this big in Social Security Administration, and maybe about 14 or 15 of the Chinese. I went through a long spiel explaining how the U.S. pension systems works and how our social security system works, and then I opened the floor for questions. The first question was, it just floored me, the first question was how does the social security system take care of peasants?

To an American, that was a bit of a shock. I explained that we did have a poverty rate and the poverty rate for a couple is a little over \$11,000. That would be, of course, a rich man in China. So poverty is a relative figure and a relative benchmark. And in fact indeed a lot of policy is an immigration issue but there is also a lot of movement out of poverty. Five out of six people who were poor in 1990 were no longer poor in 2000, so it turns out a lot of the people who are poor turn out to be students because they're living on their parents' charity.

That segues into the point that I really wanted to make and it was the point that my friend from AID had made a few moments ago about the potential subsidy to the United States provided by immigration, legal and illegal, that if you invest in young people and they go up and get skills and then they move off to another country, that could be a subsidy of that other country. But in fact in I think it was 2002, remittances to Latin America totaled \$44 billion from the United States. Most of that was to Mexico, a large portion of it in any case. And so we know that's one way that immigrants give back and help support local -- It vastly outpaces anything in the form of foreign aid, so this is a huge amount of money.

America is a unique society. Of course everybody has their own concept of that uniqueness from their own perspective. But in a sense, with respect to immigration we are unique because we're the only country where to become a citizen all you have to do is raise your hand and swear fealty to the Constitution and you are an American. If you go to Europe or Asia you find a collection of tribal countries where being Chinese -- in fact Germany has a citizenship rule that says you have to have German blood. So to be an immigrant in Germany is to feel very much a foreigner. You have third and fourth generation people who live in Germany, families who only know German, only know German culture, who are still officially foreigners. That's not true in the United States. A lot of the Mexican-Americans are proud to be Americans. They've come here, and they do maybe send money back and they do keep these ties.

In 1999 the OECD published a report, I guess it was in 2000 using 1999 data. A survey of immigration and the quality of immigration. They found that 41 percent, I suppose, of legal migrants to the United States, 41 percent had some college, versus 12 percent in France; 13 percent in Germany. So a lot of, what happens I suspect is that young people come over to get college

education, they decide to stay for a long period of time. I think that happens also with Mexico. The question is, is that good or bad?

There was a study back in the late 1980s of Silicon Valley and we found that something like a quarter of all Silicon Valley employees -- this is the high tech sector -- were either Indian or Chinese immigrants. Then a couple of years later they went back and found out what had happened to those immigrants. They discovered that it was something called brain circulation. It wasn't brain drain. Yes, they came over, they participated in business, but they went back and they formed businesses. They sent money back, many of them did, and it created important ties between Silicon Valley and Bangalore, India, for example.

So I would just like to challenge the idea that brain drain does happen. That people in fact come over because they can get higher returns on education and that enriches both countries in the long run.

\* [38.3 minutes in] **Maria Elena Zuñiga:** \*In Spanish\*

**Richard Jackson:** Just a clarification. Any child born in the United States is automatically a U.S. citizen.

\* [43 minutes in] **Maria Elena Zuñiga:** \*In Spanish\*

**Richard Jackson:** Thank you. I had misunderstood. Thank you very much.

\* [44 minutes in] \*Spanish\*

**Roberto Villarreal:** Thank you very much.

I must confess at some point in the meeting I am getting a little confused. It might be because we are a very diverse group with experiences in government or in the private sector, more trained academically or intellectually or more oriented towards practice, but let me perhaps put this as a set of questions and not as a set of comments.

First, throughout the day we have been concerned with the demographic transition in Mexico. At some point this touches on the issue of how Mexican policymaking will cope with rising domestic standards of living, but there is a [inaudible] continual kind of fear on the trends of immigration to this country. I'm not sure which of the two issues deserves more priority, but they both are there.

Let me then ask if you also have within the United States not on the other side of the border several demographic transitions going on, because many of your immigrant communities are having a demographic transition different to that of the general U.S.. What have you learned from that? How is your domestic labor market evolving? And how are you coping with the different fertility rates of the Asians, the African Americans or the Latin Americans within this country? Perhaps we could also learn a lot from what your own domestic policy agenda on these has taught you.

Second question, when we look at migration, my impression is that some of us react on this in negative terms and some of us react in positive terms, but only on both sides of the table, Mexicans or Americans, but I see that within Americans there are a variety of viewpoints on these.

The issue is how to solve this. Is this something that has to be solved from the Mexican side on demographic and economic policymaking? Or is this something on which perhaps we interact and we have to find future scenarios on comparative terms?

My impression is that at the beginning of the present Administration that is to be renewed or ended next week in this country, we have a very good chance to think seriously about these issues that affect our common future. But we have spent four times with no results whatsoever, and the realities of demographics and economics don't stop when our politicians don't do their job. And we have in my humble opinion lost four years in which the problems that we are looking into the future from 2004 now, would have looked entirely different had we acted on time.

So what is coming next? I have the impression that some of, and I say this on personal grounds not as a government official, that sometimes some policymaking agencies in the United States perhaps don't have such a wide scope in understanding their effects of domestic policies so as to anticipate consequences into the longer future.

Let me give three examples. First in the '70s and '80s on political and military grounds there was much concern in the U.S. about leftist governments going on in Latin America. And several policies were pursued, I don't want to mention them, but 20 years later the consequences of that are weaknesses in democracy and in human rights abroad. This is very much connected to policies that were adopted from decades ago.

A second example, and this connects with Mexico, during the '80s and part of the '90s our common approach on drugs and drug trafficking was more a confrontational one. When this started to change into a more collaborative effort in the mid '90s, my impression is that we are getting better control over the situation.

