Pension Reform Options

The risks associated with enacted reforms and the need for fiscal consolidation reinforce the importance of identifying additional measures to contain pension spending. The magnitude of the projected baseline pension spending increase (about 1½ and 1 percentage point of GDP, respectively, in advanced and emerging market economies) suggests that relatively modest additional reforms could stabilize this spending over the next 20 years. Deeper reforms may be needed in countries with larger projected increases if certain aspects of the enacted reforms are not fully implemented, the underlying demographic and macroeconomic assumptions do not materialize, or fiscal adjustment needs warrant a more ambitious cut in public pension spending. The discussion below identifies additional reforms that could be adopted in advanced and emerging market economies to further contain public pension spending or raise contribution revenues.1

Most Advanced Economies Face the Double Challenge of High Debt and Rising Age-Related Spending

A number of countries with above-average levels of pension spending also face large projected increases in age-related outlays, particularly on health care (Austria, Belgium, Finland, Greece, Portugal, Slovenia) (Figure 7.1). In some other countries with below-average levels of pension spending today, projected increases in age-related spending are substantial (Luxembourg, Korea, New Zealand, Switzerland, the United States).

Pension reforms that curtail eligibility (for example, by increasing the retirement age), reduce benefits, or increase contributions can help countries address these fiscal challenges. The trade-offs across these choices are illustrated in Figure 7.2. Beyond what is already legislated, with no increases in payroll taxes and no cuts in benefits, the average statutory age would have to increase by about another 2½ years to keep spending constant in relation to GDP over the next 20 years.2 Relying only on benefit reductions would require a nearly 17 percent across-the-board cut in pensions. Relying only on contributions would require an average payroll rate hike of 3½ percentage points. To keep pension spending as a share of GDP from rising after 2030, additional reforms would be needed: for each decade, the retirement age would have to increase by about one year, benefits would have to be cut by about 6 percent, or contribution rates would have to rise by about 1 percentage point.

Gradually Raising the Statutory Retirement Age Is an Attractive Reform Option

The appropriate combination of reforms depends on each country’s circumstances. Nevertheless, raising the statutory retirement age has clear advantages. First, it would promote higher employment levels and economic growth, whereas increases in social security contribution rates could decrease the labor supply. By increasing lifetime working periods and earnings, raising the retirement age can also boost the growth of real consumption, even in the short run.3 Second, raising the retirement age would help avoid even larger cuts in replacement rates than

1Many of the issues discussed below are also relevant for civil service pensions. However, both the design and level of these pensions need to be evaluated within the broader context of public sector remuneration (Palacios and Whitehouse, 2006; Eich, 2009; Sommer, 2011).

2Raising the retirement age helps pension finances by increasing the years of contributions and reducing the number of years of benefits. To the extent that workers accrue higher-pension rights by delaying retirement, higher replacement rates might also help. This is especially true for notional defined contribution systems (Italy, Sweden) for which increases in the retirement age would be exactly offset by higher benefits. In these systems, an alternative is to adjust the conversion factor from notional accounts to pensions to mirror the impact of increases in the statutory retirement age in pay-as-you-go systems.

3See Karam and others (2010).
those already legislated, thus reducing the impact of reforms on elderly poverty. Third, increases in the retirement age may be easier for the public to understand in light of increasing life expectancy.

One objection often raised to increasing the retirement age is that it would increase unemployment. However, there is little evidence that increased labor force participation of the elderly would increase...
Box 7.1. The Retirement Age and Unemployment

In some countries, the introduction of incentives for early retirement was often motivated by a desire to reduce high unemployment among younger workers. However, recent empirical evidence for advanced economies does not support the view that elderly employment crowds out the young. Gruber and Wise (2009) summarize evidence on the relationship between social insurance incentives and youth employment in 12 Organisation for Economic Co-operation and Development countries. Their main findings are as follows: (1) Youth employment is positively correlated with the employment of older persons (see Figure 7.1.1), even when the data are adjusted for common macro shocks. (2) There is no relationship across countries between social insurance incentives to retire and youth unemployment, and the same incentives that reduce the labor force participation of older people do not seem to boost youth employment. (3) Country case studies of early-retirement reforms with natural experiments that allow for control for macro shocks do not support the crowding-out hypothesis. (4) Cross-country and panel estimates show no evidence that increases in the employment of older people decrease youth employment or raise the youth unemployment rate. If anything, the results show the opposite, with a correlation between increased elderly employment and either lower youth unemployment or higher youth employment.

Figure 7.1.1 Employment Rates of Older and Younger Individuals, 2007

Note: See page xi for a list of country abbreviations.

