The politics of automatic stabilization mechanisms in public pension programs

Weaver, Kent

Veröffentlichungsversion / Published Version
Arbeitspapier / working paper

WZB

Kent Weaver

The Politics of Automatic Stabilization Mechanisms in Public Pension Programs*

Kent Weaver
Brookings Institution, Washington D.C., USA
Email: kweaver@brookings.edu

January 2011

Order–No.:
SP I 2011 – 201

Research Area
Education, Work, and Life Chances

Research Unit
Inequality and Social Integration

http://www.wzb.eu/bal/usi

discussion paper

Social Science Research Center Berlin (WZB)
Reichpietschufer 50, 10785 Berlin
http://www.wzb.eu

* The author would like to thank Luca Etter for excellent research assistance in preparing this working paper.

Abstract

Demographic and fiscal pressures have increased pressures on governments in most wealthy countries to reduce the generosity of their public pension programs. Mechanisms that automatically adjust public pension levels to take account of factors such as increased life expectancy and slower economic growth are appealing to politicians because it saves them from having to take loss-imposing actions that are likely to incur political blame. This paper analyzes the financial and political potential of automatic stabilizing mechanisms (ASMs), beginning with a discussion of design issues and alternatives. This is followed by a discussion of potential adoption, implementation, and sustainability challenges for automatic stabilizing mechanisms and a review of experiences with stabilization mechanisms in three countries: Canada, Sweden and Germany. The paper argues that ASMs are vulnerable to erosion over time, especially when the losses that the ASM would impose are substantial, and when elections are impending. Preserving the integrity of ASMs is most likely where the parties that initially supported their adoption continue to be able to sustain cartel-like behavior with respect to pension policymaking. Overall, the analysis in this paper suggests that automatic stabilizing mechanisms are no panacea for the problems of countries facing serious long-term pension financing problems.

Contents

Introduction

As populations age, almost all wealthy countries face increasing challenges to the sustainability of their retirement income policies. Policymakers dealing with retirement income policy in advanced industrial countries face trade-offs among five major challenges. First and most basic is the *demographic* challenge of a declining ratio of workers to retirees. People are living longer and spending more years in retirement. Fertility rates have also declined dramatically, lowering entry into the labor markets just as aging Baby Boomers leave it in increasing numbers. A second challenge is the *fiscal* challenge of funding rising pension expenditures. The commitments that almost all industrialized countries and many middle-income countries have made to provide public pensions to their citizens are likely to be unsustainable in the medium to long-run—and some countries have already reached that point. The current economic slowdown in most industrialized countries has further exacerbated this fiscal pressure. Governments also face an *adequacy*, or *senior well–being* challenge of maintaining the standard of living of current and future seniors and reducing remaining pockets of poverty among the elderly, although the nature of this challenge again varies across countries depending on the nature of the pension promise made to seniors and how those benefits are to be financed.

Another key challenge in adapting to population aging concerns how to produce *behavioral change*--or more accurately, two behavioral challenges—without harming the most vulnerable segments of the population. The first involves extension of working lives, where feasible, to take account of longer life expectancy and reduce the decline in the ratio of workers to retirees. Workers in occupations that require hard manual labor clearly will have more difficulties in working longer than those holding jobs that are less physically demanding. These workers are also particularly likely to lack transferable skills that will allow them to transition into less physically demanding work. A second behavioral challenge is to increase savings for retirement. As populations age, many governments will be forced to reduce the public pension commitments that they have made, which will place a larger burden on individual citizens to provide more for their own retirement. But they are unlikely to do so voluntarily—and many low-wage workers or those with interrupted working careers may be unable to do so under any circumstances.

A final challenge is the *political* challenge of developing political mechanisms and processes that will allow the other challenges to be addressed in a politically sustainable way (Myles and Pierson, 2001). Population aging means that retirement income policymaking increasingly includes enactment of politically painful changes in pension programs (notably benefit cuts and increases in the age at which pension benefits are received). These changes promise few political rewards and risk substantial punishment from voters and powerful interest groups. Politicians may be

tempted to engage in political bidding wars at election time followed by backtracking or policy reversals. Moreover, there is a connection between the demographic challenge and the political challenge: as the population ages, so too does the electorate. As a large share of voters are retirees and near retirees, pension issues rise in salience and the share of the electorate who fear being affected by near-term cuts increases.

Governments clearly face a number of trade-offs in balancing those challenges. They also have multiple options in seeking a balance. They can, for example, increase the standard retirement age at which workers become eligible for a "full" public pension benefit, and reduce benefits (or deny them entirely) for each month that a person retires before that new, higher age. Alternatively, governments can increase the number of years that a worker needs to have contributed to the pension system to earn entitlement to full benefits, or the years of earnings on which initial benefits are calculated (from an average of the highest fifteen years of earnings to the highest thirty, for example, or the average of earnings in all years between ages eighteen and sixty-seven). They can change the way that past earnings are indexed for inflation in calculating initial benefits in ways that will make the initial benefit in an earnings-related pension less generous.

There are two major political problems with all of these policy options, however. One key problem is that voters don't like them: they impose concentrated and visible losses on identifiable groups of people. In response, politicians have developed a common set of blame-reducing strategies to use in reforming retirement income systems. They seek to make painful changes as invisible as possible, for example by employing technical changes in benefit formula that average voters may not understand. They also try to delay the onset of negative impacts of policy changes (e.g., phasing in retirement age increases), preferably to a point in time beyond their current term of office. And they try to deflect blame from themselves, for example by blaming past governments or developing mechanisms to share responsibility broadly across political parties. While this broad strategic repertoire can be seen across a variety of political systems, there are also important cross-national differences in politicians' capacity to manage the trade-offs involved in retirement income policy. Different policy "inheritances" and differing political institutions that must approve changes in retirement income policy both constrain policymakers' options.

These blame-reducing mechanisms still encounter another political problem, however: given uncertainties about future demographic and economic developments and politicians' desire to avoid imposing any more losses on voters than absolutely necessary, retrenchment is likely to have to be revisited repeatedly. Hence the political appeal of putting in place mechanisms that make unpopular pension adjustments automatically, without politicians having to "dirty their hands" in politically damaging ways (Weaver, 1988).

Many forms of automatic stabilizing mechanisms (ASMs) in pension programs have been in place for a long time. Indexing the upper limit on income subject to pension payroll taxes for inflation or wage growth, for example, allows politicians in the United States and other countries to escape blame for legislating "tax increases" while keeping the share of total wages subject to payroll taxes relatively stable. Mechanisms explicitly designed to stabilize the finances of public pension systems are generally of more recent origin, reflecting adverse demographic shifts and slower economic growth in many countries since the early 1970s, combined with the political difficulties and risks involved in pension cutbacks.

These newer mechanisms make automatic or semi-automatic adjustments to benefit levels and eligibility standards or revenues in public pension programs when triggers related to the current or anticipated fiscal health of the program are reached. Indeed a very weak stabilizing mechanism was enacted as part of the Social Security rescue package in the United States in 1983: it shifts cost-of living increases from prices to the lower of wage or price increases when the main Social Security trust fund falls below twenty percent of annual program expenditures. This mechanism is not triggered until the Social Security funding crisis is immediate and severe. Nor does it have a very large impact once it is triggered. In Sweden's new pension system, both initial pension benefits and later benefit adjustments for retirees are tied to both growth in the wage contribution base and changes in life expectancy. In Germany, the "demographic factor" enacted by the Kohl government in Germany in 1997 (and later withdrawn by the Schröder government) tied future pension levels to developments in life expectancy, while the "sustainability factor" enacted in 2004 included both demographic and employment considerations.

Proponents of automatic stabilizing mechanism-based pension reforms argue that those reforms have several advantages in balancing the five challenges of retirement income policy outlined above. Most importantly, ASMs address the fiscal challenge in contributory pension systems by facilitating a long-term balance between pension contributions and payouts. Moreover, they do so without exposing individuals to fluctuations in market returns and annuity prices found in pension systems based on defined contribution individual investment accounts. (Of course, individuals *are* exposed to risks of increases in life expectancy and poor economic growth rates that will almost certainly push benefits down and/or payroll tax rates up over the medium to long-term, exacerbating the senior welfare challenge.) Finally, because automatic stabilizing mechanisms are adaptations to existing, largely Pay-As-You-Go pension systems, they do not incur the transition costs of shifting to a funded defined contribution system; they can however be combined with such reforms so that as stabilizing mechanisms gradually cut the value of defined benefits, those benefits are complemented with income from individual accounts. Nor do ASMs require the difficult policy choices regarding annuitization mechanisms that are associated with defined contribution individual account systems.

Automatic stabilizing mechanisms can also be helpful in meeting the political challenges associated with retirement income systems, with elements that make them appealing to both technocrats and politicians. For technocrats, ASMs offer the potential to increase fiscal discipline that is seen to be lacking in defined benefit pension plans that were enacted in an era in which the demographic challenge was much less severe. For politicians, automatic stabilizing mechanisms offer the prospect that they will in the future be spared from having to enact politically painful benefit cutbacks and payroll tax increases.

There is, however, a central contradiction in the political appeal of automatic stabilizing mechanisms—a contradiction that has implications for the behavioral challenge (Brooks and Weaver, 2006). Technocrats like the signal sent to workers that working longer and saving more for retirement to receive a higher pension. The problem is that sending clear signals about *how much* slower growth and increased longevity is likely to reduce benefits when automatic stabilizing mechanisms are being considered may kill prospects for adoption of those mechanisms, since workers are likely to object to those reductions, especially older workers who have limited time to adjust and blue-collar workers for whom working longer may be more difficult or even impossible. Politicians, on the other hand, are likely to be attracted to automatic stabilizing mechanisms precisely *because* making future benefit promises contingent on future economic and demographic developments may obscure the magnitude of future recipient losses vis-à-vis the policy status quo mechanisms. There are strong incentives for politicians *not* to be clear about the likely effects of introducing automatic stabilizing mechanisms for individual workers if they hope to succeed in adopting and sustaining that reform. But this in turn may undercut many of the hoped-for effects of those reforms on retirement and savings behavior.

Automatic stabilizing mechanisms have other shortcomings as well. In particular, if the ASM freezes pension contribution rates and makes all adjustments on the benefit side, it may lead to substantial erosion of pension values as populations age. This may have particularly important consequences for the incomes of retirees with low life-time earnings; if benefits for this group are to be maintained above poverty levels, government may have to make substantial additional commitments to some form of minimum pension. Because minimum pensions are usually paid for from general government revenues rather than payroll taxes, such a solution may incur the wrath of the Ministry of Finance.

As the discussion above suggests, there are many variations on automatic stabilizing mechanisms. This paper analyzes the financial and political potential of automatic stabilizing mechanisms, beginning with a discussion of design issues and alternatives. Special attention is given to the most "complete" form of stabilizing reform, known as notional or non-financial defined contribution (NDC) pension systems (Holzmann and Palmer, 2006; Williamson, 2004). This is followed by a discussion of potential adoption, implementation, and sustainability challenges for auto-

matic stabilizing mechanisms. I then review experiences with stabilization mechanisms in three countries—Canada, Sweden and Germany—that vary substantially in the scope, timing and automaticity of their stabilizing mechanisms, and discuss potential lessons for policymakers in other countries.

Design Issues and Options

Automatic pension stabilization mechanisms differ on several key design parameters. Various options for each of these parameters are shown in Table 1, with "stronger" provisions (i.e., those specifying or enabling more adjustment) generally shown first.

