Mr. Mokyr: We have talked a great deal about the problems of the impact of aging, and we really haven’t paid all that much attention to the left side of Don Johnston’s diagrams, which is the age at which people actually join the labor force. As Adair Turner said, we have rich people’s problems: We are living in an age in which the marginal product of human capital has gone up so much that people actually spend a lot of time going to school and not joining the labor force until a more advanced age, which was inconceivable 100 years ago. I say this as a proud parent of a 23-year-old who has never worked a day in her life. This would have been totally unimaginable at the end of the 19th century. The question is: Is there something we should do about it? It’s not clear to me that the answer is yes. Maybe we shouldn’t, but I would think that what we are telling many of the underdeveloped countries is invest in more human capital, send your kids to school, then this is the flip side of that. There is a price that they will have to be willing to pay. And I’m not totally sure what the policy implications are, but we ought to worry about both sides of the diagram—not just the right-hand side.

My other question has to do with gender, and I’m posing this as an enigma because I don’t know the answer. But this is something we should think about. At least half the people in the aging process
happen to be women. Almost all the countries today have a younger retirement age for women than for men. This is so even though women have a longer life expectancy. This must mean that women’s proportion of the number retired must be larger than the men’s proportion. Why is this so? Women don’t seem to age faster than men. I have seen no evidence that there is any sort of more rapid deterioration either mental or physical. Why do we do this? I asked Marty Feldstein this this morning and he didn’t know the answer, so that means the answer is not obvious.

Mr. Feldstein: I have thought about it since then and it’s to look after their older husbands.

Mr. Dudley: I have a question on the monetary policy implications. I thought Charles Bean covered most of them, but there might be one more and that is the risks of demand shortfall problem over the next 10 to 15 years as we are moving the baby boomers close to retirement. There is good reason why the savings rate might have to go up. In the United States we are at a very low starting point. The demographics point to higher savings as the baby boomers get older. Also, we heard that real interest rates are supposed to be lower as this demographic process persists. That means lower financial asset returns. If we get lower financial asset returns, that also requires higher savings. Presumably, home price inflation is going to go up a lot less as the population ages, so there is a possibility of a negative wealth effect there. Everything we have heard in these two days, which has been marvelous, is that taxes are probably going to have to go up. If we believe at all that people will anticipate those higher taxes, that is another reason for them to save more. We may actually find ourselves in a situation that monetary policy has a problem in its ability to drive the economy to full employment because of a persistent demand shortfall.

Mr. Budd: I have an answer to Joel Mokyr’s question. It is really the one Marty Feldstein reached. I have always understood that, certainly in Britain, the difference between the two retirement ages, which is
five years, represented the average difference between the age of the husband and the wife. So, they both retired on a pension at the same time. That was the original institutional explanation for it, at least in Britain. You are shaking your head for that; that was what I was always told. I was puzzled about it as a child. That was the answer I was given.

My comment relates back to the very first session and Don Johnston’s question about the policy response, and, of course, Jacob Frenkel commented on it in the current session. I want to say something about the United Kingdom experience. It is well-recognized that as far as pension problems are concerned, the United Kingdom has a very small problem. This is because the state pension is fixed in real terms and, therefore, the replacement ratio falls through time. This has been mentioned, but for many people this has to be topped up to reach the income support level.

There was an earlier incident in the United Kingdom that is less well-recognized. In the mid-1980s, the British government recognized that another part of the state system, the earnings-related part of the state pension, was going to be extraordinarily expensive in about 30 years. It was one of those rare cases where a government took steps because of a financial problem appearing a long way down the road. The problems were not so much demographic as actuarial.

They changed the rules and, in effect, halved the benefits derived from this system. They simply did that and no one noticed. There was no political cost to doing this at all. What they did at the same time was to change the rules and encourage employed people to take out personal pensions and many people did so. What we then had was the so-called mis-selling scandal in which people bought pensions that were totally inappropriate for them. They should not have bought them. They were not the right people to buy them, and then they were bad schemes once they had bought them. This somewhat brought the whole policy into disrepute. Cutting the entitlements was not the problem, but trying to replace them with something else
in the way that they chose to do so did cause a problem. The moral of that is that you do not necessarily know where the political problems are going to arise when you try to escape from these problems.