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(Munnell, Soto, and Golub-Sass, 2008; Krugman, 2010). Older workers should be protected fully by disability pensions where appropriate and social assistance programs to ensure that increases in the retirement age do not raise poverty rates. To ensure that higher life expectancy does not erode the progressivity of pension systems, offsetting measures, such as reduced replacement rates for upper-income households, could be considered.

Many countries have room for more ambitious increases in the retirement age. In advanced economies, men’s life expectancy beyond age 60 is projected to increase by an average of five years between 1990 and 2030. In contrast, the average statutory retirement age is being raised by only one year over this period (Figure 7.3). To better address increases in longevity, statutory retirement ages could be gradually raised to 67 by 2030 (as already legislated in Australia, Germany, Iceland, Spain, and the United States) and indexed to life expectancy thereafter.

Increases in the statutory retirement age would need to be accompanied by steps to limit early retirement. Individuals claim pensions, on average, about four years earlier than the statutory age (Appendix 4). One way to limit early retirement is to decrease the incentives; if early retirement benefits are too generous, the expected additional

Notes:
1. In the United States, life expectancy at age 65 increased by five years for people in the top half of the earnings distribution between 1982 and 2006, while the increase was only one year for those in the bottom half (Waldron, 2007).
2. Furthermore, employer attitudes toward older workers could introduce additional impediments (Leahy, 2008).
3. Diamond and Orszag (2005), in their proposal to reform social security in the United States, called for raising the cap on contributions and reducing benefits for those in the top income tier in light of the increasing gap in life expectancy between low- and high-income earners.
4. A number of countries have already linked the increase in the retirement age to increases in longevity (Denmark, Greece, Italy, Spain, Sweden). However, this link is not always automatic. For example, in Spain the recent reform introduced a “sustainability factor” that will modify “relevant parameters of the system” to reflect increases in longevity without details on how this would be implemented.
years of benefits would more than compensate for a lower payment, thus increasing the incentive to claim early. In the majority of OECD economies, and particularly in Hungary, Italy, Germany, and Switzerland, the adjustment for early retirement is below the 6 to 9 percent range estimated to be “actuarially fair” (under which pension wealth does not depend on the age at which a pension is first claimed for individuals with average mortality) (Queisser and Whitehouse, 2006; Table A5.6). Another way to keep people in the workforce is to strictly control alternative pathways to retirement, such as disability pensions. In Finland, Norway, Sweden, and the United Kingdom, a relatively high share of individuals ages 50–64 report that they are economically inactive because of illness or disability (OECD, 2006). In these countries, conditioning disability pensions on strict medical evaluations could limit early retirement.

Further reductions in replacement rates could be considered in countries where they remain relatively high. Countries with relatively high projected replacement rates in 2030 are Austria, Greece, Ireland, Italy, and Norway. One way to reduce replacement rates is to freeze pensions for a period of time or reduce indexation for those who receive high pension benefits—in most advanced economies, pensions are indexed to inflation. For example, in the United States the cost of living adjustment was delayed by six months in 1983, and in Italy only the portion of pensions below €1,000 is fully indexed to inflation. Another option is to link benefits to demographic and economic variables so that they are reduced to respond to changes in these variables. (Austria, Canada, Germany, Italy, Japan, and Sweden have some type of automatic adjustment mechanism.)

As noted earlier, cuts in pensions should be sufficiently progressive to keep the elderly out of poverty.

**Increasing Revenues Could Also Help Offset Increases in Pension Spending**

In Austria, Belgium, France, Germany, Hungary, and Italy, the tax wedge—income and payroll taxes as a share of labor earnings—is already near or above 50 percent of total labor costs. At these high levels, contribution hikes could have adverse labor market effects. However, other countries may have room for raising payroll contribution rates (Australia, Ireland, Korea, New Zealand, Switzerland, and the United States have a tax wedge at or below 30 percent), and in some cases it may be appropriate to lift the ceiling on earnings subject to contributions. Another option is to equalize the taxation of pensions and other forms of income—although there is little justification, many advanced economies tax pensions at a lower rate than other forms of income. Where it is desirable to increase revenues, alternative revenue sources such as consumption taxes could also be considered, particularly to finance the redistributive components of pension systems. Similarly, countries that subsidize private pensions, either through tax relief or matching contributions, could consider scaling these back, since these often have very little impact on national saving and benefit mostly higher-income households (European Commission, 2008).