A first dimension of automatic stabilizing mechanisms is whether the triggering mechanisms are *projection–based* or *trend–based*, or some combination of the two. Projection-based triggers utilize expected future trends on 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. Trend-based mechanisms base adjustments on real changes in factors such as the ratio of employed workers to retirees in the most recent year. These trend measures are usually measured over relatively short periods.

Each of these mechanisms has distinctive advantages and disadvantages. Projection-based mechanisms rely on assumptions about future events (fertility and migration, life expectancy, labor force participation rates, productivity growth, etc.) that may or may not be accurate. Small differences in projections projected over a very long period can make substantial differences in the projected health of a pension system. Thus changing assumptions could lead to disruptions in pension payments if they act as policy triggers—disruptions that politicians will find difficult to justify if they involve lower payments. Moreover, politicians could be tempted to interfere in the assumptions and projections to avoid triggering benefit cuts or tax increases during an election year. They may also be accused of political interference even they have not done so.

Trend-based mechanisms based on real data have problems of their own, however. Trend data may be subject to a high degree of volatility. Automatic stabilizing mechanisms that link benefit adjustments to the ratio of workers to retirees, for example, may be affected by short-term fluctuations in unemployment. Thus an improving employment situation might lead to a short-term rise in the ratio of workers to retirees, even when the long-term trend in the worker-retiree ratio is

expected to deteriorate markedly. Alternatively, a sharp contraction in employment could in theory trigger a nominal as well as real decline in pension benefits.

A second—and perhaps the most critical—design issue is whether automatic stabilizing mechanisms are oriented toward preventing long-term-funding problems or simply to address immediate funding crises—a situation in which funding may not be available to send out the next month's promised checks to pensioners. This dimension can be labeled "crisis-preventing" versus "crisis responding." These mechanisms range from Sweden's notional defined contribution pension, which is designed to make the system stable indefinitely, to the very weak mechanism found in the U.S. Social Security system, which triggers modest adjustments when the system is about to run out of cash. Most pension stabilization mechanisms project a specified numbers into the year from the time the projection is made. Given rising life expectancy and declining fertility rates in most advanced industrial countries, demographic projections that are based on longer projection periods are almost certain to look bleaker, and each year's projection is likely to look bleaker than the one that preceded it. Projections of Social Security and Canada Pension Plan solvency, for example, are historically made over a 75-year projection period. A mechanism that triggers programmatic changes based on this projection period would have to be more severe than those based on a shorter period.

A third issue with respect to automatic stabilization mechanisms is the *frequency of review*. Countries that have annual reviews (and at least in theory, adjustments) of their pension systems are likely to require smaller adjustments with each review, making those adjustments less visible—for example, requiring only a freezing of benefit indexation rather than nominal benefit cuts. Lower visibility presumably makes such adjustments more politically feasible. On the other hand, annual adjustments will inevitably collide with elections, giving opponents of those adjustments more political leverage to block them. Certainly very infrequent reviews, such as the once-a-decade review incorporated incorporated in Italy's 1995 reform (Franco and Sartor, 2006), create potential problems of mandating very large cutbacks that will in turn create huge pushback.

A fourth issue in designing automatic stabilization mechanisms is the *completeness and speed* of adjustment. Stabilization mechanisms may attempt to address all of the perceived shortfalls of a public pension system (whatever the projection period) or just a part of it. Obviously, the more complete the adjustment, the more political opposition is likely to be roused—especially if the shortfall is large. Similarly, stabilizing mechanisms can vary in their speed of_adjustment—mechanisms that require all adjustments to be made in a single year are more likely to be resisted than those that spread the adjustment over the course of five or ten years. In the case of benefit cuts, a speedy adjustment might require a (highly visible) cut in nominal benefit levels of current retirees while a slower one would require nominal

benefits to stay the same or rise slowly while the real value of benefits fell. The former is of course far more visible, and thus likely to spark more opposition.

A fifth issue in designing stabilization mechanisms is the *degree of automaticity* of those mechanisms. The degree of automaticity is important because of the unpopularity of pension cutbacks and tax increases: politicians may bravely pledge to commit future politicians (or themselves) to allowing unpopular adjustments to occur at some unknown future date, but they may be sorely tempted to renege and claim credit for preventing those unpopular benefit cuts or tax increases when the time actually arrives. Once again, a range of options is possible, ranging from very strong "fail safes" to much weaker "alarm bells." The options shown in Table 1 are in declining order from most to least insulated. At the most insulated end, adjustment mechanisms can be protected by procedures that require legislative supermajorities or other hurdles stronger than those found in the normal legislative process (e.g., approval by a super-majority of provincial or state governments) to block the recommendations from going into effect. A mechanism that can be blocked or altered through normal legislative procedures to overturn stabilizing adjustments is less secure, especially in political systems that have (1) few veto points and (2) weak agenda control that does not allow political leaders to keep politically popular but fiscally irresponsible measures off the agenda. At the weaker end of the spectrum, "alarm bell" provisions 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.

A sixth critical parameter is the *incidence of loss–imposition*. The most important features include (1) the balance between expenditure reductions and revenue enhancement provisions in an automatic adjustment package, and (2) whether triggered cuts on the expenditure side are targeted at future retirees (e.g., automatic increases in standard retirement ages as the population ages), current retirees (e.g., cutbacks in indexation of benefits for those already retired) or some combination of the two. Cutbacks to benefits through indexation freezes for the benefits of current beneficiaries are the "usual suspects" for benefit cuts, though there are other possibilities. For example, the Danish government recently enacted automatic increases in the retirement age to match longevity increases beginning in 2025 (Social Security Administration, *International Update*, July 2006, p. 1). On the revenue side, automatic adjustments could be made to payroll tax rates, upper earnings thresholds for social security taxation, or both. Adjustments can also be made through some combination of benefits and revenues.

A final parameter involves *protection from automatic cutbacks* for low-income retirees. It is possible to provide a strong poverty-preventing income floor for low-income retirees through a minimum benefit in an earnings-related program or

through a separate means-tested program. Alternatively, low-income retirees may be subject to lower percentage cutbacks than others in an earnings-related program. The latter situation will advance the affordability objectives of pension reform at the cost of senior well-being (adequacy) objectives.

The Canada Pension Plan is a good example of how these parameters are combined in practice. The CPP's finances are reviewed every three years. When projections generated in that triennial review process show the CPP out of balance at end of a 60 year projection period, half of the deficit is supposed to be made up through reductions in future benefits for current retirees by trimming indexation, and half of the deficit through payroll tax rate increases. Both of these adjustments are phased in over a three year period. These automatic adjustments can be avoided if politicians explicitly decide through Cabinet order not to allow the changes to go into effect, or if they enact an alternative plan. But overall, the CPP adjustment mechanism can be characterized as a crisis-preventing (long projection period), comprehensive, highly automatic "fail-safe" of medium speed, that is highly balanced between current retirees and current taxpayers in its imposition of costs. Other tiers of the Canadian pension system, Old Age Security and the Guaranteed Income Supplement, provide strong anti-poverty protection for most Canadian seniors.

The most comprehensive form of an automatic stabilization mechanism is what is known as the notional or non-financial defined contribution (NDC). Although many variants are possible, NDC pensions systems generally have the following characteristics:

1. NDC benefit levels are based on earners' lifetime contributions to the system, unlike defined benefit systems, which in most countries are based on some smaller number of peak earnings years;
2. Benefits of both current and future retirees are automatically adjusted for changes in life expectancy as well as some measure of wage growth or overall economic growth. If life expectancy increases, or the economy performs poorly, benefits for current and future retirees are adjusted downward until anticipated total payouts and resources are brought back into balance;[1]
3. Payroll tax rates are permanently fixed, and general revenues cannot be used to pay benefits. Thus NDC pensions make any automatic adjustments exclusively on the benefit side;

[1] The exact calculation of these amounts can vary. In Sweden, the initial benefit includes an imputed rate of return based on expected real annual wage growth of 1.6 percent, giving retirees a higher initial benefit than would otherwise be the case. If real wage growth equals 1.6, full price indexation occurs. If real wage growth is higher or lower than this standard, inflation adjustments in the retirement annuity are adjusted upward or downward accordingly. See Palmer, "Swedish Pension Reform," pp. 176-177, Sundén, "How Will Sweden's New Pension System Work?," p. 9, and Settergren, 2001.

4. Like most defined benefit pension systems, they operate primarily on a Pay-As-You Go (PAYG) basis. Sweden's system uses "buffer funds" of past surpluses to smooth spending across demographic peaks and valleys.

Shifting from an earnings-related defined benefit pension system to an NDC-based pension system may have particularly important redistributive effects. In particular, such a shift may have severe consequences on individuals with interrupted and part-time participation in labor markets—characteristics that are especially associated with female workers.

Political Issues

Automatic stabilizing mechanisms pose a number of distinctive design choices, as outlined in the previous section and Table 1. But automatic stabilization mechanisms, and specific options for their design, also need to be evaluated in terms of three criteria of a more *political* nature. First, there may be major obstacles to their adoption that undercut their potential utility. Second, problems may arise in the implementation process. Finally, there may be problems of politically sustainability if their opponents seek to erode the reform or reverse it outright. This section outlines the most important of those opportunities and challenges as well as possible strategic responses by policymakers (see Table 2 for a summary). The next section then examines how those issues played out in the experience of three countries.

Adoption Issues

Political constraints on adoption of automatic stabilizing mechanisms can be divided into three categories: interest group opposition, norms about benefit entitlement, and political institutions. All three of these constraints are likely to be barriers in adopting automatic stabilizing mechanisms. The purpose of ASMs is to increase the probability that some losses (benefit cuts, retirement age increases, tax increases or some combination) occur. Thus they are likely to encounter concentrated opposition from groups that benefit from current policy, notably seniors organizations and unions that represent workers in physically demanding professions who may have difficulty in working in their current occupations as they age.

Institutional obstacles to enacting ASMs obviously will vary greatly across political systems, but as a general rule, systems that have multiple veto points and supermajority requirements at each approval point pose greater obstacles to any change from the status quo. Opposition parties are likely to face a difficult political trade-off in any decision to challenge adoption of an ASM, however: it is likely to be in their short-term interest to challenge adoption of the mechanism as a threat to senior incomes, but if they anticipate gaining power in the future, having an ASM already in place can save them the great political headache of explicitly making such cutbacks themselves. While this calculation will always be a complex-multifaceted one, the odds of being able to resist the siren's call of blame-generating are probably weakest when (1) an election is near, and (2) the outcome of the election is uncertain but the opposition is likely to lose, so that blame-generating on pensions might make the difference turning defeat into victory.

Finally, norms of benefit entitlement are usually deeply imbedded for most pension systems, although the young tend to be more skeptical that they can or will be kept. Automatic cutbacks may be perceived as unfair, especially to retirees and near-retirees who have little time to adjust their savings and labor supply. ASMs may also be perceived as an effort by government to avoid accountability.

Three broad sets of strategies can be used by proponents of automatic stabilizing mechanisms to help win their adoption: adjusting payoffs, changing perceptions, and manipulating procedures (Pal and Weaver, 2003), as shown in Table 2. There are several ways to lessen the incidence of concentrated, visible losses associated with ASMs, including having long lead times so that current retirees and those about to retire are unaffected by cutbacks. Gradual phase-ins are also likely to lower the visibility of and opposition to automatic cuts or tax increases. And the most vulnerable clienteles can be protected from the effects of ASMs by improving minimum benefits within a contributory pension system or a parallel income-tested tier. In the short-term, avoiding the first potential "triggered" adjustment until after the next election is an obvious step to avoid blame.

