I am, as ever, delighted to be in Jackson Hole. Demographic change and its fiscal implications constitute a significant concern for the International Monetary Fund (IMF) and the international financial institutions (IFIs) more generally.

Demographic change will affect all our member countries over the coming decades. Of course, the problems differ greatly among individual countries and among groups of countries. The industrial countries will encounter the problems posed by aging populations first: Indeed, in a very real sense, those problems are already upon us.

All of us here are familiar with the general outline of the problem in industrial countries. As populations age and the ratio of the elderly to the working-age population—the dependency ratio—rises, governments face increased budgetary pressures with rising expenditures on the one hand and falling tax revenues on the other. Pay-as-you-go financing looked very different with the demographic situations of the 1950s and 1960s than it does with the prospectively much higher ratios of pensioners to workers in the years ahead.

Several of the sessions this weekend are examining the policy implications of this for industrial countries in more detail. Among the
international financial institutions, the Fund has been closely involved in work in this area, principally through our annual Article IV consultations; I will say something about that work in a moment.

But the main focus of my remarks will be on another group of countries: the middle-income or emerging market economies. We do not usually associate the problem of aging populations with these countries; it is widely believed that they will not encounter this phenomenon until much later than the mature economies—with the notable exception of China where aging is taking place rapidly. But although China is a unique case, significant aging—by which I mean a significant rise in the elderly dependency ratio—will occur much sooner than is often realized in many other emerging market countries.

And these countries are already facing formidable fiscal challenges (that sometimes include their current social insurance financing) that must be addressed in addition to the oncoming demographic problem. So, these countries will confront the problems posed by demographic change from a much weaker position than the mature economies.

Of course, demographic change will have a large impact on low-income countries, too. But as David Bloom and David Canning suggested this morning, there will be a rise in the proportion of the working-age population in most low-income countries before the problem of aging populations becomes acute, probably around 2050 for most of the world’s poorest economies.

**Industrial economies**

Let me start by stating the problem as we see it. As people live longer and fertility rates drop, the elderly dependency ratio—the number of people over 60 expressed as a proportion of the working-age population—rises, with obvious consequences for fiscal policy.

This shift requires a fiscal adjustment if government finances are to remain on a sustainable path. And because of the long lead times that
such politically sensitive adjustments involve, timely and pre-emptive action, while difficult, is important.

We already know how difficult these adjustments have been—and are—for the industrial economies. For some years now, the Fund—along with the Bank, the OECD and, indeed, the EU—has been actively involved in urging mature economies to make those adjustments. Our Article IV consultations regularly explore the magnitude of the problem—which, as you know, differs quite widely even among the industrial countries—along with policy options, such as later retirement, higher pension contributions, taxation of retirement income, and so on.

Demographic change has tended to be a relatively slow process for industrial economies. But the projected rise in dependency ratios between now and 2050 implies apparently large fiscal adjustments for most of them. Frederikson estimates that for 19 OECD countries, the GDP-weighted average adjustment needed now to achieve sustainability is more than 5 percent of GDP. Any delays will only increase this number.

In Germany, the Fund staff analysis suggests that age-related expenditures will be around seven percentage points of GDP higher by 2050 than they are today. Governments have found it difficult to push through reforms that will achieve much smaller adjustments required to achieve fiscal sustainability for general government expenditures.

In some countries, reforms already undertaken have done much to strengthen the pension system: In Canada, benefit levels have been rationalized in the context of a major reform that privatized the management of pension fund assets and left the system actuarially balanced, the base used for calculating pension contributions was widened, and contributions were raised.
In the UK, pre-emptive action taken long ago has done much to mitigate the problem. In 1980, the link between the basic state pension and average earnings was broken, with pension increases linked solely to prices (instead of, as was the case before 1980, being indexed to whichever figure was more favorable to pensioners each year). And between 2010 and 2020, the retirement age for women will be raised from 60 to 65, the current retirement age for men. Even so, as this year’s Fund staff analysis noted, there remains a risk that the current policy of supplementing the basic pension with means-tested benefits has created other pressures on the public finances that will eventually have to be addressed.

**Emerging market economies**

I don’t want to underestimate the problems that industrial countries face as they grapple with the fiscal implications of aging populations. But they confront these issues from a position of relative economic strength—industrial countries grew rich before they started to age, the fiscal positions are generally stronger, and their debt levels are mostly lower than the comparable figure for emerging markets.

