

# WORKING PAPER

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## SOCIAL SECURITY ON AUTO-PILOT: INTERNATIONAL EXPERIENCE WITH AUTOMATIC STABILIZER MECHANISMS

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As the baby boom generation enters retirement, a long-forecast funding crisis of the Social Security system is about to become a reality. Many other high-income countries are faced with similar financial problems with their public pension systems. Some of those countries have adopted legislative measures to reduce their funding deficits, and a few have included automatic adjustment mechanisms by which staged adjustments would be made in either benefits or revenues without the need for new legislation. The objective of this paper is to review the experience of other high-income countries who have adopted automatic adjustment mechanisms as part of their efforts to maintain fiscal solvency in the presence of an aging population. What types of mechanisms have been adopted? Have they been sustained or eroded and reversed over time? Have they led to significant reductions in current and future imbalances between public pension revenues and expenditures? Can we draw any conclusions about the applicability of automatic adjustment mechanisms to the United States in light of the experience of these other countries?

### **Automatic Stabilizer Mechanisms**

Versions of automatic stabilizers have been a feature of the U.S. pension system for many years. Wage and price indexation of the earnings tax base and benefit payments have been incorporated in the OASDI program for the past four decades. The measures have been adopted in order to stabilize the share of earnings subject to taxation and to maintain the real value of benefits without the complexity of frequent legislative interventions. Indexation that protected the real value of benefits also lowered the risk that there would be political “bidding wars” during election years to appeal to older voters by increasing the real value of benefits.

Mechanisms explicitly designed to stabilize the financial balance of the pension system are generally of more recent origin. Adverse demographic shifts and slower economic growth in many countries since the early 1970s have combined to force reductions in the scale of pension commitments and increases in

pension revenues. Politicians have sought means of achieving these loss-imposing changes in ways that also minimize the political risks. They have employed two distinctive strategies in doing so. Most commonly, they have adopted legislative changes, but with significant delays and staged implementation of the changes. The Social Security Act of 1983, for example, included changes in the standard retirement age that did not begin to phase in until 2000 and will not be fully phased in until 2022.

Automatic stabilizer mechanisms (ASMs) provide a second means of rebalancing retirement income systems. These mechanisms do not specify the exact dimensions and timing of policy changes through advance legislation. Instead, system parameters are adjusted over time at set intervals without further legislative action according to movements in actual or projected changes in demographic indicators (e.g., life expectancy), economic performance (e.g., growth in the economy, which indicates capacity of the economy to pay benefits), or the financial status of the pension system (e.g., projections of impending insolvency).

### **Structure of ASMs**

Automatic pension stabilization mechanisms differ on several key design parameters. For example, they can have certainty-based or projection-based triggers. Certainty-based mechanisms adjust in response to actual changes in factors such as the ratio of employed workers to retirees in the most recent year. Projection-based triggers make adjustments based on expected future trends in dimensions such as life expectancy, fertility, labor force participation, and real wage growth to project the financial solvency of a pension system over some specified period. Those assumptions about future events may not be accurate, yet small changes in the assumptions sustained over a long projection period can result in the need for large and disruptive changes in future pension payments. Moreover, there may be a greater political temptation to interfere in the assumptions and projections to avoid triggering benefit cuts or tax increases during an election year. Certainty-based mechanisms can lead to a high degree of volatility to the extent that they are affected by short-term fluctuations.

ASMs also differ in their degree of automaticity. Adjustment mechanisms could in theory be protected by procedures that require legislative supermajorities or other hurdles stronger than those found in the normal legislative process. At the weaker end of the spectrum are “alarm bell” provisions which make sure that an issue receives some attention but do not require substantial action by governments. The annual report of the Social Security trustees in the United States is a very weak “alarm bell”—it calls attention to the long range funding shortfall, but government is not even required to explain its inaction, let alone present a plan for addressing it.

Finally, ASMs can differ on the incidence of loss-imposition. Specific mechanisms differ on: the balance between expenditure reductions and revenue enhancement provisions; whether triggered cuts on the expenditure side are targeted at future retirees, current retirees or some combination of the two; and whether and how low income workers and retirees are protected against cutbacks.