To counter perceptions of unfairness, proponents of automatic stabilizing mechanisms need to reframe the issue in terms of maintaining fiscal solvency for future generations if they are to generate support for those mechanisms. Framing the issue as "taking decisions out of the hands of politicians" may also be useful.

Options for managing procedures to help win adoption of ASMs are more limited. In almost all systems, legislative action will be required to put these mechanisms in place; there are few "venue-shopping" opportunities to bypass legislation. As will be discussed in the case studies, however, it is sometimes possible to utilize or create politically insulated decisionmaking procedures to formulate and build political support for automatic stabilization mechanisms that then make it easier to obtain formal legislative adoption.

Implementation Issues

Automatic stabilizing mechanisms may encounter several problems in the policy implementation process. One problem that is likely to be present immediately after adoption is that the agency charged with implementing the proposal may lack the information and technical expertise (including use of technical demographic and economic forecasting models) needed to develop accurate projections of the magnitude of future pension funding burdens and adjustments needed to address funding shortfalls. Providing a substantial lead time, adequate funding, and expertise can help to avoid problems in initial implementation that may undercut support for keeping ASMs in place.

A second potential problem with implementing ASMs is that politicians may pressure statistical agencies not to make projections that trigger politically unpopular benefit changes—for example, projections of increased longevity or low long-term economic growth. Although this may not be a problem in countries where statistical agencies are well-established, highly professionalized, and enjoy a high degree of independence, status, and deference, it could be a problem in countries where none of these things are true. In Argentina, for example, there have been widespread charges that the national statistical agency artificially suppressed inflation figures for electoral purposes and to lower payments on inflation-indexed bonds and public sector wage negotiations ("Cooking the Books," 2007; McDonnell, 2007; Galak, 2007). Increasing the independence of agencies charged with calculating triggers or outsourcing production of data are two potential ways to head off this risk.

Politicians may also be tempted to intervene to block or modify implementation of automatic adjustments once they have been announced. One possible way to head off this type of intervention is to phase in the effects of automatic adjustments over several years so that impacts are less visible and politicians are less tempted to intervene.

A fourth potential implementation issue in automatic stabilizing mechanisms is that program clientele may fail to adjust their behavior in ways that are consistent with programmatic changes. The issue is not obvious on its face: adjustments in pensions will occur without workers or pensioners doing anything. But that is precisely the problem: with automatic stabilization mechanisms in place, future public pension benefits are likely to be lower in the past for a given earnings history. Workers who do not adjust their savings and labor supply behavior to take account of this fact are likely to have an inadequate pension when they retire. As noted above, sending out clear signals about the anticipated magnitude of a reform's effects on pension levels should enhance behavioral effects of an ASM, but doing so before a reform is enacted is likely to lower its prospects for adoption. Waiting to be clear about the anticipated magnitude of these effects until after the reform may

undercut this risk, but it also risks creating a (justifiable) backlash against both the reform and the politicians who enacted it.

Sustainability[2]

Until recently, political scientists have largely assumed that once major policy reforms were put in place, they would remain in place, though implementation might be problematic. Recent work by Eric Patashnik (2003, 2008) and others calls this assumption into doubt, however. Politicians may be reluctant to abolish ASMs entirely, given the significant investments of time and political capital that are required to put them in place in the first place and their long-term blame-shielding advantages. But permanent *erosion* of automatic stabilizing mechanisms, undercutting their effects, may occur—for example a shortening of a projection period, a shift from a full to partial adjustment for adverse democratic trends, or an exclusion of certain specific politically sensitive groups (e.g., members of the armed forces) from the effects of the mechanism. Having an automatic stabilizing mechanism in place does shift the bargaining leverage in favor of those who want those adjustments to occur as scheduled, because preventing the mechanism's reversal or erosion requires them merely to block changes proposed by politicians or groups catering to short-term constituency interests rather than adopting new policies. This advantage is likely to be important (1) in political systems where the governing party or coalition has sufficient agenda control to keep reform-eroding proposals off the agenda , and (2) in systems with multiple veto points, where super-majorities are usually needed to move from the default position. But where agenda control is weak and where veto points are fewer and weaker, temptations for politicians to prevent visible loss-imposition on present and future retirees will remain strong.

A full reversal of automatic adjustment mechanisms is probably most likely when there is a turnover in the party of government, and a party that was never committed to that mechanism takes over the reins of power. But an erosion to avoid short-term political losses will be a temptation for blame-avoiding politicians whenever the mechanism is triggered, especially if it appears likely that a high probability that several politically painful iterations are likely to follow in the near future. Thus economic downturns, which may trigger a short-term government fiscal crisis as well as lowering contributions to a pension system, are likely to be contributing conditions to any challenge to an ASM that is already in place, because the benefit cuts triggered during a downturn are likely to be bigger and thus more visible than during good times.

---

[2] This section draws on Brooks and Weaver, 2006.

Country Experiences

As Table 3 shows, advanced industrial countries utilize a variety of automatic stabilizing mechanisms ranging from Sweden's comprehensive NDC system to the very weak Social Security failsafe in the United States. These mechanisms are generally used in contributory systems where at least a rough balance is anticipated over time between contributions and payouts.

Canada

Canada has a complex public pension system in which multiple tiers play a significant role. Canada has both a large quasi-universal (benefits are "clawed back" for very high income individuals) flat-rate pension tier, known as Old Age Security (OAS) and a large income-tested tier, called the Guaranteed Income Supplement (GIS). Both of these programs are financed through general revenues. In addition, the Canada Pension Plan (CPP), a contributory social insurance plan pays benefits linked to an individual's contribution history. An opting-out clause allows Quebec to operate a distinct Quebec Pension Plan (QPP) in that province, with contribution rates and eligibility and benefit levels in the CPP and QPP kept harmonized.

Fiscal pressures led the Canadian government to consider retrenchment and restructuring of the Old Age Security program on several occasions in the 1980s and early 1990s. Throughout each of these rounds of retrenchment in OAS, the Canada/Quebec Pension Plan remained untouched. It was not for lack of underlying problems: The financial condition of the CPP was deteriorating as a result of declining economic and demographic conditions, a number of benefit enhancements enacted in the 1970s, and a dramatic increase in takeup of disability benefits (the CPP provides disability as well as retirement and survivors benefits) in the 1980s and 1990s.[3] As a result, cash flow from contributions (i.e., contributions minus expenditures) in the CPP turned consistently negative beginning in fiscal year1984-85), and in 1993, overall CPP assets began to decline (that is, contributions plus interest payments were no longer adequate to pay benefits). The CPP's Chief Actuary estimated in 1995 that the CPP trust fund would be exhausted by the year 2015, and that with an empty trust fund, the contribution rate needed to finance contributions

[3] Benefit enhancements included full indexation of benefits rather than just for inflation over 2 percent in 1975, dropping retirement and earnings tests for persons aged 65 to 69 in 1975, and addition of child-rearing drop-out provisions in 1987. Overall, these benefit enhancements were estimated to add costs of 2.4 percent of contributory earnings to the program. Federal/Provincial/Territorial CPP Consultations Secretariat, 1996, chapter 3.

on a pay as-you-go basis would have to reach 14.2 percent by the year 2030 (Office of the Superintendent of Financial Institutions, 1997).

Despite these financial problems, the difficulty of securing provincial assent helped to keep CPP cutbacks from even getting on the agenda for a number of years: it doesn't pay to go out in front on an issue where resolution in the absence of a crisis is very doubtful, and where it is almost certain that at least some provincial ministers as well as the federal opposition parties would use the occasion to denounce the federal government in a high-profile setting.

Declining trust fund balances, eroding public confidence in the CPP, and growing awareness that a failure to address the CPP's problems quickly would lead to soaring contribution rates in the future finally led to an initiative by Ottawa in 1995 to alter the program(Federal/Provincial/Territorial CPP Consultations Secretariat, 1996; See also Prince, 2003; Little, 2008). Ottawa and eight of ten provinces reached agreement in 1997 on a package of CPP changes that distributed pain among all parties. With the political cover provided by the federal provincial agreement and a single party majority government in Ottawa, Parliament approved the changes, and they went into effect in 1998.

The most visible change in the CPP rescue package--and the one with the biggest fiscal impact--was in payroll taxes (see Slater and Robson, 1999). Tax rates on employers and employees rose from 5.85% to 9.90% (shared equally between the two) over a six year period to finance a move away from Pay-As-You-Go toward partial advance funding of the CPP. Politicians sold the CPP payroll tax increase as a measure that would prevent payroll taxes from having to go as high as previously projected if the CPP contribution rate was not changed quickly. Moreover, the initial tax increase was not scheduled to be felt until 1998, after the next federal election.[4] Cuts in CPP retirement benefits were, not surprisingly, made much harder for beneficiaries to discern and understand.[5]

Little noticed at the time the legislation was passed, but potentially of great importance in the longer run, the new CPP legislation also put in place a new "default" or fail-safe procedure for ensuring the long-term financial viability of the CPP. In the future, the chief actuary for the CPP was to prepare estimates of the long-term financial sustainability of the Plan. Over the next year, Ministers from Ottawa and the provinces are supposed to agree on any needed changes to keep the plan viable; if they do not agree, contribution rates will increase automatically to meet half of

---

4 In fact, the initial tax increase--from 5.85 to 6.0% of payroll, was retroactive to January 1997, but was not to be paid until income tax time in the spring of 1998 (Ferguson, 1997).

5 Just over one quarter of the reduction in the overall projected long-term 4.0 percent of payroll in the CPP/QPP contribution rate required to achieve long-term funding stability came on the benefit side, largely through technical changes to formulas that are almost incomprehensible to most beneficiaries. For a summary of the financial impact of the benefit changes in the 1997 CPP reform package, See Office of the Superintendent of Financial Institutions, Office of the Chief Actuary, 1997, pp. 6-8.

the anticipated deficiency (phased in over three years), and indexation of the CPP will be frozen for the next three years.[6] This procedure could be overridden by Cabinet order, but it would take affirmative action to do so.

The revised statute has several important implications. It created a strong procedural presumption, and sent a strong signal to beneficiaries and contributors, that the CPP would be kept fiscally sound: its fail-safe trigger kicks in when the long-term viability of the plan is in question, not just when the plan is in immediate danger of not being able to pay out benefits. Moreover, the pain of a future CPP fix will be shared equally between taxpayers (through contribution rate increases) and current beneficiaries (through benefit freezes) unless federal and provincial finance ministers can agree on an alternative. The "clean hands" default procedure established by the statute allows losses to be imposed on beneficiaries and contributors without politicians having to do anything--although the concentration of accountability in Canada's Westminster political system means that there would be pressure on a future Cabinet to avoid blame for loss imposition by cancelling contribution increases and indexation freezes.