Even without the prospect of aging, many emerging market countries are struggling with large fiscal imbalances. They have large budget deficits. They have large public debt burdens that are not sustainable over time. They already urgently need to make large fiscal adjustments to bring their budgets back toward balance and their public debt down to sustainable levels. They must increase their primary surpluses to achieve debt sustainability.

Turkey, one of the Fund’s largest borrowers, is currently running a primary surplus of over 6 percent as part of the adjustment needed to bring its public debt down to more sustainable levels. Brazil, currently our largest borrower, is, as you know, pursuing a prudent fiscal policy aimed at reducing its debt-to-GDP ratio: The government has committed itself to a primary surplus target of 4.25 percent, which if
adhered to will bring the budget into overall balance by around the end of the decade.

Both of these countries have pressing needs for publicly financed expenditures on infrastructure, education, health, and other items, in addition to the need to address demographic change.

India—not a Fund borrower—has a budget deficit in excess of 10 percent of GDP, a cause for considerable concern. Fund staff analyses suggest that even stabilizing the debt-to-GDP ratio at 85 percent—a relatively high level for an emerging market economy—would require a fiscal adjustment of about two percentage points a year over the next five years. And again, the need for increased infrastructure and social spending is evident.

These fiscal strains come at a time when emerging market economies face significant upward pressures on budgets. Infrastructure improvements that will boost growth performance are badly needed—the new Indian government is firmly committed to making significant progress in this area and to increasing social welfare spending. Yet, India’s budget is constrained not just by its deficit problem but also, like many emerging market countries, by existing budgetary commitments that are often poorly targeted, failing to reach those in greatest need. In India, as elsewhere, subsidies often go to those with relatively high incomes and result in highly wasteful use of scarce resources—subsidies to electric power consumers are an obvious example. In 2001, the World Bank noted that in Brazil, less than 1 percent of social security spending reached the poorest 10 percent, while 50 percent went to the wealthiest 10 percent.

Weaknesses in the collection systems make raising revenues difficult and the structure of taxation often acts as an incentive for people to stay in the informal sector of the economy. Corruption both in tax collection and government spending is a major problem in many countries.
And one of the major challenges for effective fiscal reform in these countries is the level of existing pension commitments. In many cases, these are so seriously underfunded to the extent that they are already in cash deficit. We are currently projecting the pension system deficit in Turkey, for example, to be around 3.5 percent of GDP in 2004. The civil service pension fund has the largest deficit—it will reach 1.8 percent of GDP in 2005. Current estimates suggest the total public pension deficit will continue to rise, to around 4 percent by 2030. Yet, the coverage of social insurance in that country is far from complete.

In Brazil, the deficit of the public employees’ public pension system is currently around 3.5 percent of GDP, and that for the private sector employees’ public system is about 1 percent of GDP. By 2020, the total public pension system will be in deficit by something like 4.9 percent—an actuarial imbalance of around 235 percent of GDP.

The scale of these deficits is easier to comprehend when one realizes how generous many schemes are. In Turkey, pension benefits are high and qualifying periods are low. Until 1999, when reforms were introduced, male civil servants in Turkey could retire on full pension after 25 years of service and women after 20; and the full pension was 75 percent of final salary, itself determined generously, plus an additional 1 percent for each subsequent year of retirement. For other public sector workers and employees of private sector companies, 13.9 years was enough to get you a full pension, equal to 60 percent of final salary for the first 5,000 days, with supplements added thereafter.

In Brazil, the picture is not very different. Reforms are currently being introduced. But public sector workers have had to work for a minimum of only 10 years to get some sort of pension. To obtain the full pension, which is 100 percent of final salary, men in the public sector have to work for 30 years, women for 25. The discrepancies between the benefits available to public sector workers and those in the private sector are wide: In a 2001 study, the World Bank noted
that male workers with a high school diploma in the judiciary got 50 percent more pay and could look forward to pensions 75 percent higher than their private sector counterparts. In 1999, government spending on 21 million retirees exceeded education spending on 48 million students.

Generous, then, and expensive to run. Pension schemes in emerging market countries tend to have very high administrative costs. In a book edited by Marty Feldstein in 1998, Olivia Mitchell found that administrative costs as a percentage of expenditures were, on average, more than eight times higher for a group of Latin American and Caribbean countries than for OECD economies. In another paper in the same volume, Sebastian Edwards cited figures showing that the reformed social security system in Chile, though still relatively expensive, was around 42 percent cheaper than the system it replaced.

