## General Discussion: Panel on Demographics

Chair: Peter Blair Henry

Mr. Gurría: Aging will of course result in a decline in potential labor force, which will weigh on potential output and will need to be offset through increases in other employment participation, employment rates, and it is not clear the role of productivity; older workers are not necessarily less productive, at least I like to think so—I have a bias here probably—reform to increased participation rates, saving patterns, etc. There is also an impact on current account balances because aging population will tend to save less, therefore, that will change the dynamics. Big impact on public finances, as we have seen, even under cost containment scenario, and that is a big if by the way, it's still far. We probably have 1 ½ percent increases per year between now and 2030 of the very considerable cost. There are solvency problems for defined contribution pensions, very serious considerations. Therefore on the policy side, the question of longer working lives mean longer periods where the depreciation of skills will be longer and then the question of how does one, particularly in the OECD countries, the question of migration. How does one fit the question of migration and migration policies in order to offset part of this impact on the aging? We are not, in fact we are doing mostly doing the opposite in most of the countries, where the aging is more serious, like Japan and where Karen Eggleston mentioned Korea, and Russia

where this is happening so fast, and they do not have any compensation on the migration policy as I said almost the reverse, also policies on facilitating the transition of work to retirement we have so many cases where workers are too young to retire but too old to find a new job. That means of course we have to change the attitudes both of employers and of course policy, very serious policy implications here. I would like to thank all the panelists for their contribution and for pointing out one of the most serious and most important challenges I would say, not to call it a threat, for our future.

Mr. Poterba: I just wanted to ask the panel how important they think the economic response to some of these demographic changes will be. For example, age-specific labor force participation rates can evolve substantially as we move through a demographic transition. It is helpful to remember that in the U.S. at the turn of the 20th century the labor force participation rate for men 65 and older was over two-thirds. That dropped to about 15 percent by 1985 and has subsequently risen; today it is a little over 20 percent. If you look at the 65-69-year-old population, that number has increased by close to 15 percentage points within the last 25 years, a really remarkable reversal of what seemed to be a long-term trend. This reversal has many potential sources. One is that today's elderly are somewhat healthier than the elderly in past decades. I would be very interested in the panelists' comments on the extent to which there are similar developments in other nations.

*Mr. Liikanen:* About 10 years ago we discussed about aging and there was one slogan: global financial meltdown will be in front of us when baby boomers will retire. If you look at the recent data: the opposite can be the case. If the generous pension systems will be maintained, and the longevity will increase, assets prices can go up, and global interest rates down. That could be quite a relevant issue for us.

*Mr. Blinder:* This is a question for anyone, although it's prompted more by the chart in David Lam's handout. To my thinking, and the thinking of a lot of other people, the big, big event of the later part of the 20th century was the ascension so to speak, though not literally, of China, India and the former Soviet Union into the world economy. These places were on the planet, of course, but they weren't

really participating much in the world economy. As they "entered," happened, over a long period of time, the world labor force almost exactly doubled and the world's capital stock probably barely moved, because not much capital was brought in. And that development had, I think, the predictable effect of putting huge downward pressure on wages and upward pressure on the returns to capital. As I look at the charts here about declining population growth, not yet leveled but declining world population growth, it sort of makes me wonder whether the next big events, say over the years 2010 to 2030 may be years in which world labor supply shrank and capital became abundant, thereby lowering the returns to capital and raising the returns to labor. My question is: Do you think that is wishful thinking, or do you think there is something there?

Ms. Eggleston: Thank you very much. These are all very interesting, important and complicated questions, as you know. I don't certainly presume to have any answers to all of them. Let me just touch upon a couple of them related to the particular issue of age-specific labor force participation. As many of the experts here know, there are many contradictory forces ongoing there. To give an example of China, Japan, South Korea and other developing countries, there are multiple different forces at work, for example the structural change from agriculture to urban population. China is urbanizing in a very fast rate as you know and that actually tends to reduce labor force participation because as was shown in the NTA graphs in lower income and agricultural-based economies people tend to work longer. There isn't even a word for retirement in some rural areas—when you do surveys in rural China as I have, for example, they often don't define themselves as "retirees," they are still farmers; but that is changing as China rapidly urbanizes. On the other hand, as you know, these elderly rural workers have relatively low productivity, compared to the younger cohorts that might have a lot more education, and they might be healthier. Certainly if you look at the NTA again for China you see that there is large income among those youth cohorts and smaller for the older part of the working-age population; that difference is partly because those are cross-sectional cohorts. As the current young people age, labor force participation rates are

changing so you might think that they would work longer (to older ages) in the future.