A final impact of the new statute was that by turning the highly inexact science of long-term actuarial projections into a policy trigger for imposing painful increases in contribution rates and indexation freezes, it increased the probability that those projections would be the subject of future political conflict. And shortly before the first Chief Actuary's report was due under the new law, the Chief Actuary was fired. The fired Chief Actuary, Bernard Dussault, charged that he had been pressured by Finance Ministry officials to change his assumptions after preliminary estimates suggested that a small (0.1% of payroll) increase in the contribution rate would be needed to keep the CPP solvent in the long term. The Chrétien government argued strongly, if not very convincingly, that Dussault's firing had nothing to do with his conclusions (Eggertson, 1998; Jack, 1998a and 1998b; Jack, 1999; see also the discussion in Little, 2008). The consultant commissioned to complete Dussault's report, using a set of assumptions that were questioned by some critics as too optimistic, produced a report showing that the system was in fact slightly (0.1% of payroll) over-financed. The issue soon faded, however, and later actuarial reports, which have shown the system in surplus at the end of the 75 year projection period, have not spawned controversy. Nor have Canadian politicians faced a "when push comes to shove" situation of being forced to let unpopular benefit cuts and payroll tax rate increases go into effect.

Canadian experience thus suggests several lessons. One is that it *is* possible to win enactment of a fairly stiff fail-safe device that combines a lengthy time horizon for financial viability projections, a series of "default" policy changes split between

[6] See Canada Pension Plan, Chapter C-8, *Consolidated Statutes of Canada*, sections 113-115 and *Statutes of Canada*, Chapter C-40 (Bill C-2), sections 94-6, and Slater and Robson, *Building a Stronger Pillar*, pp. 6-7.

payroll tax increases and indexation freezes that go into effect in the absence of an agreement between politicians, and an action-forcing mechanism that allows politicians to devise an alternative to default changes within a specified period of time. In the Canadian case, the fact that the negotiation process for any changes in the CPP/QPP involved a "behind closed doors" process of negotiation among federal and provincial finance ministers, followed by a ratification process in a Westminster-style parliament where single-party majorities are the norm, undoubtedly eased the policy adoption process.

With respect to implementation, the hints of possible political interference in the first actuarial assessment of CPP suggest that such interference is a real risk, although nothing comparable have occurred since. And since the expectation of both policymakers and the public is that the failsafe will not be used, no clear behavioral signals on the need to work longer and save more for retirement have been sent or received by the ASM. Finally, Canadian experience suggests the not very surprising lesson that it if a mechanism is not activated (and thus never produces visible losses), it is unlikely to spark opposition that leads to its reversal or erosion.

Sweden

Sweden is often seen as the quintessential welfare state.[7] The Social Democratic Party, which was in power (though usually in a minority government or in coalition) for all but nine years of the period from 1932 to 2006, was the guiding force shaping expansion of the Swedish welfare state. For most of the first eighty years of the twentieth century, the story of the Swedish pension system was largely one of expansion—albeit frequently contentious expansion (see Heclo, 1974). By the late 1960s, the public pension system in Sweden consisted of three tiers. A flat-rate basic pension (*folk–pension*) operated on as Pay-As-You-Go basis. An earnings related national supplementary pension (ATP), enacted in 1959 and widely regarded as the "jewel in the crown" that had helped to solidify middle class support for the Social Democratic welfare state (Lundberg, 2003), was partially pre-funded. Both tiers were financed largely by earmarked employer contributions.[8] A means-tested pension supplement was created in 1969 to provide a higher pension floor whose earnings-related benefits were very low. The pension supplement, in combination with the other two tiers, moved almost all seniors in Sweden out of poverty.

---

[7] This section of the paper draws on collaborative work with Karen Anderson.

[8] In 1990, the basic pension contribution (7.45% of payroll) financed 85% of benefits for the flat rate pension; the rest was financed from general revenues. Employer contributions of 13.5% of payroll to the earnings-related pension financed both current benefits and an accumulation of savings in the AP funds.

By the 1980s, several problems with the Swedish pension system were becoming evident. Funding the pension system through payroll taxes was becoming increasingly problematic due to slower economic growth and an aging population.[9] Successive Swedish governments responded to the pension crisis on three tracks: through a number of ad hoc incremental changes in pension programs; through efforts to restrict early retirement among Swedish workers; and through efforts to bring about more fundamental changes that would stabilize financing and benefits for the long term and therefore keep pensions from becoming a recurrent (and divisive) item on the policy agenda (see Anderson and Immergut, 2007: 367-372).

Several elements of the "third track" process through which Sweden moved toward a fundamentally restructured pension system are worth stressing here. First, the process was accelerated by the election of a four-party "bourgeois" (i.e., non-Social Democratic) minority government in 1991 that faced a severe economic and budgetary crisis and lacked a parliamentary majority. Second, there was a strong effort by the new government to develop a mechanism and a proposal that could obtain broad support from parties in the Swedish parliament across the dividing line between bourgeois parties and parties of the left. Failure to do so would mean both that any reform might be at risk when the Social Democrats, still by far the largest party in Sweden) returned to power. Third, the process was dominated by politicians and experts. Unions and employers ("social partners" in European parlance) were not directly involved in the negotiations, which participants in the negotiations believe helped to facilitate an agreement.

The pension working group comprised of members of the four bourgeois government coalition partners and the Social Democrats (but not the smaller Left or New Democracy parties) issued their first report in August 1992, including a sketch of proposed principles for reform and a comprehensive report in 1994. The working group continued its work after the Social Democrats returned to power in September 1994, and most of the implementing legislation was enacted by 1998.

The new pension system had several major characteristics, including a permanently fixed contribution rate for Swedish pensions, the addition of a relatively modest (2.5 percent of payroll) mandatory defined contribution tier to the Swedish pension system, and a new income-tested "guarantee pension" financed from general revenues to replace the former pension supplement.[10]

For our purposes, however, the key change was replacement of the former flat-rate pension and earnings-related pension by a new "income pension" based on

---

[9] The design of the earnings-related ATP system assumed a stable annual economic growth rate of 3-4 % and full employment if contribution rates were to remain stable. See Anderson and Immergut, 2007: 373. See also the discussion in Palme and Svensson, 1999, and Palmer, 2002: 186-187.

[10] The guarantee pension requires far more resources than the pension supplement since it took over much of the function of supporting very low income pensioners who had previously received the flat-rate pension.

what came to be called Notional or Non-Financial Defined Contribution (NDC) principles. With NDC, no promises would be made about the level of benefits in relation to an employee's final salary or to the level of income for a specific number of earnings-years. Benefits are based on contributions (which may include contributions made on a person's behalf by the state, for example for periods of unemployment or child-caring) over the entire course of their working life.[11]

In terms of stabilizing pension system finances, the key feature of the new NDC pension tier is an "automatic balancing mechanism" that uses a complex formula to correct for increases in life expectancy and slow wage growth by lowering initial benefits (for those who have not yet retired) and benefit indexation (for retirees) until the system comes back into balance. The new income pension also took over most of the "buffer funds" from the old earnings-related pension, and balances in individuals' notional accounts includes a share of buffer fund balances as well as their own contributions. Because the balancing mechanism makes all corrections in the year after data is finalized (e.g., at the beginning of 2010 for changes that occurred in 2008), as well as demographic and wage growth trends, there is a potential for significant swings in benefits during periods of unusual economic decline.

Several aspects of the more fundamental reform enacted in the 1990s contributed heavily to its adoption—indeed make it a masterpiece of political blame-avoidance. First, the reform package is extraordinarily complex and many of its specific provisions are quite opaque. Benefits under the income pension and premium pension depend in part on long-term trends, including the performance of the Swedish economy, performance of investment funds that hold pension fund surpluses, and demographic trends, for which politicians are unlikely to be held fully accountable. The balancing mechanism allows reductions to occur without politicians having to take direct, visible actions, and generally accrue slowly over a long period of time. Thus it is difficult for most voters to conceptualize the impact of the various budgetary fail-safes in the "notional defined contribution" tier of the new pension system and to develop a clear sense of how much, if at all, that their pensions will be lower in the future. It is also difficult for potential partisan opponents of the reform to articulate a clear and convincing critique of it that voters can easily understand—at least until cutbacks have or are about to be triggered.

Trying to avoid perceptions that the reform would cause widespread losses was a fundamental objective for negotiators. Indeed the final package was sold as having the potential to yield a pension equivalent to that under the current system—at least for those who worked steadily for forty years, if there were no further increases in life expectancy over that prevailing in 1994, and making optimistic but

[11] Pensions are indexed to developments in real wages rather than prices. Rather than simply raising the "standard" retirement age, the new pension system sidestepped the retirement age issue entirely by setting a flexible retirement age between 61 and 67, with increased incentives for continued work.

plausible estimates of overall economic growth (2 percent annually) and returns on the individual account tier included in the final package (Sweden, Ministry of Health and Social Affairs, 2002: 23; Settergren, 2003). However, projected life expectancy increases after 1994 had made the idea that pension replacement rates would remain stable obsolete by the time implementing legislation for the new NDC pension was adopted.

The complexity of the reformed pension system created opportunities to compensate those negatively affected by the new lifetime earnings principle. In particular, the introduction of pension rights for higher education and child rearing (with contributions made by the national treasury) helped to mitigate losses from professionally trained workers who had spent many years in higher education and from women who had reduced work effort when raising children. Many of the more technical aspects of the proposed reform, such as the introduction of a life expectancy index and a new post-retirement inflation index were shielded from criticism by the shear complexity of the package. The guarantee provided to the "early transition" generation of retirees also lowered the prospects for political opposition. Moreover, increasing the linkage between social insurance pension benefits and contributions allowed politicians to claim that the new system was more "fair." This helped to defuse opposition from those who would stand to lose in the new system. All of this meant that politicians were unlikely to incur voter retribution for supporting cuts in pension obligations.

Sweden also offers some lessons in how to (and how not to) frame proposals for automatic stabilizing mechanisms. The mechanism used to lower benefits in the Swedish NDC system was originally referred to as the "brake." That terminology was discarded by reform proponents because it was seen to give the politically unattractive (although accurate) message that it was likely to lower future benefits. The less alarming term "automatic balancing mechanism" was substituted ("balance" is, after all, generally considered to be good thing), although the term "brake" is still used in common discourse.

Swedish experience also provides lessons regarding the provision of clear signals about the scope for potential for cutbacks under automatic stabilizing mechanisms. Swedish workers receive annual statements that project their future pension benefits under three separate retirement ages (Sweden's new retirement system has moved away from a standard retirement age to a flexible retirement age between 61 and 67), as well as two projections of economic growth. The retirement age projections provide clear information about future benefits, though not as clear a signal as an increase in the retirement age. Nor is it clear how much attention workers pay to projections about different rates of economic growth—a factor about which general information levels are low. If many workers do not alter their behavior, they will end up with inadequate pensions. Effective retirement ages have indeed increased under the new pension regime. However, it is not clear that increased effective re-

tirement ages are the result of the pension statements and the limited information on potential for future automatic cutbacks that they provide.

One very notable feature of Swedish implementation of its new pension system is that the pension working group established to design the system has been maintained in a modified form after the new system was established. This mechanism facilitates resolution of conflicts as new issues arise during implementation. Equally important, it helps to sustain commitment to the pension system and to collaborative solutions when problems arise.