I cannot quite resist the temptation to make a comment on John Helliwell’s paper. I became convinced of the value of the “well-being analysis” when I learned of the results, so satisfying to an Englishman, that the French are actually deeply miserable people. This, of course, is the penalty they deserve for living in such a beautiful and generally excellent country.

**Mr. Balls:** When I start thinking about these issues, I often immediately start thinking about funded versus nonfunded and defined benefit versus defined contribution systems. In the discussion during this conference, there has been a lot more discussion of the fundamental issues such as saving, investment, and migration/immigration but less on the question of whether you need to prefund as a part of your reform, whether you can rely on those aspects, or need higher taxes. I just wanted to ask the panel to address the question of whether this debate is central to these issues or whether this is a detail alongside those more important macro variables.

**Mr. Basci:** I would like to ask about the bequest motive and inheritance possibilities under different systems—pay-as-you-go or fully funded systems. In our case, we have the pay-as-you-go and only the dependents can get the benefits after death. Are there other alternatives, especially in the fully funded system? I suspect that the bequest possibilities would help increase the savings total possibly.

**Mr. Berner:** I have a question about the long term for the demographers and an observation about the short term. The question about the long term relates to something Andrew Crockett and John Helliwell were talking about. Certainly, increasing longevity is a blessing and not a curse. But I wonder to what extent our analysis recognized that longevity is endogenous courtesy of better public health but also of increased health care benefits and our desire to prolong life.
we think either about public policy design or about forecasts—actuarial or demographic forecasts—are we taking into account this endogeneity and its implications for the future costs of social security, private pensions, or for health care benefits themselves?

The short-term comment is related to things that Charlie Bean and Morris Goldstein talked about—namely whether our capital markets sometimes telescope the results of long-term demographic problems into crises. We had a reminder of that last week that may start to serve as a catalyst for change in defined-benefit pension plans in the United States. Now, some people think of such plans as relics and all we need to worry about are the legacy costs. Michael Mussa and I had a conversation about DB plans earlier today, and in Michael’s view defined-benefit plans should be abolished. But whether DB plans for future workers are abolished or not, there is more at stake than legacy costs. DB plans still cover 20 million active workers at the private level and another 20 million or so at the state and local level. Last week, United Airlines threatened to terminate its four defined-benefit pension plans and to suspend contributions to them. Some may view this action merely as a symptom of airlines’ problems just as many viewed the steel industry’s problems earlier. In my view, there are deeper rooted problems with our defined benefits system. Failed or opaque accounting, inadequate funding rules resulting in underfunded plans, unrealistic rates of return, and a pension safety net that has moral hazard written all over it. The risk is that the healthy plans are now going to exit from the system because they do not want to pick up the tab for the less healthy brethren. As a consequence, the whole DB system is now at risk of becoming unraveled and will leave these future beneficiaries—active workers—without a retirement nest egg.

Mr. Poterba: The United States is currently in the top third of distribution of countries by age at which people retire. So, there are more older workers in the labor force here. We have tended to talk about retirement as though it is a discrete event, that people just drop out of the labor force and that is it. In fact, our labor economist
friends, when they study retirement in the United States, that it is far more complicated and that there are often transitions to secondary jobs that last for a number of years after departure from a primary labor force attachment position. All of that suggests there may be a good deal of institutional adjustment that is needed in order to stretch out the length of the working life. Simply thinking about this is keeping people in the job where they are working for a number of extra years is not going to go very far. Alan Blinder raised this question yesterday about what to do with the folks who have jobs in manual labor occupations. For them, of course, the solution probably is to find a transition to some alternative form of employment at some point late in life. In fact, the market will move us in this direction, as we see a greater supply of labor coming from those older workers. But there will be a number of institutional changes as we move along those directions.

Mr. Weber: I just wanted to add a view coming from Germany, the Deutsche Bundesbank, from a country that has finally faced the need for reform. I also wanted to refer to some experiences as a former member of the Council of Economic Advisers in Germany, which has proposed much of these elements of the reforms.

One of the problems you see in the countries that have started reform is if you compare France and Germany. In France, they had this very bad experience: When the government starts a reform, there is a landslide victory of the opposition soon after that. These types of reforms, if they are phrased in in a kind of noncooperative way become the issue in election campaigns. Really, what you see is a postponement of reforms until finally there is a huge need to jump in. So, the question is slow with big jumps many years ahead. That is a very hard way to do it.