Now when we talk about immigration I pose myself the question on how much of what we are seeing now is a consequence of policies on free trade that were not fully analyzed 10, 15 years ago, particularly liberalization of traditional agricultural products. This was a very hot issue when we were negotiating NAFTA. Sidney who was here must remember that very well. But how much of the immigration that you're getting from Mexico into this country is a consequence of perhaps inadequate trade liberalization in the case of [corn and so on]

So my point is we do have a problem of demographic transitions in the two countries that don't match perfectly, but if we look at these more on negative terms than on positive ones, and if we don't reach our scope analyzing the effects of different policies, and if we do not engage on time into collaborative efforts, the problems that we are facing now in terms of living standards and immigration are going to be much bigger ten years from now.

But you also have these problems occurring inside the United States and not only abroad with your neighbors, so I guess it's nice always to talk in a group of Mexicans and Americans about things going on on both sides of the country, but you can also learn a lot from investigating your own history on domestic policymaking.

I say this with much respect, but I am getting a little confused on how much of this is a problem that originates in Mexico and has to be solved by Mexicans. I'm curious if this is a common problem and if we can solve this together. Sorry for being so frank.

**Armand Peschard-Sverdrup:** I don't know if anybody wants to comment. I would be more than glad to comment.

Not necessarily about your first point which is what can Mexico learn from the various dynamics that are in play in the U.S., but I'll comment with regards to your point about whether these are problems that Mexico must solve by themselves or whether they are problems that must be addressed collectively. You referred to I think President Fox's initiative to try and engage the U.S. from more of a North American perspective.

I can tell you, this is my own personal opinion and I'm not a government official, but I can tell you that, I would say that folks here in the U.S. aren't necessarily ready to look at some of these issues from a collective standpoint, from a North American standpoint for several reasons. One is I think they just, I don't know that they've reached that level in terms of looking at both Mexico and Canada collectively beyond NAFTA, some of the issues that have emerged.

But the other is I personally think that has to be somewhat attributed to the asymmetries that continue to exist between all three countries. Obviously with the asymmetries being greater with Mexico. So I think to some extent that's also one of the reasons why let's say the policymaking community here in the U.S. hasn't necessarily embraced the idea of looking at issues collectively because I think they continue to see that there are incredible asymmetries between the three countries, especially from an institutional standpoint.

Having said that, one of the purposes of us convening all of you here today is to try and see if from a human capital standpoint, whether there is some merit in looking at it collectively. That's one of the things we're trying to do and this is one of the things that this third session is intended to draw out, trying to get a sense of okay, what can we do collectively? And to tell you the truth, the fact that this third session is the most deficient in terms of substantive discussion in relation to the first two tells me that there's a lot of work to be done by both sides in terms of trying to figure out whether in fact we can do something collectively.

So that's my comment to your comments. I don't know if anybody wants to -- Luis?

**Luis Manuel Guaida Escontria:** In this session, as Armand was saying, we're trying to identify opportunities; we're trying to look for points of convergence. Then at the closing stage of this we're going to make policy recommendations I think, or we're going to try.

I think Roberto also jumped ahead of me and made a very interesting comment when he talked about a more general or global, if you will, approach. So everybody understands demographic processes in the U.S. and in Mexico. Then there is this and other phenomenon which is not really synergy but there is a certain compatilization between both countries because we have young workers and here in the States they need young workers. Also we have a poor development, economically speaking, in our country, and the States has a good development from the economic viewpoint. So there is a certain bilateral aspect in all this problem.

I think very enthusiastically and with lots of ambition we're trying to focus on all this and we're trying to have a good blueprint of the problem. This is not only a bilateral problem it's a multilateral problem. We're looking at both our economies, but we are inserted in a global economy. We are really looking at the effects of globalization and the fierce competition that exists in all markets, and I'm also including there the labor market. So this global competition, both for Mexico and for the States, we can feel this very strongly in Mexico, there is a reduction in wages in general, and also there is a certain transfer of jobs not only between both countries but also among other countries, other societies.

So this ties into my colleague's comment, Roberto actually put it forth in a very good manner. I think we need to look at our strong points, of our strengths. We have the North American Free

Trade Agreement, we have instruments and tools that perhaps if we could strengthen them we are going to be able to improve this bilateral situation that is going to allow us to spearhead stronger and firmer policies. This is not only a two-country situation. This is a situation of two countries that immersed in an international reality.

**Eduardo Solis:** Let me pick up on a comment made here. I think the comment was related to how we can move forward and I think this can be helpful. We can frame all this and look at it from an institutional viewpoint. Roberto was talking about this a little while ago. He talked about this forum that the U.S. and Mexico have which was established by President Bush and President Fox, we're talking about Partnership for Prosperity. Also if we look at the North American Free Trade Agreement, that is another tool that we have. There are many vehicles that we can use.

Now if we look at this from a sectoral viewpoint, well, that can be felicitous, but if we also look at Customs, for example, people think about resolving the problems with Customs as a whole, but we need to look at it partially, we need to look at the Customs problem from a sectoral viewpoint and we have done this in connection with automobile making. I think we have created this marriage between Detroit and Mexico and therefore in the automobile sector we were able to make way. In the case of Customs, Customs is a very ample problem and has a lot of issues. The same thing happens when we look at demographics and the possibilities that Mexico and the U.S. have and the bilateral synergies and the possibilities of collaboration that we have.