The most serious problem that Sweden has faced in implementing its "automatic balancing mechanism" arose with the worldwide financial crisis and recession that began in 2008 (see Kruse, 2009; Settergren, 2010). Sweden's NDC pension system is particularly vulnerable to disruption because the solvency of the system is calculated based not only on the basis of economic growth and lifeexpectancy, but also on the value of accumulated contribution surpluses that are held in five "buffer funds." These funds invest heavily in volatile investments in Sweden and overseas. The financial crisis and recession led to a decline in the value of the assets held by those funds of 194 billion kronor at the end of 2008, or more than 21 percent. This was expected to lead to a 3.28 reduction in income pension benefits in 2010, though low income retirees would be protected by an increase in the guarantee pension (Forsäkringskassan, 2009: 43.). Would the stabilizing mechanism hold up under such pressure, especially with a general election scheduled for September 2010? A former Social Democratic Finance Minister suggested injecting 200 billion kronor in general revenues into the pension system to prevent triggering the "brake," asking "are the five parties behind the pension arrangements ready to go to the polls on this, with all the opportunities for other parties—inside and outside parliament—to propose measures that would seem far more attractive to 1.6 million pensioners?" (Åsbrink, 2008) Sweden's Minister of Social Affairs suggested additional possibilities, including compensating retirees from the state budget. After receiving expert input from the Swedish Social Insurance Agency, the matter was referred to the multiparty working group representing the five parties that had agreed to the original 1990s pension reform package. The working group agreed to a change that would base the activation of the automatic balancing trigger on buffer fund balances averaged over three years. Thus any benefit cuts that were made in benefits based on swings in the buffer fund balances were likely to be moderated over time—phasing in more slowly, but also rebounding more slowly during stock market upturns.

Overall, the experience of the first major "pothole" of the Swedish NDC system suggest substantial resilience rather than high vulnerability to erosion or reversal. While the five parties that belong to the pension group rejected the Swedish Social Insurance Agency's recommendation, the change that they endorsed is consistent with the principles of their original agreement by not injecting new money into the

system. It is at least arguably an improvement because it weakens the measure's volatility.

The cartelistic behavior of the five major parties (Moderates, People's/Liberals, Center and Christian Democrats in the "bourgeois" bloc and Social Democrats on the left) in the Pensions Working Group in defense of a modestly revised ASM status quo has remained intact, despite the rise of a new rightist anti-immigrant populist party, the Sweden Democrats. The Sweden Democrats prepared a television advertisement for the September 2010 election which explicitly criticized the cost of services to immigrants and said that Sweden faced a choice between an "immigration brake" and the "pension brake." (Sweden's commercial broadcaster refused to carry the ad, but it was widely circulated on the internet and discussed in the print media) (Brown, 2010). The Sweden Democrats won enough votes to put them over Sweden's 4 percent threshold and enter the Riksdag, and they held the balance of power when neither the bourgeois parties nor the left parties (the Social Democrats, Greens and Left Party) won a majority of seats. However, the center-right parties formed a minority government and refused to bargain with the Sweden Democrats. Thus the multi-party "cartel" backing the NDC system remains intact. Its automatic balancing mechanism, while modified in details, remains largely unchallenged in its broad principles.

Germany

Germany, like Sweden, has a long-established public pension system (See for example Hering, 2008; Anderson and Meyer, 2003; Hinrichs, 2005; Schulze and Jochem, 2007; Busemeyer, 2005, Schludi, 2005; Jacobs, 2009). Germany's system differs from Sweden's in having relied almost exclusively on a single contributory social insurance tier for its public pension system. But Germany has faced a particularly serious demographic challenge of a rapidly aging population. German reunification exacerbated the financing pressure on the pension system as inefficient East German industries were shut down and many of those workers took early retirement. By the late 1990s, contribution rates were approaching 20 percent, and were expected to rise much higher in the future if no action was taken. Moreover, Germany's pension system is financed in part by federal government subsidies from other revenue sources (notably the VAT and more recently ecology taxes); these expenditures were also growing, putting an added strain on the general budget.[12]

Germany's demographic and financial challenges have been exacerbated by a series of political challenges, notably a changing party system. Germany's long-

[12] In 2007, the federal grant covered 28.5 percent of the expenditures of the pension insurance system (Deutsche Bundesbank, 2008)

standing "two and a half" major players (the Christian Democrats/Christian Social Union, Social Democrats, and Free Democrats) were joined successively by the Greens in the 1980s and the Party of Democratic Socialism (later Left Party, *Die Linke*) in the 1990s. And it was not just the number of the parties that was changing. The Free Democrats moved to the right of the CDU/CSU from their traditional role as median party that could form a coalition with either of the larger parties. The PDS positioned itself as an intransigent defender of the welfare state status quo, and was seen as "uncoalitionable" because of its Communist past: this freed it from concerns about the practicalities of governing. These changes made it more difficult to build a broad cross-party consensus in favor of proposals of measures that would cut back on spending commitments—especially for the SPD, which now faced a credible party challenger on its left. Equally important, a more complex party system meant that *maintaining* commitment to such changes would also be more difficult once measures were in place and actual cutbacks were imminent because there were strong incentives to defect from any retrenchment-supporting party cartel in search of votes.

Changes in the party system not only complicated coalition building in developing policy proposals and passing them in the lower legislative chamber, the *Bundestag*, they also created more uncertainty in the *Bundesrat*, where the governments of Germany's *länder* are unrepresented. The *Bundesrat* has a veto over changes in the financing provisions provisions of the pension system, although not provisions that relate solely to benefits. Because Bundestag elections are not synchronized with elections to the *länder*, changes in the composition of the Bundesrat as a result of land elections could derail government pension financing initiatives unless broad agreement was reached across party lines. Moreover even governments in the länder that mirrored the coalitional arrangements in the center could not necessarily be counted on to back such legislation proposals.

Responses to the German pension system's demographic and financial crisis initially focused on increased financing (notably contribution rate rises) and then ad hoc benefit and eligibility cutbacks. This process was characterized by a broadly consensual approach in which social policy experts from the major parties as well as employers and trade unions formulated policy responses within a relatively closed and depoliticized policy network which "after a joint learning process, usually resulted in compromises acceptable for all actors involved." (Hinrichs, 2005: 54; see also Hering, 2008).

By the mid-1990s, however, consensual policymaking had broken down under the strain of multiple pressures, notably slow job growth and increased takeup of early pensions as a result of firm closures in the former East Germany. The breakdown of consensual policymaking delayed response to pension crisis and made policy reversals more likely.

The collapse of consensual pension policymaking in Germany was clearly evident in legislation enacted in 1997.[13] The CDU/CSU/FDP coalition government headed by Helmut Kohl attempted to address the severe financial and demographic challenges confronting Germany's pension regime by developing a comprehensive reform package. The Social Democrats, anticipating a federal election in 1998, refused to collaborate, so the governing parties proceeded on their own. The 1997 legislation included a "demographic factor" that would automatically lower benefits as life expectancy rose. Targets were also set for both near-term and longer-term caps on payroll tax rates.

Reflecting the more partisan atmosphere of pension policymaking in Germany in the late 1990s, the "demographic factor" was abolished after a new Social Democratic-Green coalition came to power in 1998, while proceeds from an eco-tax were dedicated to the pension system with the objective of stabilizing the contribution rate (Hering, 2008: 172). After a prolonged debate, a small new quasi-mandatory tax-advantaged and subsidized individual account tier was enacted in 2001 to compensate for planned future declines in public system replacement rates. At the same time, the new law introduced a "Riester factor" into the calculation of both current and future retirees that ostensibly compensates for a partial shift from public to private pension schemes (though this is of course purely fictitious for current retirees). For current retirees, the practical effect of the Riester factor was supposed to be annual adjustments 0.5 percent below what they would otherwise be every year for between 2003 and 2010, reaching a total of 5 percent (Deutsche Bundesbank, 2008). This is not a statistically based automatic stabilizing mechanism like the demographic factor, but an *ad hoc* cut with similar effects justified with the fig leaf of an increasing role for voluntary private pensions.

After a very narrow victory in the 2002 election, the Schröder Red/Green government also enacted a major pension reform in 2004 that included a new automatic stabilizing mechanism to replace the "demographic factor" that the SPD had revoked after coming to power in 1998. This new stabilizing mechanism was rebranded under the new label of "sustainability factor" (*Nachhaltigkeitsfactor*) to make it more politically palatable. It was also designed to lower replacement rates over time, stabilizing the contribution rate. However, in response to opposition from trade unions and the left-wing of the SPD, the impact of the sustainability factor was capped: it could not cause pensions for workers with a full earnings history to fall below a 46 percent replacement rate.

The main difference between the demographic factor and the sustainability factor is that the latter is based on the *actual* ratio of pension contributors to beneficiaries, while the demographic factor was based mainly on demographic projections. The sustainability factor does not just reduce pension benefits as life expectancy

[13] For detailed discussion of the electoral calculations involved in the 1997 reform inside and outside the CDU/CSU/FDP coalition, see Schulze and Jochem, 2007, pp. 682-686.

rises, but is rather based on the ratio of contributors to beneficiaries and thus includes developments in fertility, migration, and changes in labor force participation. As the government appointed Rürup Commission summarized it, "The sustainability factor has a self-stabilizing function, because it automatically responds to shifts in demography and employment: It increases pensions in the case of increase in employment and reduces them if the number of beneficiaries is growing faster than those of the contributors." (Rürup, 2003)

A technical/political argument for the sustainability factor and against the demographic factor was that because demographic projections predicted an uneven development (with big drops in one year and almost no changes in the next), the demographic factor might have led to the introduction of a "protection clause" for years with high drops (Krieger and Stowhase, 2009). There also was a political component to the decision to use a different form of automatic stabilizing mechanism: during the 1999 election, the SPD had run on a platform against the demographic factor and presented itself as the party defending pensions. Having promised the electorate to undo the demographic factor, it would have been political suicide to have proposed the same mechanism when they were in power (Krupp, 1999). In the debate over the sustainability factor, the SPD argued that the losses are distributed evenly between workers and pensioners, and are therefore shared. Overall, the debate over the sustainability factor was much more technical than the first one, mainly because all of the major parties except the PDS agreed that action needed to be taken. Thus while Germany did not move as far in the scope of its automatic stabilizing mechanism as Sweden, it did put in place a mechanism that would facilitate automatic downward pension adjustments—so long as politicians could agree to keep their hands off.

Rather than putting pension benefits on autopilot, however, the new pension formulae in fact coincided with several rounds of ad hoc policymaking. Most notably, in 2007 a CDU/CSU/SPD "grand coalition" enacted a gradual increase in the standard retirement (and thus the age for receiving "full" pension benefits) to 67 by the year 2029.

Keeping their hands off mechanisms intended to reduce pension spending proved to be politically impossible in the wake of the global financial crisis and with the 2009 elections approaching. The "grand" CDU/CSU/SPD government proved to be not so grand in its capacity to take shared blame for pre-scheduled cuts. On May 5th, 2008, the *Bundestag* passed the "Law to adjust pensions in 2008" which had the effect of increasing pension payments by 1.1 percent, instead of the 0.46 percent increase that would have resulted if the overall formula (wage growth plus the Riester and sustainability formulas) had been used without any adjustments. It also laid the basis for a more substantial increase in 2009, mainly by suspending the Riester Factor for two years – 2008 and 2009. The coalition government stated that this was only a temporary suspension of the Riester Factor and the government is still com-

mitted to contribution rate caps described earlier (Lexis-Nexis, 2008). The overall costs of the measure were estimated to total 2.6 billion Euro in 2008 and 2009 (Suddeuutsche Zeitung, 2008).