Economic and Political Rationales for ASMs

There are both economic and political advantages to using phased adjustments and automatic stabilizing mechanisms to address funding problems and rebalance retirement income systems. From an economic perspective, workers need to plan their own retirement, and they would benefit from early knowledge of the magnitude of the pension that they can realistically anticipate and the implications of differing retirement dates. This knowledge of future changes can be provided by ASMs, but only if the triggering mechanism is forward looking and consistent with a phased introduction of the changes in program parameters prior to retirement.

A political rationale is often given for phased adjustments and automatic stabilizing mechanisms as well. Because of population aging, retirement policies are bound to be focused on the scaling back of pension promises. Benefit reductions and contribution increases are painful; they offer few political rewards and risk substantial punishment from voters and powerful interest groups. Moreover, there is a connection between the demographic challenge and the political challenge: as the population ages, so too does the electorate. Hence politicians will seek to delay the onset of negative changes—preferably to a time beyond their term in office—and have them take effect gradually. Once politicians put in place mechanisms that make unpopular adjustments automatically, they can induce change without the need to “get their hands dirty.”

### **International Comparisons**

The U.S. challenge of financing the transition of the baby-boomers into retirement is modest compared to the demographic challenge faced by most other high-income countries. The ratio of the population over age 64 to the population age 20-64 is projected to remain below that of the other G-7 countries and the OECD average for many decades: among the G-7, the United States has the highest fertility rate and the lowest life expectancy, both of which are helpful to maintaining a low pension cost. It also has one of the more modest pension programs as measured by the benefits that it provides.

We examine the experiences of four advanced industrial countries that have enacted comprehensive reforms with some form of ASMs: Canada, Sweden, Germany, and Italy. They illustrate a very broad range of outcomes with respect to the policy designs adopted, their impacts on the financial solvency of the pension system, and their political sustainability. Canada in 1997 adopted a default mechanism to provide for a combination of benefit freezes and tax increases in the event that the system was projected to go into long-term deficit and politicians were unable to agree fully on a policy response to bring the system back into balance. That mechanism has not yet been triggered, however.

Sweden adopted a very comprehensive pension reform package with broad multi-party agreement in the 1990s. This package included a comprehensive Notional Defined Contribution (NDC) pension tier with a fairly rapid phase-in that will have a substantial impact on future pension benefits, though its impact on current expenditures has so far been relatively modest. The system has remained relatively intact, although two significant changes have been made in policy to shield pensioners from highly visible losses: a revision in the automatic balancing mechanism that lowers the volatility of benefits due to fluctuations in the system's buffer funds, and a lowering of tax rates on pensions that kept most pensioners from suffering a cut in nominal pension values triggered by the balancing mechanism.

Germany has had a more mixed experience with balancing mechanisms. Inclusion of a “demographic factor” in the German pension formula was enacted in 1997, but repealed the next year after a change in government. A somewhat different “sustainability factor” was enacted in 2004, as part of a broad pension package, but with a cap on its long-term effect. But this has not led to putting pensions on autopilot, with politicians delaying previously legislated pension cuts in the leadup to a federal election in 2009.

Italy’s experience has been even more ambiguous: an NDC pension system was adopted in 1995, but with deep design flaws and an exceptionally long transition. Moreover, the first schedule adjustment of pension benefit calculations, scheduled for 2005, was repeatedly delayed. Ad hoc changes in the pension system have had a much greater impact on current pension expenditures and medium term pension liabilities, although the NDC system should substantially lower pension liabilities in the longer term.

#### Automatic Stabilizers in the United States Social Security System

The OASDI system already incorporates a substantial element of automatic adjustment to changes in economic trends. Both revenues and expenditures are adjusted for changes in price inflation. In addition, the real value of individuals’ initial benefits are tied to their average earnings over their full work life, automatically adjusting benefit growth in line with rates of growth in taxable wages. In contrast, the system incorporates no adjustment for changes in the underlying demographic trends. Thus, finances remain highly sensitive to changes in demographic trends.

When we factor the cost rate into its two components of a dependency rate and the benefit rate, we find that all of the projected increase in the cost rate can be traced to changes in demographic factors. Since the total fertility rate is projected to remain close to the average of the past two decades for the indefinite future, the sharp near-term increase in the dependency rate is a reflection of the size of the baby-boom generation, but it is also noteworthy that the rate remains high in the future, even after the baby boomers have died. That is due to the presumed continued increases in life expectancy.