Mr. Lam: Just some comments on Alan Binder's excellent question; I think you are absolutely right that if you combine the fact that you have India and China joining the world economy and their populations doubling in 25 years, roughly between 1960 and 1985—they grew much faster than the world as a whole. That is an enormous increase in the labor supply to the global labor market and we do not think about that enough in terms of what kind of impact that had. Then of course we have China joining the WTO as mentioned earlier, which is the ultimate manifestation of that in some ways, combined with this huge increase in population, most of which is in the young ages. The slowdown that is happening very fast, these fertility declines, no one would have imagined fertility falling as fast as it fell. There is still a lot of what demographers call population inertia or population momentum, so these populations are still growing. But as I show it's mostly the old ages and they will eventually stop growing over the coming decades. That's a huge change in terms of this flow into the labor market. Now whether that causes a decline in returns to capital is a very interesting question, but I think the absolute numbers are staggering. Combining that with Jim Poterba's question, one of the amazing things in these countries is that they have this incredible growth of their labor force, say in Brazil, Thailand and so on. If you look for increasing unemployment in those countries you just don't find it back in the period of the rapid population growth. These countries are absorbing incredible numbers of people into the labor force. Of course it's a lot because of the big informal sector, a lot of them go into agriculture, there may be big effects on productivity and so on. But it's absolutely amazing how many people got added to the labor force with no evidence of increasing unemployment in these countries. This is partly because of very flexible labor markets in a sense, because of informal sectors, but that may now begin to change.

*Mr. Lee:* So on the matter of increasing participation rates, certainly I agree it's very important. In addition to increasing labor force participation rates of older workers there is also increasing female labor supply, which is a big untapped resource in many countries,

at least in market labor. Then there is investment in education and early childhood development and so on thinking of the labor force of the future, which I think is very important, and to some degree is happening almost automatically as fertility falls. Globally we see a very strong relationship between low birth rate and high investment in human capital per child, whatever the direction of causality, I don't think it really matters in this case. On the other hand, there also has been, certainly in the U.S. and I think in other countries, a widening dispersion of a health and mortality by long-term income and by education. These policies of raising retirement ages and so on can have regressive effects in terms of benefits since poor people don't live as long to receive benefits and retire later and so on. There are also issues like that to worry about as we try to craft policies to encourage increased labor supply at older ages. As Jim Poterba was saying, there's just a really dramatic decline in labor supply at older ages. The retirement age, defined as the median age at which people are out of the labor force or no longer participating, declined by about 10-12 years over the first part of the 20th century. Now, and as Jim said, there has been a reversal since the mid-90s, and I think that is pretty common across OECD, but looking at recent OECD data it seems to be only about one year, and on average countries are still below the retirement age they had in the 1970s. So, something is happening, but not happening as quickly at least in many countries as one might hope. Dropping rate of return, I'm not sure I fully understood the question, but I indeed think there will be a declining rate of return to assets globally and it will affect all countries whether they have aging populations themselves or not. But, there is another view and the other view is that these massive public transfer programs for the elderly that seem to be quite underfunded are going to lead to a big accumulation of public debt and that public debt is going to offset the tendency for asset holdings to increase due to aging and longer retirement and such things and there may end up a wash or who can say.

*Mr. Frenkel:* I would like to put some of the data that were presented to us in the context of public policy. The demographic changes that characterize the various regions in the world economy result in dramatic changes in the relative shares of emerging markets and industrial economies. Specifically, in the year 1990, two-thirds of

world output was produced by the U.S., Europe and Japan. Today those three economies are producing only 45 percent of world output. The center of gravity of the economic world has moved to the emerging markets, especially in Asia. The first public policy issue that arises from this fact is related to the international governance of the world economy. It is obvious that in view of the rising importance of the emerging countries they need to be granted a larger voice in the various multilateral bodies such as the IMF and the World Bank, as measured by the quota shares granted to the emerging economies. While this need has clearly been recognized by the various governments of the world, the implementation of the new distribution of quotas has been stalled. The second public policy issue that arises from the demographic changes relates to the effects of demographic changes on the allocation of government spending. As an example, consider the U.S., according to the CBO at present about 23 percent of government spending (excluding interest payments) is allocated to Social Security spending, another 25 percent is allocated to healthcare (including Medicare and Medicaid) and the remaining 52 percent is allocated to everything else including education, R&D, infrastructure, defense, etc. Fast-forward to the year 2035, the effect of the aging of the population in the U.S. will imply that the spending on Social Security will constitute about 24 percent of the budget (excluding interest payments) and 39 percent on healthcare. This means that just because of aging the government will have to its disposal in order to finance its other expenditures on education, R&D, infrastructure, defense, etc., only the remaining 37 percent of its budget. It is obvious that with the remaining 37 percent of the budget there is no way that the government can finance the necessary spending. These demographic trends will necessitate a re-examination of the nature of the social contract between the government and its citizens. That re-examination will need to determine the amount of services that the government should be expected to provide to its citizens and the mechanism by which those services are being financed. The third public policy issue that arises from the dramatic demographic changes related to the age distribution of the world's population relates to the international mobility of people. In this regard, a pressing issue today is the visa policies of the industrial countries in general

and of the U.S. in particular. This public policy issue encompasses labor market considerations, security considerations and ultimately geopolitical considerations.