I would like to look at this from a positivist viewpoint. Roberto, the two Robertos and myself started saying that our agenda had to have a positive background so if we have a crisis in the future what are we going to do? Well, we know there is a demographic dividend and that demographic dividend has to be used as an opportunity. That should be the line along which we should conduct our studies and our analysis. So why don't we partialize this? Why don't we take a sectoral approach to the problem? When we talk about trading goods, that's fine, we're quite integrated in that regard. We trade \$87 billion in electronic products. This is trade between Mexico and the U.S.. We sell the U.S. over \$30 billion in automotive products. One out of five jobs in Mexico is based in a company that has FDI, and also in companies that are dedicated to foreign commerce.

If that's true, let's look at the easiest part of things. Let's look at the positive side of things. What can we do? What are we able to do?

When I went to the Partnership for Prosperity forum I put forth an idea. And this is just a small contribution of course, but if we make small contributions we're going to be able to improve the profile of North America. And as I said in Partnership for Prosperity, the important thing is not how many jobs are lost in the U.S. to China, the important thing is how us as North America, how are we going to keep a leadership position, a North American leadership position? We have different stages in development, of course. As I said before, well in Mexico itself, Chihuahua, Baja California, Jalisco and Nuevo Leon are one thing, and Chiapas, Tabasco, Campeche, is a different thing. I mean that's a different part of the country that has different educational profiles and different degrees of development.

So if we take one or two sectors and we start with them, we look at the private sector, sectors that are the driving force, if we [buy] them things are going to be better. For example, Delphi. Delphi is one of the largest car part companies in the world and is the largest foreign company that employs Mexicans in my country in Mexico. It has over 70 facilities. So Delphi gives us a great opportunity for a case study and we can see what can we do there.

\*65 minutes in\* \*Spanish\*

**Armand Peschard-Sverdrup:** Eduardo, thank you. Jaime and then Arnie and then Roberto.

**Jaime Santibanez Andonegui:** I would also like to go back to the educational issue. This, as Eduardo has pointed out, what can be done between the two countries. Likewise in economic terms, for instance. The educational matter. I don't think we need to take the finger off the page. On the contrary, much can be done. I cite here as an example another U.S. employer in Mexico which is General Electric, GE, which as you know also has a very large number of employees as well as a number of very important plants in Mexico. I know because I work with them on this project with now over 300 executives and employees of GE come from marginal primary education sectors to offer training programs for free market in economics to children from first to the sixth grade of elementary school. These types of contributions can be made many times in non-formal educational programs. We do not require here framework agreements, nothing. We simply need to go to direct, quick negotiations to form partnerships between the two sectors and at those types of levels.

I think that this kind of example gives us a guideline that much can be done between the two neighbors to further bring people together since the human capital that needs to be built on both sides of the border has to be a challenge within this demographic dividend. I think it is very important to bring the two parts together which are the schools and business as motors of society so that eventually we may reach a better situation or position. Teachers as well are fundamental to this demographic dividend because they will be a piece of exchange. These may seem small actions but I think they are key and can be promoted within this Partnership for Prosperity also that we are trying to [inaudible].

**Arnold Packer:** Let me again compliment the previous speakers. I think success in specific situations are an important accompaniment to these broad approaches. I would like just to mention that in the automobile industry, the certification of mechanics has spread from the United States to Mexico and that organization is selling certificates there.

The health area I think again is 15 percent of the United States economy, growing very rapidly. We're seeing small things like Americans going to Thailand and India for health vacations where they're getting their operations done a lot less expensively. Hospital HR directors are frequently in the Philippines looking for health care people. We're seeing the x-rays done in India too. We'll surely see drugs coming in from Canada. What is the sectoral approach around health which is primarily or at least substantially government funded, between the two nations? And what would work best so that 20 years from now we don't end up with a situation where indeed the U.S. health system is internationalized but it's India and the Philippines rather than Mexico that's doing that portion of the work to the detriment of both countries, perhaps.

**Armand Peschard-Sverdrup:** Thank you, Arnie.

Roberto?

**Roberto Newell:** Two things, both hopefully moving the agenda forward a little bit and I want to hark back to a commentary that Mr. Hewitt made a while ago because I think we would have the project look terribly naive if it weren't taking this into consideration.

Mexico already is facing a fiscal crisis related to the unfunded liability that its labor force has already earned. That is somewhere of the order of about 120 percent of our GDP. That means too that we have hypothecated the future of the public finances of Mexico unless we redress the unfunded liability very very rapidly. In fact the portion of government spending dedicated to paying the unfunded liability year by year is expected to grow around 35 percent per year into the future

unless we reform our particularly public sector pension systems which are an enormous drag on the competitiveness of Mexico. It probably is worth picking up a lot earlier in our discussions than we've done so today.

In that same order of ideas, and Mr. Hewitt once again was the person who jogged my memory on this, we have a very large part of our population in Mexico which is already aged, which has absolutely no benefit network out there, not even family members living in the United States. As they approach their old age the fact that their network has dissolved and their productive age is largely behind them means that we have a very very significant peasant social security problem facing us and looming in the not too distant future just as the Chinese individuals raised when they were talking to Mr. Hewitt about social security issues for the U.S..

Those two are very significant competitive drags on Mexico and we've only very partially addressed the issue. Hopefully the discussions underway right now which are being led by the Mexican Executive with the CONAPO will very significantly readdress this issue. If we didn't do so I would argue that Mexico's AA credit rating will be disappearing like this and will be heading into a situation where fiscal accounts of Mexico will actually be out of control. That could come faster than one wishes. It needs to be addressed.

Those two things have got to be earlier in the discussions because we actually sound very naive, now that I think about these things in our earlier discussions today.

