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The IMF's Involvement with Pension Issues: 2006–15

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ABBREVIATIONS

| | |
|-------------|--|
| AE | advanced economy |
| AFR | African Department (IMF) |
| APD | Asia and Pacific Department (IMF) |
| CPI | consumer price index |
| DB | defined benefit |
| DC | defined contribution |
| DSA | debt sustainability analysis |
| EC | European Commission |
| ECB | European Central Bank |
| EME | emerging market economy |
| EU | European Union |
| EUR | European Department (IMF) |
| FAD | Fiscal Affairs Department (IMF) |
| FSAP | Financial Sector Assessment Program |
| G–7 | Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom, and United States) |
| G–10 | Group of Ten (Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom, and United States) |
| GDP | gross domestic product |
| <i>GFSR</i> | <i>Global Financial Stability Report</i> |
| ICD | Institute for Capacity Development (IMF) |
| IDB | Inter-American Development Bank |
| ILO | International Labor Organization |
| LIC | low-income country |
| MCD | Middle East and Central Asia Department (IMF) |
| MCM | Monetary and Capital Markets Department (IMF) |
| MEFP | Memorandum of Economic and Financial Policies |
| NDC | notional defined contribution |
| OECD | Organisation for Economic Co-operation and Development |
| PAYG | pay-as-you-go |
| PROST | Pension Reform Options Simulation Toolkit (World Bank) |
| SIP | selected issues paper |
| SSN | social safety net |
| TA | technical assistance |
| WHD | Western Hemisphere Department (IMF) |

EXECUTIVE SUMMARY

This paper examines the IMF's work on pension issues during 2006–15. The social protection objectives of a public pension system are to ensure that individuals save adequately for their retirement and to minimize poverty among the elderly. A country needs to ensure the financial sustainability of its public pension system—that is, its ability to finance pension obligations without imperiling the government's overall fiscal position.

During the two decades prior to the evaluation period, the Fund's Executive Board came to view public pension systems as potentially a macro-critical issue affecting a country's fiscal policy and appropriate for consideration in the Fund's multilateral and bilateral surveillance. The post-financial crisis period provided reaffirmation of the Board's view but with the additional recognition that pension reforms had important equity and distributional implications. Equity issues related to pensions were highlighted in a number of Board papers as well as in Fund research. Nevertheless, the Board emphasized that the Fund staff should view detailed advice on pension systems and pension reform, as well as on equity issues, as at most an area of shared expertise, principally with the World Bank and the OECD, with the Fund focusing on how pension systems influence macroeconomic policy.

The evaluation period witnessed a marked expansion in the Fund's analysis and focus on pension issues, as reflected particularly in surveillance discussions with country authorities. Pension issues also featured in IMF-supported programs over the period (often accompanied by Fund technical assistance) due to a confluence of forces—a financial crisis and an aging population—not only in emerging market economies but also in a few advanced economies.

The Fund focused mainly on assessing the financial sustainability of public defined-benefit pension schemes, and proffered policy recommendations to address any fiscal vulnerability or risk. Occasionally, short-term budgetary pressures motivated the Fund's focus. Thus, the Fund's concern was more with the financial constraints underlying social protection than with social protection objectives themselves. Nonetheless, in considering remedial policies, the Fund was sensitive to the potential distributional or allocative consequences of policies, and it often sought to address inter- or intra-generational inequities, minimize adverse effects on low-income pensioners, and sustain employment. Since DC pension schemes—unlike defined-benefit schemes—do not create explicit fiscal obligations with macro-critical consequences, Fund surveillance of DC schemes proved more limited.

In seeking to ensure the financial sustainability of pension systems, the Fund did not always cover such key social-protection issues as the extent of coverage, the adequacy of retiree pensions, or the social sustainability of the pension system. Often, these issues were seen as outside the Fund's traditional mandate and beyond the competency of Fund macroeconomists. But the Fund strongly benefitted from collaboration with the World Bank and other institutions whenever feasible.