The law was supported by the grand coalition of SPD and CDU/CSU. The coalition argued that with this short term measure pensioners can participate in the economic upswing, without jeopardizing the long term sustainability of the pension system (Bundesministerium fuer Arbeit und Soziales, 2009). Another argument that was brought up by proponents during the debate was the fact that pensions have been increased only very limited in past years, while overall costs of life were increasing (Focus, 2008). The entire opposition – FDP, Green Party, and the Left Party - voted against the law, but for differing reasons. The Left party criticized the increase as "not enough" and launched an (unsuccessful) plan to increase pensions by 4 percent, and abolish both the Riester and the sustainability factors. The FDP and the Green party, on the other hand, voted against it because the increase in pension payments would have to be covered by higher contributions by future generations. But there were also voices within the coalition parties stating fears that the increase will have repercussions in the future. In the SPD, one of the most prominent critics was Rainer Wend, speaker for economic affairs of the party, who stated worries that the increase will add pressure to the working age population. In the CDU, the measure led to open criticism of Chancellor Merkel and the party establishment. Prominent opponents were CDU pension expert Jens Spahn and the leader of the "young group" of the Bundestag, Marco Wanderwitz. (Schweitzer, 2008). Other prominent critics, from both coalition and opposition parties, stated that the increase of 1.1 percent was not enough given that pensions have been increased only marginally in most years leading to 2008. Horst Seehofer, then vice president of the CSU and now Minister President of Bavaria, argued that the Riester factor should be taken out of the pension formula permanently as it is "unfair" and decreases the transparency of the pension calculation. Rainer Bruederle from the FDP, then opposition leader and today Economic Minister in the CDU/FDP coalition, stated that the 1.1 percent increase 'barely covers the increase in VAT." (Suddeutsche Zeitung 2008). One of the most vocal critics of the pension increase was the employer's association (*Bundesvereinigung der Deutschen Arbeitgeberverbände, or* BDA) who argued that it will lead to an increase in contribution payments after 2011 (Der Spiegel, 2008).

Controversy over pension funding formula continued in the spring of 2009, when pension payments increased by 2.41 percentage points in the East, and 3.38 in the Western *Bundeslaender*––the highest increase since 1994. The increase resulted from a number of factors in the pension adjustment formula, including a significant gross wage increase of 2.1 percent and the second year of the suspension of the Riester factor, which had already been set in 2008 as noted above (the two "suspended" years of the Riester factor will be replaced in 2012 and 2013). But the pen-

sion rise was also fueled by a 0.3 percent *increase* in the sustainability factor as employment growth shifted the contributor/beneficiary ratio. This change shows the potential volatility of an adjustment formula that is sensitive to short-term changes in employment. Chancellor Merkel and the grand coalition emphasized the importance of promoting spending in the global financial crisis and justified the increase in pensions as part of the German "stimulus package" (Der Spiegel 2009). Criticism came mostly from outside the coalition parties. As usual, the Left party criticized that the increase as insufficient. On the other side, critics claimed that the suspension of the Riester factor for two years will lead to a contribution rate of 20.7 percent by 2016, much higher than the government originally estimated (Branstetter, 2009).

In short, while the major parties remain committed to principles of the sustainability index and adjusting pension spending to Germany's changing demographic reality, they have not matched Sweden's success in achieving a durable cartel that colludes in sustaining and supporting the operation of the automatic stabilizing mechanism. Conflict over the stabilizing mechanism and the associated Riester factor have become part of pension conflict in Germany rather than preventing pension conflict.

Patterns and Lessons

This paper has attempted to identify key design choices for automatic stabilizing mechanisms in public pension systems. In addition, I have tried to identify key *political* challenges in adopting implementing and sustaining those mechanisms. A number of common patterns emerge, as well as some lessons for other countries that may be considering adopting ASMs.

The many options in design of automatic stabilizing mechanisms clearly have political implications as well as policy ones—indeed, politicians who fail to keep political feasibility in mind and overreach are likely to find disappointment in the short run or find their innovations in trouble in the medium-term.

With regard to policy adoption, automatic stabilizing mechanisms were mostly adopted in procedurally protected arrangements (Canada and Sweden), although the nature of those arrangements differed. Reform initiatives in each of the three countries attempted to dampen partisan identification of reform proposals and (with varying degrees of success) to obtain broad cross-partisan buy-in and insulation from partisan and interest group attacks. This is not saying that the adoption process sought to create (let alone succeeded in creating) social consensus on the stabi-

lizing mechanism or the broader reform packages of which they were a key element. Cartelization among key political actors and resigned acquiescence by key interest groups and the general public is a better description of what reform proponents sought (Weaver, 2006) than consensus. If they were skilled political managers and fortunate in the electoral and policy constraints they faced, that is what they got.

There is also a clear pattern with regard to "pay-offs" in reform packages that included ASMs. A first thing to note is that in the Canadian, Swedish and German cases, automatic stabilizing mechanisms were adopted as components of very large pension reform packages that were seen as addressing major pension shortcomings, and ASMs were not the main focus of the public debate in most debates. Moreover, most ASM reforms included delay at least in the anticipated initial *impact* of those mechanisms if not their legal coming into force—that is policymakers did not try to use them to force painful retrenchment or tax increases immediately. This is hardly surprising: if one of the main objectives of ASMs is to distance politicians from political blame, they cannot be expected to enact a mechanism that will immediately lead the public to identify the loss imposition with the party or politicians who put it in place.

With regard to framing perceptions, proponents of reforms invested substantial effort in focusing on the "sustainability" of their pension systems. While stressing the need to have pensions that would be available to later generations, politicians have tried to avoid offending the powerful senior voting bloc by demonizing "greedy geezers."

These patterns suggest several lessons that countries considering adoption of automatic stabilizing mechanisms in their own public pension systems. Certainly trying to develop a broad coalition and sense of "ownership" in the policy's success, as well as a long-term commitment among multiple parties, is one strategic lesson that emerges from the cases. But as Martin Hering (2008) has argued in the German case, cartelization can take many forms, and formal agreements may be asking too much of potential veto players—informal cooperation may be all that can be extracted, and it may be sufficient to allow the adoption of ASMs. Of course, commitments (especially informal ones) are not an ironclad guarantee against party defection, especially in a system like the United States where parties are themselves largely vehicles for individual political entrepreneurs, with weak policy identity and weak party discipline. The need to act when an election is still far away is a closely related lesson: building an agreement—tacit or formal--clearly takes time, and it is especially unlikely when parties are fearful of giving an electoral advantage to their opponents or losing such an advantage for themselves.

Inclusion of an automatic balancing mechanism within a broader package that lowers its visibility is also likely to make an ASM more adoptable. Inclusion in a broader package also allows for the inclusion of "sweetener" provisions that may

neutralize potential opposition. Provisions to delay and phase in potential pain may also facilitate adoption of automatic stabilizing mechanisms—for example ASMs can start with an "alarm bell" and have a "fail safe" phase in later, use initial solvency projection periods that are relatively short and lengthen over time, and mechanisms that spread out the adjustment rather than requiring cuts to be made all in one year. Such provisions may also help to sustain an ASM once it has been triggered, as will be noted below.

In terms of ASM implementation patterns, the highly trained bureaucracies in Canada, Sweden and Germany did not encounter major difficulties in setting up procedures under ASMs, but that is not a guarantee that such problems would not arise in countries where data, computer models and expertise are all in shorter supply. Only in the initial Canadian review is there some suggestion that governments may have interfered with projections and triggers, but once again the three countries that were the focus here are far from a random sample of nations in terms of bureaucratic expertise and insulation. However, the German and Swedish cases suggest that *ad hoc* interventions to mitigate potential benefit cuts can be a problem, especially during financial crisis and at the time of elections: ASMs are not as robust as their proponents had initially hoped. Special procedures such as legislative supermajority requirements might be useful in avoiding ad hoc interventions by politicians, but recent German and Swedish experience does not give much hope: once a proposal to ease ASM-imposed cuts is made by a large party, the incentives for other parties to climb on the bandwagon are strong.

Evidence on another important aspect of ASM implementation, whether it leads to changes in retirement and savings behavior, is not very clear, and it may never be so. A major problem in evaluating such claims is precisely that adoption of ASMs generally has coincided with other changes in policy and in economic conditions that cannot be separated from the effects of the ASMs. Getting workers to increase their retirement savings and delaying retirement requires *clear, consistent, and repeated messages*—and probably more incentives and direction—than automatic stabilizing mechanisms alone provide. The policy implication is that governments should not rely on ASMs alone to revise behavior. Repeated messages like those that Swedish workers receive in their annual "Orange Envelope" detailing their likely pension benefits under varying retirement ages and conditions of economic growth are almost certainly a better strategy. Increases in the standard retirement age provide an even clearer signal.

As noted above, 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 erosion over time, especially

when the losses that the ASM would impose are substantial (notably during financial crises), and when elections are impending.

Overall, erosion of ASMs appears to be a more important concern than reversal. Given the political appeal of stopping ASM-triggered pension cutbacks or payroll tax increases, preserving the integrity of ASMs is most likely where the parties that initially supported their adoption continue to be able to engage in cartel-like behavior with respect to pensions, or where the political system contains multiple veto points, or both. Continued cartel-like behavior in turn is more likely when there is no threat of defection or low threat of entry by new parties who see the elderly as a potential constituency. Spreading out the effects of ASMs on current beneficiaries over time so that they are less visible (e.g., not resulting in nominal cuts) is likely to make gradual erosion of benefit levels more acceptable, especially when those cuts are triggered as a result of financial crises (as with the recent Swedish cuts). Use of insulating mechanisms (e.g., supermajority requirements) to try to prevent erosion may also be useful.

Overall, the analysis in this paper suggests that automatic stabilizing mechanisms 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.

Table 1. Policy Design Issues for Automatic Stabilizing Reforms

KEY ISSUES	OPTIONS
Prospective or trend-based stabilization trigger	• Triggers based on actual trends in employment, retirement, fertility, etc. • Triggers based on combination of trends and projections • Triggers based on projected developments in fertility, life expectancy, labor force participation, productivity, etc.
Length of projection period ("crisis-preventing" versus "crisis-responding")	• Very long projection period (e.g., 75 years): usually makes demographic crisis appear more severe and requires bigger adjustments • Medium projection period (e.g., 25 years): usually makes demographic crisis appear less severe and requires smaller adjustments • Projection of next year's fiscal requirements: requires no adjustment until crisis is imminent, but may require large and rapidly escalating cuts then to prevent immediate program insolvency
Frequency of review	• Annual review • Triennial review • Once-a-decade-review
Speed and comprehesiveness of adjustment	• Adjust system costs fully and immediately for changes in life-expectancy and economic conditions • Adjust system costs partially for changes in life-expectancy and economic conditions, phased in over several (e.g., three to ten) years • Government makes adjustments needed to prevent immediate program insolvency

Table 1 continued

KEY ISSUES	OPTIONS
Automaticity of stabilizing adjustments ("fail-safe" versus minimal "alarm bell")	• Adjustments occur automatically with no government action required; extraordinary majorities required to overturn them • Adjustments occur automatically with no government action required; can be overturned with normal legislative procedures • Adjustments occur automatically with no government action required; can be overturned or varied by executive action alone • Government must ratify adjustments for them to take effect, but is required to make up-or-down decision on adjustments • Government is required to take some affirmative action (e.g., submit a balancing proposal to the legislature), but no further action required • Government required to explain inaction when triggers are activated, but need not do anything • Government required to issue regular reports on financial status of pension system but no further action required
Incidence of cost-bearing	• Adjustment achieved entirely through benefit reductions for both current and future retirees and/or retirement age increases for future retirees • Adjustment achieved entirely through benefit reductions and/or retirement age increases for future retirees; current retirees held harmless • Adjustment split evenly between benefit retrenchment and financing increases • Adjustment achieved entirely through revenue enhancement (e.g., increases in payroll tax rate and/or payroll tax base)
Protection from automatic cutbacks for low-income retirees	• Strong poverty-preventing income floor for low-income retirees through means-tested or minimum benefit • Partial protection from cutbacks for low-income retirees • No protection from cutbacks for low-income retirees