I'd also like to pick up on a commentary Mr. Parker made, and once again very much in the spirit of trying to move the agenda forward. There are a set of sectors and sectoral opportunities, and this also builds on Eduardo's point earlier, that we haven't built largely because we haven't resolved institutional impediments. Let me build on one that's very very obvious. The professions, particularly such things as education, law, medicine, tend to have built into the judicial and legal systems of both countries barriers to entry which make it very difficult for us to solve each other's problems well. We could give a hoot about moving an MBA between the two societies and in fact they have enormous mobility, but sometimes just moving a nurse who is already conversant in English to the U.S. or bringing an American doctor, physician, to ply his trade in Mexico is impeded not by skill sets or opportunities, but by legal institutions that don't allow those degrees to be translated easily.

I think it's a lot cheaper to move highly skilled individuals to fill niches that both societies have that are not really being well attended right now than it is to devise very complex population strategies and demographic and economic strategies to change the shape of our societies as dramatically as we might need to.

This, though, requires that we once again have the courage to take on vested interests. The AMA in the United States has made it its business to keep the supply of doctors limited. We have exactly the equivalent going on in Mexico in many sectors. And actually SIP which is represented here today has the keys to that kingdom. To the extent that we can go to work on these issues we can make a lot of our economic processes a lot more efficient at relatively low public policy costs if we go to work on them. Tourism, certainly the medical sector, our financial sectors, our accounting and legal sectors are all sectors that could easily be made to work better with relatively minor reforms on both sides.

**Eduardo Solís:** I think that to dwell upon what Roberto Newell said at the end of his intervention, I think it is important that we go back to what we have under the NAFTA for professional services. Under professional services of the NAFTA there is a provision whereby these accrediting associations -- the bar associations, medical, architect, professional associations. They

basically agree on whatever is necessary so that we have the mobility of lawyers, of medical doctors, of architects, and they have done a pretty good job. We have the agreement for lawyers ready, engineers between Mexico and Canada ready, architects ready, so I think that in these areas building upon what is already being done under the NAFTA trilaterally, although for some of these provisions the agreement has been bilateral, and in the case of the United States the states have participated. So for example in the case, and here I'm not quite sure but I think it's architects, Canada and Mexico have already agreed and I think it's Texas who has already agreed also. I'm not sure if this is architects, okay? But I think we should go back to those people who are charged in the three countries for these committee on professional services that are in charge of making sure that the professional communities of each of the three countries are talking and getting agreements, because the goal is that all professions sit down, especially those that need licenses like lawyers, like engineers, like medical doctors, so that they agree and we can have this mobility that Roberto is talking about. I think there is a lot that has been done in this area.

**Luis Manuel Guaida:** Also let us not forget another means that we have for this bilateral coordination. NAFTA itself has a parallel agreement for labor issues which could be made to function more dynamically in these matters. Remember that when NAFTA was negotiating the labor issue came up mostly because of the opposition of the large U.S. trade unions, AFL-CIO, and then sort of a release valve was created to coordinate a parallel agreement for labor issues. It is there, it has worked on certain items, and it could be perhaps made use of for this coordination as well.

**Miguel Angel Tamayo Taype:** Sometimes too many ideas generate a kind of entropic process, but I am referring to sometimes we try to make one part efficient and perhaps that part, making that part more efficient generates negative effects in the whole.

This has much to do, perhaps this latter issue that we are dealing with in this session. With the convergence of two realities and which we can hardly model as a whole in order to establish certain guidelines or recommendations that seek common benefit and not only for one part as I repeat, one part of all of this that we seek to make more efficient.

It resembles the case of a company or organization which is something very much in vogue today. They try to improve quality by making quality control using, for instance, ISO 9001 2000, and what it says and what it describes, what this standard describes, makes the companies who use the same standard over time and with the indicators of the effect on their clients will try to improve their processes. The truth is, that's not how it works. Those companies not only need to use that standard as they must, but also other elements. For instance, working on their organizational structures, working on their processes, working on the competencies of their workers and their standards and values that rule the organization to have an idea of a full management model that needs to be fostered.

I think on this matter we are touching on something similar. We touch on different aspects and we don't know for sure which is the model, or at least conceptually, and what the variables are on which we must work to improve the situation of the issue today, not just this afternoon, but that we've been discussing all day.

I seem to remember that the issue is the aging of the population. I seem to remember that the problem is the youth who are approaching entry age for the work market. I'm thinking of those youth entering the labor market who do not find work in Mexico and by inertia will come to the United States. I am thinking of those youth, how are they going to be able to show in the United States what they know and what they can do?

What I'm trying to say first of all, that we need to undertake an effort on this point to seek a way of modeling this phenomenon which regards two different realities. Secondly, to focus the discussion on these youth who regardless of whatever happens, whether the North American economy grows or not, there will be a permanent migratory flow and these young people who come here usually are young people who have left school early and they face a market in which they cannot show what they know and what they can do.

So it seems to me that this part, regardless of all these other aspects, we would need to focus on a way of cooperating so that the acknowledgement of these people skills, Mexican people's, young Mexicans, can be accepted in the United States as an information system for the employer and as a degree of mobility of transferrability of what we know how to do and be able to get better jobs with better wages. I'm not sure if I'm clear on this part. That is, and I'll end here. It seems to me that this point is somewhat, the analyses are somewhat scattered because there isn't a conceptual model.

Secondly, we're talking about two different worlds, the United States and Mexico.

Thirdly, that these are youth that we are talking about who will be arriving regardless of what the growth relationships between the two countries are. And I do think positively that if we engage in efforts to acknowledge or give recognition to what Mexican youth people know and can do in the United States, I think we can help this relationship indeed.

**Richard Jackson:** To just add a comment, surely if there are large migrant flows from Mexico to the United States it's because the people leaving Mexico feel that they are earning a higher return -- they wouldn't call it this but we can call it this -- on their human capital in the United States than they can earn in Mexico. So I would turn this around and say the real problem is not how the United States can recognize the skills of Mexican workers, but how Mexico can recognize the skills of them.