On balance, country authorities who were interviewed for the evaluation viewed the Fund's contributions positively, particularly as regards its efforts to diagnose and address financial problems related to pension systems while acknowledging the political sensitivity of the issues at stake and the limited revenues available.

I. INTRODUCTION¹

1. Social protection encompasses policies aimed at preventing or alleviating sharp reductions in well-being, particularly for the most vulnerable groups in society. Particularly in countries for which an aging population is in prospect, pension policy is an integral element of the social protection framework, because many members of society are either myopic in saving for their elderly years or too poor to undertake such savings. Facilitating consumption-smoothing and addressing poverty among the elderly are thus the two key social protection objectives of public pension policies.
2. During the last century, most advanced economies (AEs)—whose populations are almost all now rapidly aging or already aged—have put in place pension policy frameworks with largely universal coverage, not only for the elderly but also for their survivors and the disabled. Most emerging market economies (EMEs)—many also rapidly aging—have followed suit, though they still lag in their coverage of population and the adequacy of the financial protection provided. Most low-income countries (LICs) are at a much earlier stage in addressing these issues.
3. The design of a pension system has important implications for allocative efficiency and an economy's potential growth. Typically, social insurance schemes are financed by contributions from employers and employees. Raising the contribution rate to restore a scheme's financial viability not only raises the cost of labor and is burdensome to younger workers but also encourages informality in the labor market. Changing the retirement age for pension eligibility offers the prospect of slowing the rise in the pension system's elderly dependency rate,² reducing the number of years for which it is financing a retiree's pension and addressing the challenge that a shrinking labor force poses for growth. Pension policies may also influence a country's aggregate savings rate, whether by mandating pension savings or by influencing the perceived return on savings. Indirectly, savings disincentives may be implied by policies that provide a welfare floor for the elderly (e.g., through means-tested pensions). Pension funds have also become important players in the financial sector, reflecting the role of government-incentivized or mandated pension saving schemes. Such funds may serve as captive sources for government deficit financing and can be a source of systemic financial risk. Pension systems can foster redistribution from better-off workers to those in lower-income groups; between men and women; and between single and married persons. They can further influence the relative position of different cohorts over time. The tax treatment of pensions can influence the extent of redistribution implicit in a pension system.

¹ The paper benefited from the careful and thoughtful comments on various drafts from Alisa Abrams, Marcelo Selowsky, Shinji Takagi, and Ling Hui Tan; from the full cooperation of the IMF staff members interviewed for this evaluation; and from the insights of several pension experts outside the IMF who provided important inputs to my thinking, including Nicholas Barr, Elsa Fornero, and Platon Tinios.

² The elderly-dependency burden equals the ratio of the share of the country's 65+ population to the share of its population aged 15–64.

4. A key constraint on a public pension system's achievement of social protection objectives is that it should be financially sustainable over the long term. Countries recognize the limits on the taxes and contributions that can be asked of their citizens, and the important competing public policy objectives that a government must achieve. While fiscal sustainability is not an objective of social protection, it is a constraint that limits whether social protection objectives are accomplished and are perceived as satisfactory by citizens. This speaks to the criterion of "social sustainability." Specifically, is a pension system perceived as fair to those who are mandated to contribute, while not leaving many destitute in their old age? In many countries, the task of achieving these objectives is increasingly daunting. In many, the replacement rate—the ratio of the expected pension or income stream from pension savings to the average wage—may drop sharply in coming decades, pushing many elderly people into poverty. For workers outside the pension system (common in countries with significant agricultural and informal sectors), even this limited social protection may be lacking, with many elderly reliant at best on family members or on whatever public social safety net (SSN) may exist.

5. This paper evaluates the IMF's involvement in pension issues during 2006–15 with its member countries through bilateral surveillance, lending arrangements, and technical assistance (TA). It takes stock of the coverage of pension issues in the Fund's country work and the nature of the Fund's advice, clarifying the linkages to social protection. It addresses several evaluation questions: Were pension issues analyzed when they posed "macro-critical" questions? Did the Fund consider the distributional implications and trade-offs for social protection of countries' pension policy reforms? Was the Fund's policy advice supported by relevant analysis and international experience? Did the Fund coordinate its operational work on pensions with that of other institutions? Did country authorities find the Fund's pension advice relevant and useful?