In Germany, what added to the reforms is the fact that we have a government system where you have an opposition that dominates currently the second house and you have a government that dominates the first house. So, there is a need to cooperate. Cooperation is
not perfect; it is a partial cooperation. Basically, when you compare the programs—we have parties that have party programs so they precommit to what they are going to do once they are in government—this takes away the degree of freedom or at least diminishes the degree of freedom to choose between the two alternatives. The electorate in Germany can choose between two slightly different ways of having harsh reforms, slightly milder reforms, but anyway reforms around the agenda of all the parties. The partially cooperative way is probably the way that you are going to see in many of these countries that will implement the reforms and want to do it successfully. As a word of caution, it is very important for those who are in the arena of policy debate and criticizing governments, once they start implementing the reforms, to not fall into the backs of these governments. Once they start doing that, if they are harshly criticized from across the board, there are some incentives to diminish again the types of reforms that have been implemented and to fall back on prior announcements. It is one of the key aspects that Don Johnston mentioned before: Those that have credibility in their countries to speak from an independent view need to keep supporting the need for those reforms and caution against postponing those reforms.

Mr. Barnes: There is a really important issue related to demography that nobody has talked about, perhaps because it is seen as a little tangential to the subject of economic impacts—that is the geopolitical impact of demographic changes. What we see is that some of the highest birth rates in the world are in the Middle East. As in Yemen, Afghanistan, Iraq, and Saudi Arabia, we are seeing a massive increase in the youth population of countries that have limited economic prospects. The CIA did a big study in mid-2001 on the strategic implications of demographic change, and it raised some very serious concerns about this. Unfortunately, we have learned that geopolitics does rebound onto economics in fairly significant ways. It is unfortunate that nobody has talked about this yet.

Mr. Goldstein: I want to introduce into the discussion a word that has not been mentioned. We might think of it as the “L” word—
leisure. We have talked a lot about the challenges associated with aging, including the physical problem that many people have mentioned in extending the working life. It could well be that for the majority of people in this room, they would look forward with anticipation to working to 70 or 75 instead of 60 or 65. But I suspect there are many people outside this room who would not. Indeed, I recall my father had a series of physical jobs, the longest of which was a door-to-door salesman. The thing he talked most about his jobs is when they would be over. He certainly would not have looked forward to having to extend his working life a number of years. I suspect he is not alone. So, the question I would ask, and perhaps it is most relevant to John Helliwell’s engagement, or happiness, or well-being indices, is: What price of leisure is implicitly entering into these various prescriptions?

Mr. Feldstein: It is interesting that the United States has an actuarial adjustment that says to people they can retire anytime between 62 and 70, and their benefits will be lower if they retire at the early end and higher if they retire at the later end. At least for somebody with the average actuarial table built into him or her, it would be neutral with respect to the cost of that. By the way, it is gender-neutral. We do not have any bias in favor of early retirement for women in the United States.

Mr. Andrews: When looking at Donald Johnston’s charts, one of the things that strikes me is that if you look at the dependency ratios, compare them between the United States and its major trading partners, Germany, France, Italy are right now where the United States is projected to be in 2025 and even 2050. I looked at that and I wondered if that is not part of the reason why growth in Europe has been consistently so much lower than in the United States—that this problem is already a drag on their growth to a much greater extent than in the United States. I want to take that one step further. We have this huge current account deficit and trade deficit in the United States. Part of that stems from the inability to get really robust export growth. The demand for our products in many other parts of the
world is weak. I am wondering whether, if you put these things together, that does not lead you to the thought that we are kidding ourselves if we think that there is going to be some kind of smooth, easy, and relatively painless adjustment to the U.S. current account deficit. It looks like we have a problem here that may be built in long term and perhaps force painful, abrupt corrections.