**Voice:** [inaudible].

**Richard Jackson:** Precisely, create opportunities for them to use the skills.

**Arnold Packer:** To get to Miguel's point about having a way to prove what you know and can do, that is a real problem in U.S. labor markets. Resumes frequently exaggerate what people know and can do. Sometimes they even fabricate what they know and can do. We've had some very high profile examples where degrees were really never granted to people who claim they had the degrees, and there is a small industry in the United States checking on things like that. But the learning in the informal fashion and learning on the job and what you did on your last job is a very very serious problem. There have been estimates that 40 percent of resumes have some distortions in them and when an employer makes a bad judgment based on poor information that can be a very expensive mistake for the employer. So that's something that's needed in both countries, but it would be especially useful for people coming from Mexico to the United States.

**Gary Martin:** I wanted to earn my lunch here. [Laughter]. Maybe not so much reflecting on the BLS background, but my background of many years working with the counterpart in Puerto Rico of Mr. Solis in industrial promotion.

Mr. Hewitt introduced an interesting concept, this idea of the brain circulation, but unfortunately I don't think the Chinese and Indian technicians and IT specialists and all of that are a very good example of the type of Mexican immigration we get. I don't think the people harvesting the crops on the Eastern Shore bring back a lot of valuable skills that they can apply in Mexico.

But the most important type of experience and human capital development you can get, I think we're realizing it now with the increased investment in Mexico. For so many years Mexico from the bad experience with exploitive type of outside investment in Mexico has sort of turned inward and made it very difficult for foreigners to invest in Mexico, but to get the experience of operating in a modern cultural bottom line milieu is better than anything. It's where the middle class can get that experience. The people who are comfortable in the middle class in Mexico have no reason to immigrate up here. They like where they are, they're getting along pretty well. They don't want to come up here, but if they can get that type of experience and make a better contribution in Mexico now than they could before with companies like Delphi. They're contributing a lot more than people realize. You don't have to ask them to come up with a new training program, they're going to do the training program. They need these people to do these middle level management jobs.

So really I believe the best human capital development that's going on right now in Mexico is from these foreign investments, these companies that are operating there, giving people the experience. It's as though U.S. people were, say a U.S. entertainment industry were getting the experience on how to make good [telenovales]. Then maybe we would be as competitive in the world market as the Mexicans are with their [telenovales]. So that's my two cents for now.

**Richard Jackson:** I'm not sure there's any single or simple way to wrap up this whole immigration issue, but I just wanted to come back for a moment to the question that Roberto Villarreal raised of whether it is a U.S. problem or a Mexican problem and how we should perceive this.

It seems to me that, it may be that Americans may perceive it sometimes as a problem, but that it's clearly an economic benefit for the United States, particularly if we take into account not just the contributions of immigrants but of their children and their grandchildren. All four of my grandparents were immigrants, so I'm including grandchildren.

Is it a problem for the Mexicans immigrating? Clearly not or they wouldn't be immigrating. Is it a problem for Mexico? Perhaps. If the sort of investment in the skills of the people who are lost outweighs I guess the remittances that come back in return.

My brief attempt to tie together some of these thoughts, will immigration continue indefinitely at today's levels? That's a big question. Within a neoclassical economic framework we might indeed expect immigration pressure to ease as sort of the demographics and the income levels of Mexico and the United States converge over time. But we're neighbors and there are large Mexican communities now within the United States. There are networks of immigrants. There are people that move back and forth. So I think this is a reality that we're going to be living with for the foreseeable future.

One potential wild card that we really haven't talked much about here is the extent to which outsourcing can substitute for immigration. I was amazed to read a few weeks ago about a U.S. fast food chain, I can't remember whether it was Burger King or McDonalds or Wendys, but which is outsourcing fast food ordering to India. You drive up to the fast food restaurant, you talk to the plastic clown, and you're speaking to somebody in Bombay who then out of the other headset calls the order back into the kitchen here in the United States.

We need to think through how outsourcing could potentially affect the immigration dynamic.

**Arnold Packer:** I think another thing that hasn't been discussed, we've talked about who does the work but I think we need to discuss what will do the work. I think we are coming close to

the end of what one might call algorithmic work that is the work that you can reduce to an algorithm cheaper than an Indian worker is what you can put into a computer. So as you look forward 20 years the simple work, the routine work that doesn't require interpersonal contact or creativity, there's not much of a future in that. I worry about the American education system, which is going to test your ability to do algorithms. Frankly, nobody does long division for a living any more, and the typical algebra problem that our schools are testing people on which relate typically to the age of one pet relative to another pet or relative, or when two planes will cross, nobody gets paid for that either. Both countries could take a look at what will this future workforce do and what will machines do, and are we training people for the last economy instead of for the future economy?

**Paul Hewitt:** Many know that Puerto Rico is a commonwealth relationship with the United States. Puerto Ricans can come to the United States whenever they want, and yet net migration from Puerto Rico last year was very close to zero. Part of the reason is that Puerto Rico is aging. Its median age is in the 30s. America's median age is in the 30s. It's a little younger, but the labor markets have tightened up. You no longer have this surging of young people into the workforce and no place to put them. All things considered, there's less migration.

There are some mitigating factors. Many young Puerto Ricans come to the United States, work for much of their career, and then go back and retire, so that's part of the net effect. But I suspect we'll see the same thing in Mexico in the future.

**Edward Kadunc:** Just to highlight one trend which nobody's really mentioned, but there are significant numbers of American citizens who are doing the same thing who are not necessarily of Mexican origin. There are large retirement communities in Mexico where people are resident more or less permanently throughout the year. There are a number of cities along the border, the Mexican side of the border, which provide health care services to American citizens -- dental, medical laboratory, pharmaceutical. So there is this relationship which is growing which is not only Mexicans coming to the United States to live, but also United States citizens not of Mexican origin going to Mexico to live. There is a growing community of services to deal with both of those groups.