Mr. Fischer: This has been a very interesting conversation. What is interesting, partly interesting, is there must be a lot of countries who are thinking about having larger populations rather than smaller ones. I'm sure Russia is thinking about that, Japan, Western Europe and throughout, except I think for one comment you have taken the rates of fertility as given, so you also talked about migration as Jacob Frenkel just did, but put that aside. The one example was that China is moving away, perhaps I gather, from the one-child policy. One wonders if that has to do with the fact that India's population will soon overtake China's or what is behind that; maybe it is just a social policy. What is known about the policies that could change the underlying trends of population growth in the countries, any country, but particularly the countries that are now shrinking?

Ms. Eggleston: Just very briefly to highlight the challenge to all of our societies from healthcare spending. I think it's a particularly challenging one because there is such great value to extending and improving life, and if we use too blunt instruments to try to control spending we might forgo some of those great innovations; so, it's a real challenge. Just briefly about the final comment about the onechild policy in China. They have been relaxing it. Now if either the husband or wife is a single child, they can have two children. Those affected are actually people more in the urban areas rather than the rural areas (because the rural areas tended to have two children) so that is why we think the impact on fertility might be relatively modest and it's viewed largely as compensating a generation that made a sacrifice by having only a single child. Interestingly these are also the parents that have more education and more investment per child; they themselves will be having more children, so there will be a shift toward even more education per child given that policy.

*Mr. Lam:* A comment on Jacob Frenkel's questions. They are excellent and I think you can look at Chart 1. Many of these international institutions are created back around the beginning of the graph, slightly before 1950. You look at the more developed country

line, it barely increases at all over the whole period, while the rest of the world is growing—the shift in the population is just staggering. So, it does seem like some accommodation has to be made to the structure of these organizations to reflect that reality. Also interesting on the policies is that it is very tempting for many of these countries, as Ron Lee suggested, with these very young age structures and that had these young age structures 10-20 years ago, to start creating very generous old age retirement schemes, for example. The demographics worked very much in their favor. Ultimately the bill comes later and many of them have created what are probably unsustainable basically pay-as-go social security systems at a time where they had very small elderly populations compared to the working age population which will change rapidly.

I wanted to comment on Stan Fischer's question about policies. The international population meeting was in Korea last year. Koreans are very interested, they interviewed me and probably Ron and others as well, about what they can do to increase their fertility rate. South Korea has one of the lowest fertility rates in the world, incredibly low. They had very aggressive family planning. It's very interesting, these countries tried so hard to reduce fertility and now they are trying to turn it around and go the other way, which is quite hard I think. I have done a lot of work in Brazil where very rapid fertility decline happened basically with no government intervention at all and fertility fell in these countries mainly not because of family planning programs but for many other reasons. For example, many of the Southeast Asia countries had fertility declines about as fast as China without having anything like a one-child policy. Whether China would have had a similar pattern without having anything like a one-child policy, they very likely would have, but not exactly in the same way. Trying to go the other way is very hard and Korea has tried some things. Of course there are policies around Europe trying to give incentives for the third birth and so on. These seem to have some effect, but not so much. I think we are going to see many more countries in the world now trying to figure out how to get their fertility rates back up. I think it's very hard because the big things that are driving low fertility are not going to be that responsive to sort of tweaking tax incentives and so on.

Mr. Lee: I suppose there is some link between the second point of the first question and the matter of the unsustainable government policies and raising fertility and so on. There are now something like 40 countries that would want to have higher fertility than they have and I think many of them have some kind of policy in place to do that according to U.N. surveys. They are financial incentive type policies which, I think as David Lam said, had maybe some effect but nothing very large. I've heard some articles suggesting that familyfriendly policies, public daycare maybe and anything that could be done to increase the participation of men in child rearing and home production activities is helpful. I'm not sure how solid the evidentiary base is. I did do a calculation a while ago that found that the fiscal externality to a birth is about \$400,000 in the U.S., well that is sort of updated from the mid-1990s, but still about right. The U.S. has long term pretty much had replacement-level fertility, it's a bit low now, but that is temporary from the recession. I don't think it would be appropriate to have a policy raising fertility in the U.S. Certainly in a country with 1.2, 1.3 or 1.4 births it seems very advisable for policy to do something.

Mr. Henry: Let me try to tie together a point that Jacob Frenkel made with Alan Blinder's point. As we think about the population growth numbers, particularly in sub-Saharan Africa, it's quite interesting to consider that it is the 60th anniversary of the Lewis model. I question whether the numbers suggest that those youth are really being absorbed into the labor force and it's interesting because the Lewis model assumed a modern industrial sector with a high rate of profitability that would attract this excess supply of labor. And to tie it to Alan's point, it's true that an increase in the labor force would give you an increased rate of return to capital, holding constant your view about what is happening to total factor productivity. If you have distortions in your economy, however, that would actually lower the rate of return on capital. Then you may get a friction that breaks down the incentive for firms to actually absorb the excess labor. This seems to be a critical question for Nigeria in particular but sub-Saharan Africa in general. And to tie it to Jacob's point, it's not unrelated to this larger governance issue as we think of the role of international institutions such as the IMF and the kinds of reforms we have seen in

the past three decades that really drive the kinds of policies that lead to higher rates of return on capital and therefore create the incentives for firms in these countries to actually absorb the excess supply of labor. I think that is a critical question for the future.