Table 2. Challenges and Opportunities for Pension Automatic Stabilization Mechanisms

Potential challenges and opportunities	Potential strategic responses	Potential risks and limitations of strategic responses
DESIGN CRITERIA		
• Political challenge: automatic triggers offer politically-insulated way to balance revenues and expenditures and lower total pension burden	• Institute strong "crisis-preventing" stabilizing mechanisms	• Weak, crisis-responding "alarm bells" may fail to achieve affordability objectives
• Adequacy/Senior Welfare Challenge: Lowering of future pension benefits may especially hurt low earners	• Use other tiers of pension system to shield low income pensioners from cutbacks	• Expanded means-tested pension may undercut savings incentives • Expanded means-tested pension may undercut affordability objectives
• Behavioral Change Challenge: Clear signals are needed to change workers' savings and retirement behavior	• Issue strong, clear and frequently updated information about impacts of mechanisms on future pensions	• Clarity about likelihood of future benefit cuts undercuts probability of adoption • Lack of clarity about extent of future cutbacks could lead to inadequate behavioral responses by workers
POLICY ADOPTION		
• Payoffs: Proposals for automatic stabilizing mechanisms mobilize concentrated opposition from seniors and/or labor organizations that may prevent program adoption	▪ Institute long lead-times and transition rules so that most current retirees are unlikely to be heavily affected by cutbacks ▪ Postpone initial impact until after next election ▪ Have gradual phase-ins so that cutbacks are less visible ▪ Improve benefit floors so that low-income retirees are shielded from ASM cuts	▪ Compromises made to win adoption of stabilization mechanisms undercut program effectiveness or delay their impact, and prove difficult to phase out ▪ NDC-based systems impose substantial concentrated costs where current system has progressive benefit structure
• Perceptions of Entitlement: Auto-matic cutbacks may be perceived as unfair, especially to retirees and near-retirees	▪ Reframe issue in terms of need to maintain fiscal solvency for future generations	▪ Counter-framing by potential opponents in terms of senior welfare is likely to be broadly attractive to voters

Table 2 continued

Potential challenges and opportunities	Potential strategic responses	Potential risks and limitations of strategic responses
▪ Procedures-Institutional veto points: Political systems with multiple veto points make it easy to block adoption of strong ASMs	▪ Try to obtain broad multi-party agreement using closed-door negotiations to weaken incentives to defect from agreement and generate blame against ASM proponents	▪ Opposition parties lack political incentives to forego blame-generating opportunities by criticizing potential automatic cutbacks through ASMs, especially in lead-up to election
▪ Procedures-Few venue-shopping opportunities since ASMs are likely to require legislation	▪ Utilize or create politically insulated decision-making procedures in formulating and adopting stabilization mechanisms	
POLICY IMPLEMENTATION		
▪ Implementing agency may lack adequate time, financial or organizational resources to achieve objectives	▪ Provide adequate lead time to allow program to plan and build administrative capacity ▪ Provide adequate funding and personnel to meet technical needs	▪ Politicians often want immediate results from policy initiatives
▪ Politicians may interfere with calculation of triggers or required program adjustments	▪ Increase independence of agencies charged with calculating triggers or outsource production of data	▪ Independence harder to enforce where civil service protections and professional norms are weak
▪ Politicians may intervene to block or modify implementation of automatic adjustments once they have been announced	▪ Phase in effects of automatic adjustments over several years so that impacts are less visible and politicians are less tempted to intervene	▪ Slower phase-in of contribution rate increases requires higher long-term equilibrium contribution rate
▪ Program clientele fail to adjust savings and labor supply because of unclear signals about degree of policy change	▪ Send clear, repeated signals through annual statements with several scenarios, etc.	▪ Sending clear signals about level of cutbacks under ASM before adoption may prevent adoption; similar signals after adoption may create a backlash, leading to erosion or reversal
POLICY SUSTAINABILITY		
▪ Political elites who pushed reform may lose office, leading to reversal of reform	▪ Create multiple veto point and super-majority requirements for enacting pension reform that make it difficult to reverse or erode	▪ Political systems with weak executive agenda control and few veto points will have difficulties in preventing repeal of ASM insulation mechanism
▪ Politically powerful groups may press for exempting their group from ASM ex post	▪ Frame issue as one of fairness—no group should be exempt from reform	

Table 3. Automatic Stabilizing Mechanisms in Four Countries

Provision	United States (Bismarckian Lite social insurance pension with trust fund)	Sweden (NDC pension tier)	Germany (DB social insurance pension with quasi-NDC stabilization factor)	Canada (Bismarckian Lite social insurance pension with trust fund)
Length of projection period ("crisis-preventing" versus "crisis-responding")	Crisis-responding: 75 year projection period, but stabilization mechanism applies only to next year	Crisis-preventing: Projected lifetime of each cohort in labor market	Crisis-preventing: ratio of pensioners to labor force	Crisis-preventing: 60 years
Comprehensiveness of adjustment	Weak: shift in calculating benefit inflation adjustment from CPI to lower of increases in wages or prices; no adjustment for changes in life expectancy or retiree/worker ratio	Strong crisis-preventing: Notional account balances and benefits adjusted for wage growth and overall economic growth, before and after retirement	Strong crisis-preventing:	Moderate crisis-preventing:
Speed of adjustment	Immediate	Three years (initially one year)	One year	Three years
Automaticity of stabilizing adjustments ("fail-safe" versus minimal "alarm bell")	Fully automatic	Fully automatic	Fully automatic	Fully automatic
Cost bearing (balance between expenditure reductions and revenue enhancements in adjustments)	Entirely through expenditures	Entirely through expenditures	Largely through expenditures	Split entirely between expenditures and revenue increases
Protection from automatic cutbacks for low-income retirees	Weak protection through highly restricted and low-benefit Supplemental Security Income	Strong protection through Guarantee Pension		Strong protection through universal Old Age Security and Guaranteed Income Supplement

Sources Cited

Anderson, Karen M., and Ellen M. Immergut (2007) "Sweden: After Social Democratic Hegemony," pp. 349-395 in Ellen M. Immergut, Karen M. Anderson and Isabelle Schulze, *The Handbook of West European Pension Politics*, Oxford and New York: Oxford University Press, pp. 349-395.

Anderson, Karen M., and Traute Meyer (2003) "Social Democracy, Unions, and Pension Politics in Germany and Sweden," *Journal of Public Policy*, vol. 23, no. 1, pp. 23-54.

Brandstetter, Barbara (2009) "So wird unsere Rente aufs Spiel gesetzt", *Welt am Sonntag*, Available at: http://www.welt.de/die-welt/finanzen/article5218526/So-wird-unsere-Rente-aufs-Spiel-gesetzt.html (November 15).

Brooks, Sarah M., and R. Kent Weaver (2006) "Lashed to the Mast?: The Politics of NDC Pension Reform," pp. 345-385 in Robert Holzmann and Edward Palmer, eds., *Pension Reform: Issues and Prospects for Non–Defined Contribution Pension Schemes*, Washington, D.C.: World Bank.

Brown, Andrew (2010) "Swedish Elections: The Impact of Immigration," *The Guardian*, September 18.

Bundesministerium für Arbeit und Soziales (2009) "Renten steigen um 2,41 bzw. 3,38 Prozent - gerechte Teilhabe am hart erarbeiteten Wohlstand," Available at: http://www.bmas.de/portal/31766/2009_03_16_renten_steigen.html (March, 16, 2009).

Busemeyer, Marius R. (2005) "Pension Reform in Germany and Austria: System Change vs. Quantitative Retrenchment," *West European Politics*, vol. 28, no. 3 (May), pp. 569-591.

"Cooking the books," (2007) *The Economist*, February 8.

Der Spiegel (2008) "Arbeitgeber werfen Regierung Zahlen-Trickserei bei Rentenerhöhung vor," Available at: http://www.spiegel.de/wirtschaft/0,1518,543130,00.html (March, 25, 2008).

Der Spiegel (2009), 'Renten steigen deutlich an', Available at: http://www.spiegel.de/wirtschaft/0,1518,613598,00.html (March, 16, 2009).

Deutsche Bundesbank (2008) "Outlook for Germany's Statutory Pension Insurance Scheme," Monthly Report, vol. 60, no. 4 (April) pp. 47-72.

Eggertson, Laura (1998) "Firing of CPP Watchdog to Be Probed," *Toronto Star*, September 23.

Federal/Provincial/Territorial CPP Consultations Secretariat (1996) An Information Paper for Consultations on the Canada Pension Plan, Ottawa: Department of Finance, February.

Ferguson, Derek (1997) "73% Premium Increases to Save Pensions: Martin," *Toronto Star*, September 26.

Focus (2008) "Renten steigen dank Formel-Trickserei," Available at: http://www.focus.de/finanzen/altersvorsorge/altersbezuege_aid_265158.html (March, 14, 2008).

Forsäkringskassan (2009) Orange Report: Annual Report of the Swedish Pension System 2008.

Franco, Daniele, and Nicola Sartor (2006) "NDCs in Italy: Unsatisfactory Present, Uncertain Future," pp. 467-492, in Robert Holzmann and Edward Palmer, Pension Reform: Issues and Prospects for Non-Financial Defined Contribution (NDC) Schemes, Washington, D.C.: The World Bank.

Galak, Oliver (2007) "Un hombre de Moreno asume una dirección clave en el Indec" ["A Moreno Man Assumes a Key Leadership Role in Indec"], La Nación [Buenos Aires], July 14.

Heclo, Hugh (1974) *Modern Social Politics in Britain and Sweden*, New Haven: Yale University Press.

Hering, Martin (2008) "Welfare State Restructuring without Grand Coalitions: The Role of Informal Cooperation in Blame Avoidance," *German Politics*, 17, 2, pp. 165-183.

Hinrichs, Karl (2005) "New Century - New Paradigm: Pension Reforms in Germany." In Giuliano Bonoli and Toshimitsu Shinkawa., eds., *Ageing and Pension Reform Around the World*, Cheltenham, UK: Edward Elgar Publishing, 47-63.

Holzmann, Robert, and Edward Palmer (2006) *Pension Reform: Issues and Prospects for Non–Financial Defined Contribution (NDC) Schemes*, Washington, D.C.: The World Bank.

Jack, Ian (1998a) "Don't Embarrass Martin: Fired Actuary Says Boss Twice Asked Him to Alter CPP Numbers," National Post, October 1, p. 3.

Jack, Ian (1998b) "Actuary Was Asked to Look at 'Alternative' CPP Analysis," *National Post*, December 3.

Jack, Ian (1999) "Federal Auditor Plans to Keep Sharp Eye on CPP," *National Post*, January 8, p. C3.

Jacobs, Alan M. (2009) "How Do Ideas Mater: Mental Models and Attention in German Pension Politics," *Comparative Political Studies*, vol. 42, no. 2 (February), pp. 252-279.

Krieger, Tim, and Sven Stoewhase (2009) "Diskretionaere rentenpolitische Maßnahmen und die Entwicklung des Rentenwerts in Deutschland von 2003–2008," *Zeitschrift fuer Wirtschaftspolitik*, vol. 1, pp. 36-54.