Countries should also aim to increase the efficiency of contribution collections. On average, advanced economies raise about 0.4 percent of GDP for every percentage point in payroll taxes (Figure 7.4). This payroll tax “yield” varies from nearly 0.5 percent of GDP in Finland, Japan, and Norway to 0.4 percent

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9 Programs outside of pensions could also have an impact on early retirement. For example, the 1972 reform in Germany introduced early retirement for men at age 63 and caused a spike in retirement at that age until 1976. However, relatively generous unemployment and disability benefits were available as early as age 60. By 1980, age 60 was the mode age of exit from the labor market. See Duval (2003).

10 In Japan, this “macro indexing” reduces pensionable earnings (for future beneficiaries) and reduces the indexation of benefits (although nominal benefits do not fall) proportionally to the decrease in contributors and the increase in life expectancy at age 65, respectively. In Canada and Sweden, benefits are frozen if long-term actuarial imbalances arise. Other countries use notional defined contribution arrangements, which peg benefits more strongly to contributions, to respond to long-term economic and demographic developments (Austria, Italy, Sweden). Some macroeconomic advantages could also be derived from shifting revenue sources from social contributions toward value-added taxes (IMF, 2011b). Changes in the composition of social security revenue sources, however, should not undermine the relationship between individual payroll tax contributions and benefits (Musgrave, 1981).
or less in Austria, Canada, Greece, Ireland, Korea, the Slovak Republic, Sweden, Switzerland, and the United Kingdom. This variation reflects the structure of labor markets (for example, Greece has the highest share of self-employment in the OECD) and exemptions from the payroll tax (the Czech Republic, Finland, and the Netherlands, for example, do not have ceilings for payroll earnings subject to these taxes and have yields close to 0.5 percent of GDP). Payroll tax yields also seem weakly related to the level of payroll taxes—with increased efficiency below rates of 30 percent and a decline thereafter, although this relationship is not statistically significant. To improve the efficiency of payroll contributions, countries should consider unifying revenue administration for tax and social security collection (Barrand, Ross, and Harrison, 2004).

**Emerging Europe Should Start by Placing Public Pensions on a Sound Financial Footing**

Countries in emerging Europe look more like advanced economies than other emerging markets when it comes to public pension spending and the importance of aging. Although fiscal adjustment needs are not as large as in advanced economies (IMF, 2011a), fiscal conditions are weaker than in other emerging market economies and gross financing needs remain above 10 percent of GDP in several economies. In this light, pension reforms could help support fiscal adjustment over the medium to long term. Public pension spending is projected to rise sharply in some countries that have not reformed their systems, including Lithuania, Russia, and Ukraine. In these countries parametric reforms are needed to contain growth in pension spending. For countries that have introduced mandatory private pensions, the priority should be to stabilize spending in the pay-as-you-go component before further expanding those pension systems.

One possible strategy would be to equalize the retirement age of men and women, increase the retirement age in line with life expectancy, and tighten eligibility criteria for early retirement plans. At age 60, life expectancy for women is four years higher than for men. However, in eastern European economies, the retirement age for women is still lower than for men (notably in Poland and Russia). In addition, further increases in the retirement age could better match increasing longevity—during 1990–2030 average life expectancy at age 60 is projected to increase by three years, but the average retirement age is increasing by only one year. In addition, reforms should focus on tightening the eligibility criteria for early retirement plans.

Replacement rates can be reduced by indexing pensions to prices and increasing the pensionable base to capture lifetime earnings. In eastern Europe, it is still common to index pensions at least partially to wages. Assuming an inflation rate of 2 percent and real GDP growth of 2 percent, switching from wage to price indexation today would reduce spending in 2030 by an average of ½ percentage point of GDP. Benefits for future retirees can also be limited by modifying benefit formulas, typically by reducing accrual rates and changing the base of pensionable income. For example, increasing the number of years used to calculate the pensionable base from 20 years to lifetime earnings would reduce 2030 spending by 0.2 percentage point of GDP.
Additional parametric reforms might be required in countries that scaled back mandatory private pensions. In the wake of the recent economic crisis and in response to short-term fiscal constraints, numerous countries stopped or reduced the diversion of pension contributions from their public to private mandatory pension plans. During the crisis, contributions to the private plan were reduced in Latvia and Poland and suspended in Estonia. Hungary made membership voluntary and provided strong financial incentives to return to the public plan. Countries have recently announced plans to increase contribution rates to mandatory private pensions over the medium term, but typically these rates are lower than before the crisis. In the case of Hungary, mandatory private pensions are now effectively closed. Because contributions typically translate into higher benefit entitlements, the shift back from mandatory private to public pensions could hurt public finances in the long term. In Poland, for example, the additional public pension spending over the long term arising from the recent changes is likely to outweigh the positive impact from higher revenues (Table 7.1). In other countries, shifting back to public pensions could have beneficial effects for public finances over the long term, but pension adequacy could become an issue (Hungary, Latvia).