**Mr. Hildebrand:** My question relates to the possible link between demographic trends and supply-side reforms, which is something we have hardly touched upon during the last two days. The increasing number of conferences, newspaper articles, books on demographic developments will hopefully increase recognition of the severity of the demographic challenge. I wonder whether increased recognition of the demographics problem might not be an incentive for politicians to be more courageous in trying to enact supply-side reforms to help boost growth and fiscal balances. We, as central bankers, may have a role here. We should lay out the demographic problems and demonstrate why they make it imperative for politicians to pursue growth boosting structural reforms. Let me also make a general point on the conference. What we are facing here is not a long-term problem. A lot of people have mentioned glaciers. I come from a country with lots of glaciers. They are melting very rapidly. We are facing problems related to melting glaciers that very few people would have anticipated a mere five years ago. In that sense, demographic challenges are hardly a long-term problem.

**Mr. Johnston:** I am reminded of Peter Sutherland’s statement that politicians occasionally make the right decisions after they have exhausted all the alternatives. According to Alan Budd of the United Kingdom, it seems to have been that kind of circumstance. That may be what we are faced with. I have a technical question on demography, because earlier we were discussing with some of our colleagues here the extraordinary change in the demographic global projections that have taken place since I have joined the OECD. We were projecting 12 billion people at one point. Now it is down to 9.3 billion people. This takes me into the methodology. Just as I was
about to leave to come here, I found an article that rather shocked me. It said that the United States is the biggest exception among developed countries in terms of growth. Its population is forecast to rise by 43 percent from its current level—293 million—to 420 million at mid century. This comes from the Population Reference Bureau in Washington, I suppose. On the other hand, we have been operating, in terms of the charts and everything else, with numbers from the U.S. administration, which the OECD obviously looks to, which shows a population increase from 275 million in 2000 to 361 million in 2050. This represents an increase of 60 million people. This is based on a fertility rate of two, which is slightly above what it currently is, and immigration numbers of 900,000, which were the official estimates per year. This is an amazing discrepancy to find in the public domain. I would like to ask some of our professional demographers how this could come about.

Mr. Fischer: I have three very quick points. First, we are going to have a discussion in the United States, if we go to a fully funded private plan, about the impact on national saving. There is a lot of evidence on that point from what has happened in other countries. Vittorio Corbo’s half number for Chile is apparently about the average estimate. It would be useful to study the international experience more systematically.

Second, on social security reform; we managed to make such reforms in the United States over two decades ago, when with the Greenspan commission, which met and recommended changes in the parameters of the system, to be implemented several years ahead. It worked. The key reason it succeeded was that there was basic agreement on the structure of the plan within which the parameter changes were being recommended. But there is much less agreement on the desirability of moving toward a funded, individually invested scheme—and that means that a bipartisan committee would have a much harder time reaching a consensus. Third, regarding migration and whether it is good for developing countries, we just heard two views. Rakesh Mohan said yes. Nancy Birdsall and John Helliwell
basically said they are nervous. Whether to be nervous or not, it is very hard for people who believe in freedom to oppose the right of migration. It is especially hard for someone like me who has used the right of migration. Nancy Birdsall said it requires generosity from the industrialized countries and good policies from the poor countries. It mainly requires good policies from the poor countries. That is where the source of the problem lies. The one thing I have seen repeatedly is, that when conditions improve in their countries, immigrants begin to go home: We have seen that with Chileans, Chinese, Irish, Indians, and many others. And when conditions in other countries improve, some of their emigrants will begin to go home.

Mr. Mussa: In terms of the implications of what we have been discussing for monetary policy, the most dramatic exhibit is Adair Turner’s presentation, which shows the bimodal distribution of real long-period returns on holdings of bonds over the last century. The negative mode of that distribution is the result of the movement from zero anticipated long-term inflation to inflation rates of 25 percent per year in 1975-76, which had a devastating effect on real long-term bond yields and also trashed the stock market associated with it. The concentration of big positive returns in the period since 1977 testifies to bondholders’ revenge, real interest rates being much higher, real returns being much higher, because inflation came down more rapidly than people anticipated. I accumulated my private pension assets largely before I moved to the IMF and have been the beneficiary of that second period of big returns. But the poor, dumb schnook who retired in 1965 on the basis of a diversified portfolio of stocks and bonds and died in 1982 was crucified by the sustained acceleration of inflation. If we are going to rely more on private pension assets in the future, then it is very important that monetary policy recognize that maintaining longer-run financial stability in terms of a consistent and low inflation rate is centrally important to this issue.