**Paul Hewitt:** If I could chime in a little bit more, I think that's going to be a real growth opportunity for Mexico. Not speaking as an official for the government, but simply as an interesting observer here. [Laughter]. I believe that it probably would make sense at some point for our Medicare system to have a reimbursement agreement with Mexico just as we recently signed a social security treaty.

**Roberto Newell:** One last contribution from the noisy Mexican over here. I think if I had to bet, 20 years from now there will be perfectly free migration flows between the U.S., Mexico and Canada. I think it's in the cards. It's the whole enchilada, as Jorge Castañeda likes to put it, is not going to be driven by policymakers, it's going to be driven by economic interests which are fundamental that they cannot really be bought off very easily.

What that really leads you to is to ask the question what is that shared operating system that the three societies need to put together that allows that free flow of resources to act beneficially and to benefit itself [inaudible].

Earlier I think there was a very cautious but I think very important question raised about are we training Mexicans to speak proficiently in English? That's part of the operating system. The U.S. common system of law which adjusts a lot more dynamically by a lot of small changes instead of very large step changes such as our codified Roman law does, is part of that system. Today we close most of our investment contracts in Mexico using New York law as the venue in which these things are transacted.

We also use the American capital market and dollars for a lot of the most important contracts in our country, meaning my country, Mexico. If these things are true then it should be very much in our interest to start exploring what are the implications for three societies that have actually three languages and different legal systems and traditions working so that they start converging on a shared common operating system.

Looking at the European case of integration and how that happened, what visions they set up and what institutions they required in order to make this happened at a very low transaction cost for everybody is probably not a bad idea. We tend to think that the 9/11 is such a huge rubicon that we will never go back to what seemed to be an integration process that was starting to happen. I frankly think that it's not going to be too long before we're back to where we were. If that's the case then I would want to know what should my grandchildren be studying if they're going to have mobility throughout the Americas as the environment in which they can live. And certainly I'd want to train them to think digitally, using English as well as I do, etcetera, etcetera, etcetera, because it's stupid not to. I think once you think of it that way, then you all of a sudden have got yourself thinking about a lot of structures and institutions that have got to be redesigned and rethought that today should be on our White Papers so that they can turn into blueprints before too long.

**Edward Kadunc:** The one topic we really haven't touched on in this discussion is the fact that there have to be legal changes in order to facilitate many of the things that we're talking about. Legal changes at the international level and legal changes within the societies, and we really haven't broached that subject and it's the hardest one probably to deal with.

Maybe one of the useful things to come out of this kind of a discussion would be how outside of formal country-to-country negotiations on issues of immigration, how civil society of a group like this can make recommendations which inform the discussion of immigration reform and bring the issues out into the arena of public opinion in a way which really deals with the issues and doesn't deal with the sort of histrionics that are so often surrounding immigration.

**Armand Peschard-Sverdrup:** I agree. In fact I'll tell you what, I actually think that going back to the whole enchilada and just the issue of immigration. If you start looking at it from a human capital standpoint I think you end up looking at the whole issue from a completely different angle. I think both the Fox Administration and the Bush Administration have kind of passed each other and in large part it's because they're not looking at the same issue the same way. If they looked at it from a human capital dimension, I think there would be a lot more receptivity in this town to labor mobility, which is something that up until now hasn't really been well received here or understood, for that matter. So I'm hoping that this report, even though we started off with demographics to kind of frame what's going on between our two countries, I think focusing on human capital hopefully will enable us to move forward in such a way such that it would be mutually beneficial from both societies from a productivity standpoint.

**Roberto Villarreal:** You mentioned some time ago, and I think as a comment to my comment, the asymmetry between the two countries. This was an argument that we heard a lot in the early '90s when talking about trade liberalization, the asymmetry between the two economies, that huge deep sound in Mexico eating all our jobs and so on. The experience was that technically capable and politically skillful teams on both sides were able to negotiate an agreement in which all the asymmetries were perfectly dealt with exceptions in some branches. But with imagination, even with that enormous and obvious asymmetries, things can be worked out and phased in gradually.

**Armand Peschard-Sverdrup:** I agree, Roberto. I think in the case of NAFTA there was an incredible amount of mutual benefit for the three signatory countries so therefore the asymmetries were able to be dealt with.

When it comes to, and again, I don't want this to become an immigration discussion, but if you focus on immigration it hasn't, the discussion hasn't been addressed in such a way so that we can take that step whereby we can start looking at okay, how can all three countries benefit from a labor mobility standpoint, from a human capital standpoint?

I think, again I think human capital hasn't really been looked at from the standpoint of human capital.

When I said asymmetries, and I don't know if it rubbed you the wrong way, but I can tell you that what I sense is that there are a lot of things and I'm not blaming the Fox Administration because I know there's been a lot of accomplishments. But if you look at some of the reforms that have to be addressed in Mexico, are I think pivotal to diminish the asymmetries, if we look at just fiscal reform. Somebody mentioned energy reform. Roberto mentioned energy reform. If you look at labor reform. When I mentioned asymmetries I was really referring to the fact that there are structural reforms that Mexico needs to address to better position itself to be taken seriously I think in this town and in Canada. This is just an observation. I'm not telling you that I'm right. This is what I sense from talking to folks.