Increasing Pension Coverage in an Affordable Way Is a Key Challenge in Emerging Market Economies outside Europe

On average, coverage rates are particularly low in emerging Asia, somewhat higher in Latin America, and still higher in Middle Eastern and African economies (Figure 7.5). This partly reflects the high degree of economic informality in these countries. Those covered typically include public-service workers and in some countries parts of the formal private sector. The expected decline of informal family-based support networks for the elderly (ADB, 2010a), for example, due to rural-urban migration, will make extending formal coverage a priority for many emerging market economies in an effort to alleviate elderly poverty.

Table 7.1. Recent Pension Policy in Eastern Europe

<table>
<thead>
<tr>
<th>Crisis Policies</th>
<th>Announced Postcrisis Policies</th>
<th>Present Discounted Value of Additional revenues</th>
<th>Additional expenditure</th>
<th>Net impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>Contributions suspended in 2009 and 2010</td>
<td>4 percent contribution rate beginning in 2012, perhaps higher later should economy rebound</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Hungary</td>
<td>Participation voluntary; return to public plan possible; transfer of private pension funds into public fund</td>
<td>Those who decide to stay in private plan must make 10 percent contributions while losing all public benefits</td>
<td>88</td>
<td>48</td>
</tr>
<tr>
<td>Latvia</td>
<td>Contribution rate reduced to 2 percent in 2009 then increased to 4 percent in 2010 and 6 percent in 2011</td>
<td>Contribution rate to stay at 6 percent in the future</td>
<td>92</td>
<td>21</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Contribution rate lowered to 2 1/2 percent in 2009, then 2 percent in 2010</td>
<td>Contribution rate to increase to 6 percent by 2012</td>
<td>5</td>
<td>U</td>
</tr>
<tr>
<td>Poland</td>
<td>Contribution rate lowered to 2.3 percent</td>
<td>Contribution rate to be raised to 3 1/2 percent by 2017</td>
<td>34</td>
<td>41</td>
</tr>
<tr>
<td>Romania</td>
<td>1/2 percentage point increase in contribution rate postponed by one year</td>
<td>Contribution rate will reach 6 percent one year later than initially planned</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Sources: European Commission; International Labour Organization; Organisation for Economic Co-operation and Development; United Nations; and IMF staff estimates.

Note: The present discounted value (PDV) of additional revenues and expenditures is calculated using a 1 percent discount rate assumption, a time horizon up to 2060, and the assumption that higher contributions to the public plan will lead to proportionately higher pension entitlements. PDV is expressed as a share of 2007 GDP.
Promoting greater formalization of the economy would help close the coverage gap. With more people contributing to existing pension systems the ratio of pensioners to contributors—high in many emerging market economies despite their young populations—would decline. For emerging market economies with high household saving rates, increased pension coverage would also support efforts to make domestic demand the primary catalyst of growth. In addition, extending existing defined contribution pension plans (for example, those available to civil servants) to all workers on a voluntary basis could further help formalize the economy (ADB, 2010b).

Parametric reforms will be required to prevent the expansion of coverage from increasing fiscal pressure. Assuming the same replacement rates and eligibility rules of current systems, relatively modest expansion in pension coverage would raise pension spending substantially. Over the next two decades, an increase in coverage from 26 to 32 percent—the projected increase, taking into account projected per capita GDP growth—would increase spending by \( \frac{1}{2} \) percentage point of GDP in emerging Asia (Figure 7.6). Similarly, in other emerging market economies outside Europe, a coverage increase from 59 to 68 percent would raise spending by 1 percentage point of GDP. Parametric reforms to existing public pension plans, including raising the retirement age and lowering replacement rates, will be required to contain these costs. Where minimum pensions are provided, countries should also consider indexing these to prices instead of wages. Civil service and other public sector plans could also be reformed to contain future spending increases (as has been done in India and Jordan). In addition, emerging market economies that have moved toward funded pensions (Latin America, Egypt) should aim to offset the transition costs associated with these reforms with stronger fiscal balances where there are macroeconomic concerns about the level of explicit public debt.

For countries with very low coverage rates, “social pensions” that provide a flat pension aimed at poverty reduction could be considered. The long time horizon required for the expansion of formal pension systems means that tax-financed social pensions