Mr. Bean: To pick up on a point that was made about whether the United States would suffer from a demand shortfall as demographic effects started shifting in: Yes, that might be true, but in that case you
would obviously expect the Fed to respond appropriately by relaxing monetary policy. And you would expect the exchange rate to fall back, which will boost net trade. One might also be tempted to ask: Could there be a problem of a global lack of demand? But it is a bit difficult to say that on the one hand there will be a global lack of demand, yet on the other hand that will also be a global lack of young workers to produce the required output. So I suspect there is not really a problem there.

There was a question raised about funded/unfunded pension schemes and defined benefit/defined contribution schemes—is it important or is it a detail? Both of those issues are important and could affect the level of potential output—whether you have funded or unfunded pension schemes and whether they are defined benefit or defined contribution. It is essentially about who bears the risks. But this is a subject I would defer to our chairman, as he has spent a large part of his academic life working on these issues.

Finally, on the political questions that have come up a lot and are particularly difficult to deal with, one can think of two strategies. One is to try to make reforms by stealth—one step at a time. Arguably that was Mrs. Thatcher's strategy. The question of whether that works here, though, is more debatable. An alternative approach is to try to bundle a lot of reforms together to make it much harder for there to be blocking coalitions that can stop change. But it is not an easy area.

Ms. Birdsall: Let me start with a comment on what Stan Fischer said. First, I agree that we will always want people like him to come into our countries. The issue is not so much that the Chinese, Indians, and Chileans are going back. That is perfectly reasonable and part of the brain gain, but my point was that I am not optimistic about the Malawian nurses and the Nigerian doctors going back. There is another word besides leisure that has not been mentioned. I'll be so bold as to suggest now that, in terms of global responses, the words “fair” and “just” do not come up often in central bank discus-
sions. There is the risk of a globalization backlash along the lines of the patent unfairness associated with the risk that rich countries will be creaming off, even if there are return benefits.

Regarding Martin Barnes’ question on geopolitics, it is true that in the Middle East that the youth bulge is gigantic, and that is a serious problem. It is another example where demography is only exacerbating the fundamental issue, which is one of lack of economic opportunities, lousy economic policy, and poor institutions.

Regarding Andrew Ball’s question, which I thought was really a good one, it reminded me that what I wanted to say earlier in response to Vittorio Corbo’s points on Chile is how exceptional Chile is in Latin America. If we think that fully funded systems are a solution to fiscal problems in that region, we are mistaken. In Argentina the liabilities of the initially fully funded system were essentially taken over by the government at the time of the crisis, showing that a change in the pensions system cannot in itself fix the politics that underlie fiscal largesse. It goes back even in Argentina to the issue of how you ensure good policy in difficult policy in institutional settings.

Mr. Frenkel: On Bill Dudley’s concern about the drop of demand, I must confess I am less concerned. The reason I am less concerned is that five years ago it would not have occurred to me to think that China and India would be such big engines of increased demand. So, when it comes to this kind of thing, I say that the economic system has a lot of built-in stabilizers that we should probably not be as worried.

My next comment is on the issue of migration. I must confess that I have very little sympathy toward trying to reduce the freedom of migration. I remember the days in which countries, especially in Latin America, were plagued with capital flights. Some of them tried to deal with it by closing the borders only to recognize that the capital could find more sophisticated ways to fly. The only way they had to
deal with it was to start policies that generated capital repatriation and inflow. That is exactly the same thing on a more complex level when it comes to people.

Let me come to the philosophical remark of Andrew Crockett. Longevity is a blessing not a curse. How can one help being optimistic resist it? There are two quotes that are relevant here that tie to it. One is Oscar Wilde’s, “The tragedy of old age is not that one is old, but that one is young.” So, how you deal with that is to deal exactly with what Morris Goldstein spoke about: Give the young old guy the right tools and encourage him to develop the young tools to deal with the new things. As Victor Hugo said, “Forty is the old age of youth and 50 is the youth of old age.”

My last remark has to do with forecasting. A lot of issues of forecasting came back. I want to also bring some characters of macro back to the scene by reminding you of a discussion among three individuals about forecasting. This discussion did not occur simultaneously. Keynes, “In the long run, we are all dead.” Joan Robinson, “Yes, master, but not all of us at the same time.” Of course she was right. Then later on, when Bob Solow held about all of his debate, he could not resist saying, “Keynes was always good in long-term forecasting.”