**Roberto Villarreal:** We are on the same mind track. Perhaps you don't use the terminology of structural reforms in the United States, but as an international economist I am very much concerned with the competitiveness of your sectors that are not internationally open. The non-tradeable sectors. You have very high costs there, your productivity is increasing very slowly. That is kind of a drag on your overall competitiveness and that is also harming us in Mexico. So immigration would decrease the domestic costs of those sectors. It's a structural reform for your economy also, and we don't see much effort in that sense to reduce asymmetries. So I guess we are on the same track.

**Armand Peschard-Sverdrup:** If we were to kind of further on the discussion I would say yes, there's no question that there are certain drags in the U.S. economy and that in some sectors innovation hasn't taken place at the rate that it should be. I'll just leave it at that because I don't want to turn this into a tit for tat. This discussion isn't really meant to be the U.S. knows best therefore Mexico should do X, Y, and Z. This discussion is actually intended to be more of a constructive discussion and an exchange of points of view. I appreciate the fact that you're wanting to make sure that the U.S. side of the equation is factored in, and we'll factor that in in the report, Roberto, because one of the reasons why the reports that we've produced have been so well received on both sides, whether it's in addressing water issues or border security issues or even migration issues, is that at the end of the day when we put the report together we do make sure that they're balanced in how we address these issues so that we don't end up having some of the sensitivities that have come out during the course of the day.

**James Lewis:** Let me try a transitional remark here if we're getting close to a transition point, which is in listening to this discussion I've been thinking about the topic here which is demography, the future workforce, and economic competitiveness. And there is a European example that is interesting to think about and that example would be Ireland.

Ireland in some ways had some similarities to Mexico. It certainly had some similarities to other countries, and it wasn't a particularly developed country 20 year ago or 30 years ago. There are implications there for migration because what you've seen in the last 20 years is as the Irish

economy has developed and as they've modernized and integrated themselves into a global economy more than a European economy, migration has fallen off dramatically. Whereas young Irish people used to have to leave Ireland as late as the 1980s to find work, now they stay home. In fact you have Irish people coming back to Ireland because it's more attractive.

So one thing we might want to think about when you think about the Irish experience and comparing it perhaps to the Mexican experience, what are the kind of policies that you want to have in place that will have that effect on migration, that will have that effect on labor markets? What are the policies of which human capital development is an important one. Not the only one, but an important one. So I think in that case the Irish example can be instructive for us.

**Richard Jackson:** Just to follow up on your comment, I was reading an article -- the current survey in *The Economist* is on Ireland. I recommend it. Apparently the representatives of the governments of the new accession countries to the European Union from Eastern Europe are making pilgrimages en masse to Dublin to learn about the Irish miracle.

**James Lewis:** Let me do a quick follow-up then, and this is sort of foreshadowing my part of this project, but one of the things the Irish did is they looked at themselves in the '80s and said we're stuck. Our economy is stagnating, our youth are leaving, we're basically an agricultural economy tagged to the western end of Europe. What you had was the political parties and the unions pull themselves out for I think it was three days and say what is it we need to agree to to get our economy moving? What is it we need to agree to to get development going? This was not something -- They have a close relationship with England, they have a close relationship with Brussels, but it was actions internal to Ireland that actually turned the engine on.

**Armand Peschard-Sverdrup:** Thanks, Jim, for your comment and the infomercial on the next module of the project that we're going to be working on together which focuses on innovation technology and high technologies.

Luis, then Arnie, and then Roberto.

**Luis Manuel Guaida:** On a very brief comment, I just wanted to point out that the last comments have taken us to an issue that I also put forth before the table here because I said that part of the problem that we're dealing with always ends up in the political arena. So regardless of the academic vision and the strategies that we can propose, then Mexico's problems and the problems with Mexico's economy are politically related. We talked about trade unions, we talked about this three day meeting that the trade unions and the government had and they reached an agreement. We have that problem in Mexico. We cannot reach that kind of agreement.

There have been studies and there have been discussions such as this, and I think we're going to be able to find very good proposals, and these proposals are going to be able to lift that political obstacles that we can find.

**Arnold Packer:** I was really thinking about Roberto's comment about the integration. It would be interesting to at least in one scenario of the report to assume that 20 or 25 years from now indeed the labor force of the three countries are integrated. You can see some of that happening with I think primarily the illegal immigration. In the three years that started this century I think Native Americans in the United States lost two million jobs. All the job growth plus two million was to immigrants from all countries.

The average wage of non-supervisory production workers in the U.S. has fallen over the last 30 year period. The increase in poverty has occurred over the last 30 year period. So it would be a

very interesting exercise to say what would it look like? What would the trajectory look like if indeed there was a free labor market and the United States gave up the idea that we could restrict immigration.

**Richard Jackson:** We will think about that scenario. I'm not sure whether it will be as troubling an outlook as you seem to be suggesting though, Arnie.

**Arnold Packer:** I don't know that it would be troubling. I don't know how it would come out.

**Richard Jackson:** There are always people who lose jobs. There are always people who gain them, and there are consumers who gain too.

**Arnold Packer:** Oh, yes. I'm not sure it's a bad outcome. It might be a good outcome, but it would be useful to trace out what will happen.

**Robert Newell Garcia:** Let me put a slightly different spin on what I think my today was trying to drive, because I think it's a very thoughtful commentary that underlies the position that he espoused.

It's now conventional wisdom to say that Mexico has lost its way, that we've not been able to get the second wave of reforms to happen. And Luis Manuel I think really reminded us of that issue just a second ago when he said gosh, there are political things happening here which are in the way.