There is a further complicating factor that, while social in origin, has important fiscal implications. Pension systems in emerging market economies face large deficits and running costs, partly because of the generous nature of their provisions; but that generosity is limited in scope. Public pension commitments to the public sector usually cover a relatively small and privileged proportion of the population. In Lebanon, for example, civil service and military pension schemes covering just 3 percent of the population are the second largest item in the budget, second only to interest payments on the public debt.

For political and social reasons, governments will increasingly find themselves under pressure to extend or improve pension coverage to benefit a much wider section of the population. Improving the social safety net is a laudable objective in human terms: Finding the most efficient and effective way of doing so is challenging, especially given the current fiscal position of many emerging market economies.
The need for reform

The fiscal deficits we see in so many emerging market economies need to be addressed with urgency. We have been arguing for some time that governments should use the current favorable environment of low interest rates and global expansion to reduce public debt levels so as to reduce their vulnerability as interest rates rise or the world economy slows. It is now clear that “safe” levels of debt for emerging market countries are significantly lower than those for industrial countries. Yet, many countries currently have debt well in excess of the 60 percent limit that the EU views as the upper limit for its members and are, nonetheless, incurring fiscal deficits too large to permit the declines in debt-to-GDP ratios that are needed.

Reforms are required on both the expenditure and revenue front. Tax reforms can broaden coverage, reduce distortions, and cut back evasion. Well-planned reforms can help reduce the size of the informal sector, which is, by definition, largely uncovered by social insurance. More effective tax administrations and better-structured tax systems can enable governments both to reduce overall tax rates and broaden the taxpayer base.

Demographic change will come on top of existing problems. As I said, the pace of demographic change is more rapid than is sometimes realized. Much of this is a direct result of rising living standards and rapidly improving public health and medical care.

It took a country like France about 50 years for the dependency ratio to go from just over 30 percent (in 1950) to around 38 percent (today). That ratio is forecast to rise to about 53 percent by 2020, and to around 70 percent by 2050.

By contrast, India’s dependency ratio was only 12.45 percent in 1950; but it grew marginally more rapidly, to reach around 16 percent today; it is projected to reach 20 percent by 2020 and around 37 percent by 2050. That isn’t so surprising given the dramatic improve-
ments in living standards that we have seen in India—and, indeed, most emerging market economies in the past 50 years. According to the UN, life expectancy in India was just under 39 years in 1950; it is now around 62 years and is forecast to rise to 66 years in 2015 and 70 years by 2035. Fertility rates have fallen from just under 6 in 1950 to below 3 now and are currently forecast to fall below 2 in 2035. As an illustration of what this means for the government’s pension liabilities, the number of retiring civil servants is expected to increase from 2.73 million in 1999 to around 5 million by 2010.

For Korea, the figures are even more striking. Life expectancy has risen by even more since 1950, by 27 years to India’s 23 years. And Korea will have one of the most rapidly aging populations, with the Korean government projecting a dependency ratio (using over 65 as a definition of elderly) rising from about 12.1 percent now to 21.3 percent in 2020 and 62.5 percent in 2050.

Korea’s pension system is currently in surplus, but it faces a dramatic reversal over the coming decades. The pension system recorded a surplus of around 2 percent of GDP in 2002, but without reform that surplus will decline modestly until 2020 and then fall sharply, turning into a deficit of around 7 percent of GDP by 2045.

**The path to reform**

Just as in the case of the industrial countries, the Fund’s Article IV surveillance provides an important means for reminding emerging market policymakers, especially in those countries that do not have Fund-supported programs, of the need for reform. Tackling the problem of fiscal imbalances in emerging market economies requires sound pro-growth macroeconomic policies to be in place.

Pension reform is often a vital element in developing an appropriate fiscal strategy, because of the current underfunding of generous pensions. Pension systems in many developing countries often have inconsistent objectives, because of the piecemeal way they have devel-
oped. In addition to the fiscal problems to which they contribute, they often have a negative impact on labor markets because of the distortions and work disincentives that often result, and they fail to support—and in some cases actively hinder—the development of financial markets.

Both the Bank and the Fund’s Fiscal Affairs Department work closely with many emerging market governments in providing technical assistance to develop and implement durable pension reform. The Bank also provides financial support for such reform: Between 1989 and 2003, it provided 138 loans to 60 countries where pension reform was an important component.