Hans-Jürgen Krupp (1999) "Grenzen von Rentenanpassungsformeln," *Wirtschaftsdienst 1999*, pp. 474-479.

Kruse, Agneta (2009) "Rör inte min pension! Om värdet av stabila spelregler även i nedgång," *Ekonomisk Debatt*, no. 7, pp. 6-10.

LexisNexis (2008) "Gesetz zur Rentenanpassung 2008 im Bundestag verabschiedet," LexisNexis, Available at: http://www.lexisnexis.de/rechtsnews/gesetz-zur-rentenanpassung-2008-im-bundestag-verabschiedet-138023 (May, 9, 2008).

Little, Bruce (2008) *Fixing the Future: How Canada's Usually Fractious Governments Worked Together to Rescue the Canada Pension Plan*, Toronto: University of Toronto Press.

Lundberg, Urban (2003) *Juvelen i kronan. Socialdemokraterna och den allmänna pensionen*, Stockholm: Hjalmarson & Högberg, 2003.

McDonnell, Patrick J. (2007) "Argentina's prices could cost an election," Los Angeles Times, April 19.

Sweden, Ministry of Health and Social Affairs (2002) *National Strategy Report on the Future of Pension Systems*.

Myles, John, and Paul Pierson (2001) "The Comparative Political Economy of Pension Reform," pp. 305-333 in Pierson, ed., *The New Politics of the Welfare State*, Oxford: Oxford University Press.

Office of the Superintendent of Financial Institutions, Chief Actuary (1997) *Canada Pension Plan Sixteenth Actuarial Report, September 1997*, Ottawa: Office of the Superintendent of Financial Institutions, September 24.

Pal, Leslie A., and R. Kent Weaver (2003) "The Politics of Pain," pp. 1-40 in Pal and Weaver, *The Government Taketh Away: The Politics of Pain in the United States and Canada*, Washington, D.C.: Georgetown University Press.

Palme, Mårten, and Ingemar Svensson (1999), "Social Security, Occupational Pensions, and Retirement in Sweden," pp. 355-402 in Gruber, Jonathan and David Wise (eds.) *Social Security and Retirement Around the World*, Chicago: University of Chicago Press.

Palmer, Edward (2002) "Swedish Pension Reform: How Did It Evolve, And What Does It Mean for the Future?," pp. 171-205 in Martin Feldstein and Horst Siebert, eds., *Social Security Pension Reform in Europe*, Chicago and London: University of Chicago Press.

Patashnik, Eric M. (2004) "After the Public Interest Prevails: The Political Sustainability of Policy Reform," *Governance*, (April 2003): 203-234.

Patashnik, Eric M. (2008) *Reforms at Risk: What Happens* After *Major Policy Changes Are Enacted*, Princeton: Princeton University Press.

Prince, Michael J. (2003) "Taking Stock: Governance Practices and Portfolio Performance of the Canada Pension Plan Investment Board," pp. 134-154 in G. Bruce Doern, ed., *How Ottawa Spends 2003–2004: Regime Change and Policy Shift*, Toronto: Oxford University Press.

Rürup, B. (2003) "Bericht der Rürup-Kommission: Nachhaltigkeit der Finanzierung der sozialen Sicherungssysteme", Technical report, Bundesministerium für Gesundheit und Soziale Sicherung.

Schulze, Isabelle, and Sven Jochem (2007) "Germany: Beyond Policy Gridlock," pp. 660-710 in Ellen M. Immergut, Karen M. Anderson and Isabelle Schulze, *The Handbook of West European Pension Politics*, Oxford and New York: Oxford University Press.

Schludi, Martin (2005) *The Reform of Bismarckian Pension Systems: A Comparison of Pension Politics in Austria, France, Germany, Italy and Sweden,* Amsterdam: Amsterdam University Press.

Schweitzer, H. (2008) "Rentenerhöhung 2008 + 2009 umstritten", Buero gegen Altersdiskriminierung, Available at: http://www.altersdiskriminierung.de/themen/artikel.php?id=2496 (April, 8, 2008).

Settergren, Ole (2001) *The Automatic Balancing Mechanism of the Swedish Pension System: A Non-Technical Introduction*, National Social Insurance Board, Working papers in Social Insurance 2001: 2.

Settergren, Ole (2003) "The Reform of the Swedish Pension System—Initial Results," *Revue Française des Affaires Sociales*, 2003, 4 (October-December), pp. 369-391.

Settergren, Ole (2010) "Impact of the Financial and Economic Crisis on the Swedish Pension System," *Social Security Observer,* no. 10 (September), http://news.issa.int/eng/newsletter/newsletter_repository/observer/en/social_security_observer_10/(article)/4547 accessed December 22, 2010.

Slater, David W., and William B.P. Robson (1999) *Building A Stronger Pillar: The Changing Shape of the Canada Pension Plan*, Toronto: C.D. Howe Institute, March.

Süddeutsche Zeitung (2008) "Kabinett beschließt Rentenerhöhung," Süddeutsche Zeitung, Available at: http://www.sueddeutsche.de/politik/altersvorsorge-kabinett-beschliesst-rentenerhoehung-1.219562 (April, 8, 2008).

Weaver, R. Kent (1988) *Automatic Government: The Politics of Indexation*, Washington, D.C.: The Brookings Institution.

Weaver, R. Kent (2006) "Political Institutions and Policy Cartels," Ian Schapiro and Steven Skowronek, eds., *Crafting and Operating Political Institutions*, New York: New York University Press.

Williamson, John B. (2004) "Assessing the Pension Reform Potential of a Notional Defined Contribution Pillar." *International Social Security Review*, 57, 1, 47-64.

Åsbrink, Erik (2008) "Höjt utgiftstak krävs för att rädda pensionerna" ["Extended ceilings needed to save pensions"], *Dagens Nyheter*, November 18, 2008.

Books published by members of the research unit Inequality and Social Integration

(only available from commercial or institutional retailers)

2010

Alber, Jens, Neil Gilbert (eds.)
United in Diversity? Comparing Social Models in Europe and America
Oxford/New York: Oxford University Press 2009, 464 pages

2009

Blome, Agnes, Wolfgang Keck, Jens Alber
Family and the Welfare State in Europe. Intergenerational Relations in Ageing Societies
Cheltenham, UK/Northhampton: Edward Elgar 2009, 342 pages

Kohler, Ulrich, Frauke Kreuter
Data Analysis Using Stata, 2nd Edition
College Station: Stata Press 2009, 388 pages

2008

Alber, Jens, Tony Fahey, Chiara Saraceno (eds.)
Handbook of Quality of Life in the Enlarged European Union
London/New York: Routledge 2008, 430 pages

Blome, Agnes, Wolfgang Keck, Jens Alber
Generationenbeziehungen im Wohlfahrtsstaat. Lebensbedingungen und Einstellungen von Altersgruppen im internationalen Vergleich
Wiesbaden: VS-Verlag 2008, 419 pages

Kohler, Ulrich, Frauke Kreuter
Datenanalyse mit Stata. Allgemeine Konzepte der Datenanalyse und ihre praktische Durchführung, 3. Auflage
München/Wien: Oldenbourg Verlag 2008, 398 pages

2007

Scherer, Stefani, Reinhard Pollak, Gunnar Otte, Markus Gangl (eds.)
From Origin to Destination. Trends and Mechanisms in Social Stratification Research
Frankfurt a.M.: Campus Verlag 2007, 323 pages

Zimmer, Annette, Eckhard Priller
Gemeinnützige Organisationen im gesellschaftlichen Wandel. Ergebnisse der Dritte-Sektor-Forschung, 2. Auflage
Wiesbaden: VS Verlag für Sozialwissenschaften 2007, 237 pages

2006

Alber, Jens, Wolfgang Merkel (eds.)
Europas Osterweiterung: Das Ende der Vertiefung?
Berlin: edition sigma 2006, 429 pages

Böhnke, Petra
Am Rande der Gesellschaft - Risiken sozialer Ausgrenzung
Opladen: Verlag Barbara Budrich 2006, 249 pages

2005

Birkhölzer, Karl, Ansgar Klein, Eckhard Priller, Annette Zimmer (eds.)
Dritter Sektor/Drittes System - Theorie, Funktionswandel und zivilgesellschaft-liche Perspektiven
Wiesbaden: VS Verlag für Sozialwissenschaften 2005, 315 pages

Böhnke, Petra
First European Quality of Life Survey: Life satisfaction, happiness and sense of belonging
European Foundation for the Improvement of Living and Working Conditions, Luxembourg: Office for Official Publications of the European Communities 2005, 100 pages

Discussion Papers
of the research unit
Inequality and Social Integration (since 2007)

(available via Informations- und Kommunikationsreferat, Wissenschaftszentrum Berlin für Sozialforschung, Reichpietsufer 50, 10785 Berlin, email: presse@wzb.eu; download at htttp://www.wzb.eu/publikation/)

2011

Kent Weaver
The Politics of Automatic Stabilization Mechanisms in Public Pension Programs
Order No.: SP I 2011 - 201

2010

Steffen Mau, Denis Huschka
Die Sozialstruktur der Soziologie-Professorenschaft in Deutschland
Order No.: SP I 2010 - 204

Ron Haskins
Balancing Work and Solidarity in the Western Democracies
Order No.: SP I 2010 – 203

Jens Alber
What – if anything – is undermining the European Social Model?
Order No.: SP I 2010 – 202

Eric Plutzer
Do Highly Exclusive Social Welfare Programs Increase Political Inequality? A Comparative Analysis of the 50 US States
Order No.: SP I 2010 – 201

2009

Ulrich Kohler
Estimating the Potential Impact of Nonvoters on Outcomes of Parliamentary Elections in Proportional Systems with an Application to German National Elections from 1949 to 2005
Order No.: SP I 2009 – 206

Petra Böhnke
Abwärtsmobilität und ihre Folgen: Die Entwicklung von Wohlbefinden und Partizipation nach Verarmung
Order No.: SP I 2009 – 205

Dietlind Stolle, Marc Hooghe
Shifting Inequalities? Patterns of Exclusion and Inclusion in Emerging Forms of Political Participation
Order No.: SP I 2009 – 204

Jens Alber
What the European and American welfare states have in common and where they differ – Facts and fiction in comparisons of the European Social Model and the United States
Order No.: SP I 2009 – 203

Yan Hao
Poverty and Exclusion in Urban China
Order No.: SP I 2009 – 202

Jens Alber, Florian Fliegner, Torben Nerlich
Charakteristika prämierter Forschung in der deutschsprachigen Sozial-wissenschaft. Eine Analyse der mit dem Preis der Fritz Thyssen Stiftung ausgezeichneten sozialwissenschaftlichen Aufsätze 1981-2006
Order No.: SP I 2009 – 201

2008

Karen M. Anderson
The Politics of Multipillar Pension Restructuring in Denmark, the Netherlands and Switzerland
Order No.: SP I 2008 – 205

Thomas A. DiPrete, Andrew Gelman, Julien Teitler, Tian Zheng, Tyler McCormick
Segregation in Social Networks based on Acquaintanceship and Trust
Order No.: SP I 2008 – 204

Ulrich Kohler, Richard Rose
Election Outcomes and Maximizing Turnout: Modelling the Effect
Order No.: SP I 2008 – 203

Jens Alber, Ulrich Kohler
The inequality of electoral participation in Europe and America and the politically integrative functions of the welfare state
Order No.: SP I 2008 – 202

Petra Böhnke, Ulrich Kohler
Well-being and Inequality
Order No.: SP I 2008 – 201