In the very same vein I would suggest that the U.S. has also lost its willingness to go for the second wave of reforms, its second wave of reforms. Ag policy in the United States moved sharply backward. In moving sharply backward what it did was drag back the outcome for the free trade agreement between our three nations in the north of America. In so doing we've also delayed quite significantly the potential dividend from integration that was supposed to come. And what's worse, it might have even led some people to think that in 2008 when we're supposed to be one common market for agricultural products, we won't be. The consequences of which are very sad for all nations, and particularly for consumers in both nations because we're going to end up with a more expensive, less good diet than we would have otherwise. And in the same vein, I think we were much further along towards a monetary and financial integration than we are today. Once again, a lot of it is driven by the fact that the U.S. has lost its courage to change as well. The telecommunications sector which should have been open by now has also bogged down in the U.S. because the will to change seems to not be there.

A lot of this is driven by the fact that the two main parties in the U.S. are much more factionalist than they used to be and I say this with fondness for the gringos. I really do care about this society up here. And much as I think we've gotten factionalism in our political system in Mexico right now, which is really undermining our ability to come to national agreements, I think that something similar happens in the United States

It might be useful, and I'm trying to build on Roberto's idea because there was a criticism but there was also a very profound idea there. To try and remind the readers of your paper what is that second wave of initiatives that are needed in order to make the North American dream happen for the U.S.? Actually the dream of the Americas happen, because there was a bigger agenda there than we even recognize any more. In that context then it doesn't look like such a weird, wild and wooly idea to try and rescue a joint labor market policy, but rather just simply picking up the threads that were already in the tapestry that we were weaving together at the beginning of the '90s. We were a lot smarter as political societies in Canada, the U.S. and Mexico in the early '90s than we are today. That drop back into the past, that factionalism that almost ethnic redefinition that the three of

us seem to be expressing, actually the Canadians no but the Americans and the Mexicans, that throwback to the worst instincts in our society actually can't help but hurt us and in the final analysis I would hate to have that happen because, damnit, there are 280 million gringos that deserve something better and there are 105 million Mexicans that deserve something better. If we can't give it to them then we fail as public policy architects.

**Armand Peschard-Sverdrup:** I agree, and I recognize the merit of Roberto's point as well. I can tell you, there are individuals in this country who are concerned about U.S. competitiveness over U.S. innovation. Jim is the individual here at CSIS who focuses on many of these issues, and I can tell you that there's a concern here in the United States among those people that focus on these issues. There is a concern over the fact that September 11th and the focus on homeland security, its greatest impact on the United States could be the impact that it has on innovation and on human capital development as we tend to focus more on closing in our borders.

So I'm concerned over the impact that September 11th will have as --

**Robert Newell Garcia:** Not to draw you into polemic, though. This is not driven by 9/11. Think of what the election four years ago in the United States did to the American political capital. Think of how much of that had already been eroded by a very corrosive environment in the political system of the U.S. earlier. It's time to go back and rebuild trust in institutions in the United States and to rescue the concept of the U.S. as an idea and not an ethnicity. These are issues that have been made worse by 9/11 but are not caused directly by 9/11. And I say this with an enormous amount of fondness for the gringos. You guys are the coolest breath of fresh air for the whole world and when you lose your way, all of us get lost. I would argue that the second wave of reforms is not going to come into existence anywhere in Latin America until it's back and alive in the U.S.. And I say that with fondness.

**Armand Peschard-Sverdrup:** Does anybody want to comment? Does anybody want to challenge Roberto? [Laughter].

And Roberto, I wasn't saying that it was driven by September 11th, but there are folks in this country who are concerned that the U.S. ability to deal and address some of these challenges itself are complicated by the fact that there is a change in focus and some of these concerns and measures that have been implemented are more detrimental from a competitiveness, innovation standpoint, than anything else.

I think we should probably wrap it up.

**Gary Martin:** I just wanted to reflect a little bit more on what he said about Ireland as an example for Mexico because I have some data here that's relevant to that point.

Ireland had a very high fertility rate as late as 1980, similar to Mexico. It was over three in 1980. It's now fallen to 1.98. But one thing they've done that I don't think Mexico would contemplate is drastic tax benefits for outside investors. I don't think Mexico feels it has to give those types of tax benefits with its lower wages.

But there are some warnings in the Ireland experience for Mexico of a social type I should think that they need to look at. Maybe it looks positive on the one hand, that female employment in the age category 25 to 34 was 33.9 percent in 1980; it is 73.5 percent now. That's a drastic social change.

The negative side of that, births to unmarried women in 1980 in Ireland was five percent of all live births. In 2000 it was 31.8 percent, births to unmarried women. Just a huge social change going on in Ireland. A lot of it good, but a lot of it not so good, and this is something you've got to maybe look forward to if you're going to copy Ireland.

**Armand Peschard-Sverdrup:** Gary, thank you. I was just wondering to what extent it's the result of the pilgrimages that Richard was talking about, of all these men from former Eastern European countries traveling to Ireland. [Laughter].

But on that funny aside I'd like to thank, on behalf of Richard and I, and Richard, please feel free to close the event, but before I pass the microphone over to Richard, Sarah was smart enough to remind me to encourage you all, if you have any materials, whether it's a PowerPoint presentation or a paper that you think would be useful for us as we move forward in looking at these issues and would help us to flesh it out some more, I would encourage you to please send us those via e-mail. I would like to thank you all for coming.

Richard?

**Richard Jackson:** My thanks as well to those of you who came just from across town and especially those who came all the way from Mexico to be with us today. I think that we've thought creatively about the problem or problems. We've found I think some new and constructive, not a new and constructive way, but some new and constructive ways of framing the issue. I for one learned an enormous amount, and as I work on the report in the months ahead I hope to be in touch with some of you. I may be also taking a research trip to Mexico and may want to arrange some follow-up discussions. In any case, on Armand's behalf, on behalf of the Mexico Project and the Americas Program and the Global Aging Initiative, thank you very much for coming and sharing your wisdom with us today.

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