We consider three potential reforms that embody elements of ASMs. The first indexes the retirement age after 2022 so as to maintain a constant ratio of retirement to work life in future years. The second reform adopts a chained Consumer Price Index to adjust for inflation because it would provide a more accurate measure of the increases in cost-of-living. The third is a technical adjustment of the indexation of the taxable wage ceiling so as to stabilize the ratio of taxable to covered wages at its 1983 value of 90 percent. Together, these three reforms would reduce the 75-year actuarial deficit to about ½ percent of taxable wages.

While the allocation of the adjustments between revenues and benefits is essentially a political decision, avoiding poverty among the elderly in future years may require limiting any reduction of benefits to those at the top of the income distribution.

#### **Conclusion**

This paper has attempted to identify key design options for automatic stabilizing mechanisms in the United States and, using international evidence, to identify potential political challenges to sustaining ASMs once they are in place.

Several broad conclusions emerge from this study. A first conclusion is that an ASM based on maintaining the actuarial balance could be a useful standard for developing sustainability plans for the U.S. Social Security system. The magnitude of the imbalance is small relative to other countries, and if a program of phased changes is begun in the near future, the United States can easily avoid the financial crisis associated with exhaustion of the trust fund. However, the ASM must begin from an initial condition of balance: it is a mechanism for sustaining financial balance but cannot substitute for the discrete initial actions required to create it.

A second conclusion is that ASMs should be viewed as one element of a broader package to promote the sustainability of Social Security, not as a panacea. More visible, and hence politically risky, changes will still be required. Phased changes that are specified by and enacted by statute—imposed with a lag—should also be a part of any package to restore the financial sustainability of the Social Security program, as they have been in most pension rescue packages in other OECD countries. One reason is that inclusion of an automatic balancing mechanism within a broader package that lowers its visibility is likely to make an ASM easier to adopt. An equally important reason for including phased statutory cutbacks—changes in the retirement age or replacement rates, for example—in a Social Security solvency package is that such cuts send clearer signals to workers about the need to change their savings and labor market exit behaviour than do possible future cutbacks under an automatic stabilizing mechanism.

A third conclusion, drawing on international evidence, is that automatic stabilizing mechanisms can take numerous forms in terms of their degree of automaticity and incidence of loss imposition. Perhaps most important, ASMs can be used both on the benefit side and the revenue side, both for the tax base and the tax rate (as in Canada). Indeed, a balanced sustainability package might include both an improvement in an existing stabilizing mechanism (shifting changes in the maximum taxable earnings base from changes in average earnings to changes in total earnings) as well as phased statutory changes that cut benefits and raise revenue.

Fourth, the country case studies clearly suggest that the sustainability of automatic stabilization mechanisms should not be taken for granted. As anticipated, ASMs are politically sustainable when they aren't used (Canada). But ASMs are prone to reversal or severe erosion after party change when they are enacted without opposition party support, as shown in the Kohl government's "demographic factor" in Germany. More importantly, ASMs are vulnerable to modification over time, especially when the losses that the ASM would impose are substantial (notably during financial crises), and when elections are impending.

Fifth, automatic balancing mechanisms are likely to be more sustainable if they too are phased in when the losses they will impose are substantial. The Canadian mechanism which phases in any payroll tax increases over a three year period and the revised Swedish automatic balancing mechanism which smoothes the impact of fluctuations in buffer funds are both examples of such mechanisms.

Finally, any effort to impose pension cutbacks through automatic stabilizing mechanisms needs to take account of the implications of benefit cuts on low-income seniors. Across-the-board cuts in Social Security benefits of significant size would certainly push many American seniors into poverty. Several of the

countries that use automatic stabilizing mechanisms (notably Sweden and Canada) have benefit floors that are substantially more generous than in the United States, and any Social Security reforms could include such changes, even if it means a flattening of benefits.

Overall, the analysis in this paper suggests that automatic stabilizing mechanisms have been useful as part of an overall reform strategy, but they are no panacea for the problems of countries facing serious long-term pension financing problems. ASMs are perceived as devices to get politics out of pension politics, but they are inevitably devices that are creations of, vehicles for, and potentially victims of, politics. At each stage of the policymaking process for ASMs—design, enactment, implementation, and sustaining—they require a combination of substantive expertise with willingness on the part of multiple political actors to expend scarce political capital and cooperate with present and likely future adversaries rather than generating blame against those adversaries. Moreover, they require effective political strategizing in doing so. These are tough requirements, even under favorable institutional arrangements and political conditions.

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