I mentioned the efforts that countries like Brazil and Turkey are making to ensure that their budgets and debt levels are sustainable. These countries have also introduced reforms aimed at bringing pension costs under control. The 1999 reforms in Turkey increased the statutory retirement age to 60 years for men and 58 for women (though the change is being phased in slowly). A man with 23 years of service or a woman with 18 years of service as of 2002 can retire at 44 and 40 respectively. Pensions are to be indexed to inflation in future, rather than wages. But in practice, further reforms will be needed to contain costs. Replacement ratios are still about 75 percent. The minimum contribution period is still low: just 10 years to receive a pension equal to 35 percent of the reference wage. And there is, of course, a very long transition period for the changes: five years after the 1999 reforms, over 60 percent of current pensioners are still below the new retirement ages being phased in. The current government has twice raised pensions by more than the rate of inflation.

The Turkish government is currently planning further major administrative reforms of its social security system—including the unification of the three existing pension systems—that are expected to save about 3 percent of GDP annually. But further parametric reforms are needed, including accelerating the increase of the retire-
ment age, changing indexation provisions, and further lowering replacement rates.

Pension reform is also a key component of the Fund-supported program in Brazil. In 2003, the government made significant adjustments to the civil service pension system. These included the taxation of the benefits of retirees; a ceiling on benefits (with some grandfathering); the creation of defined contribution complementary pension schemes for new civil servants; an increase in the retirement age, with penalties for early retirement; and a change to the base for calculating benefits.

The actual savings delivered by these reforms are still small. In Brazil, even if all the changes are implemented, they would save about 0.2 percent of GDP, compared with the current deficit of 5 percent. This represents a net present value saving of around percent of GDP, compared to the actuarial deficit of around 235 percent of GDP.

Healthcare

I have focused on pension reform because, as I explained at the outset, underfunded pension systems threaten to undermine efforts to achieve fiscal sustainability in many emerging market countries. But the rapidly rising cost of healthcare clearly has implications for developing as well as developed countries in the context of aging populations, with exactly the same comparisons: Current health needs are great so that increasing access to health care is urgent.

In the industrial countries, this is already a problem requiring urgent attention—for both state-provided and insurance-based medical care systems. The cost of healthcare has on average risen by 1 percent a year more than GDP for the past 40 years. But there have also been rapid developments in medical technology—responsible for some of the rising costs—many of which have helped extend life expectancy.
For emerging market countries, the economic implications of rising healthcare costs appear less severe, simply because far fewer countries have comprehensive medical care systems. But technological advance still has an impact on the cost of care in developing countries, both in terms of increasing life expectancy—and thus the aging problem—and in terms of the costs of provision. And this is all from a base with much less coverage. Governments will come under increasing pressure to extend healthcare provision, with obvious consequences for expenditures.

**Looking to the future**

Each country faces unique problems in coping with demographic change. But much can be learned from the experience of others and, as I said, the IFIs can act both as policy advisers and disseminators of information. The aim should be to enable policymakers to benefit from the lessons of experience in other countries and to persuade them to act to prevent even larger problems at a later date.

Coordination at the institutional level is therefore important. Both within and among institutions, we need to ensure that work is complementary and not competing. We in the Fund have tended to concentrate on the macropolicy aspects of these issues, such as fiscal reform, while the Bank has focused more on the details of pension reform—even though the Fund often legitimately becomes involved directly in pension reform.

**Conclusion**

Industrial countries will be the first to encounter the problems that an aging population will pose for macroeconomic policy in general and fiscal policy in particular. Most have taken or are taking steps to ensure fiscal stability at a time when changing life patterns will place enormous strain on the financing of pension and healthcare systems. These are formidable challenges, not least because of the uncertain-
ties associated both with demographic projections and the likely economic response to changes in population structure.

But the challenges facing industrial countries pale beside those that emerging market economies will encounter. Most of these countries are starting from a much less comfortable base position. They are grappling with fiscal and other macroeconomic pressures that would be daunting even without demographic change. The challenges will not ease as populations age—quite the reverse. They do not have the breathing space that the delayed demographic changes might imply. They need to take remedial action now to establish much sounder fiscal positions at a time when the global economic environment is unusually benign.

The IFIs are well placed to help. The Fund’s very wide membership and the involvement of Fund staff in the demographic problems of industrial countries have ensured that we have acquired substantial expertise in this area. We now have a much better understanding both of what fiscal priorities are needed in the emerging market countries and, in the area of pension reform, what priorities are needed for durable, equitable social insurance in the coming decades.

We can alert them to the problems they face; we can offer advice on how to respond; we can try to cajole them into prompt action; we can warn of the consequences of delay. The challenges are huge. Ultimately, though, it is for the policymakers and citizens of emerging market countries to confront the challenges they face.