6. To answer these questions, the evaluation examined Fund discussions with 126 member countries on pension issues. Evidence was drawn from Article IV Consultation staff reports and selected issues papers (SIPs), IMF-program-related documents, and TA reports by Fiscal Affairs Department (FAD) missions.³ To obtain more information, the evaluation conducted interviews with mission staff members.⁴ Where the Fund's involvement on pension issues in a country had been particularly active, interviews were also conducted with country officials.

7. In what follows, Section II provides background on the evolution of the Fund's knowledge and policy perspective on pensions during the evaluation period. The discussion takes account of the views of the Executive Board and of IMF management on the Fund's role in engaging countries on pension policies, and of the staff's contribution to developing the Fund's thinking about pension issues. Section III provides an overview of the coverage of pension issues in Fund surveillance, IMF-supported programs, and TA. Section IV assesses the Fund's

³ Financial sector adjustment program (FSAP) reports and fiscal transparency reports were not systematically reviewed although these might also occasionally have dealt with pension-related issues.

⁴ However, the frequent turnover of mission staff made it challenging in some instances to locate staff who were involved in IMF-country discussions that may have taken place many years ago.

engagement in pension issues based on the evaluation questions listed above. Concluding, Section V takes note of the lessons learned from the Fund's engagement in pensions and the implications for social protection, to help inform a possible future role for the Fund in a context where the demographic challenges of aging societies will intensify. Annex 1 presents a case study on the IMF's involvement with pension issues in its lending arrangements with Greece—arguably one of the Fund's most complex and challenging involvements during the evaluation period.

II. EVOLUTION OF THE FUND'S APPROACH TO PENSION ISSUES

A. Prior to the Evaluation Period

8. The IMF began to engage on pension issues in the late 1980s, following an Executive Board seminar that examined the fiscal implications of aging populations in the G-7 countries. At the conclusion of that seminar, Directors agreed that the Fund should not involve itself with member countries' social expenditures and related political and ethical issues, but should focus on their implications for macroeconomic developments and broad financial policies.⁵ In 1996, the Board discussed the impact of aging populations, the fiscal implications of public pension plans, and the envisaged role of the Fund in advising on pension reforms in AEs (IMF, 1996). Directors saw that substantial reforms of existing pension schemes would be unavoidable in many AEs but their discussion was inconclusive as to what would constitute a first-best public pension system. Directors emphasized that the Fund should leave specialized and detailed advice on pension systems to the Organisation for Economic Co-operation and Development (OECD) and the World Bank, and focus on the macroeconomic implications of alternative pension scheme approaches for savings, growth, budget positions, and labor markets in the context of its multilateral and bilateral surveillance work.⁶

9. At that time, the perspective of policymakers and academics on pensions had been significantly recast following Chile's adoption of defined-contribution (DC) reforms in the late 1980s and the subsequent pioneering of such schemes by the World Bank and in the private sector of industrial countries such as the United Kingdom and the United States (Box 1). Also, an unfunded variant of DC schemes—viz., notional defined-contribution (NDC) schemes—was developed by Sweden and subsequently adopted in Italy and Japan. In the wake of these changes, a number of countries requested TA on pension reform from FAD. Much of the Fund's substantive analytical work on pensions during this period focused on the relative merits of these

⁵ Informal seminars are held for Directors' information or for Directors to engage in discussion. While staff papers prepared for such seminars may serve as input for subsequent Board decisions, views expressed by Directors at the time do not constitute IMF policy.

⁶ In line with this role, the IMF participated in preparing the 1998 G-10 report on *The Macroeconomic and Financial Implications of Ageing Populations*, which highlighted the potentially adverse impact of demographic trends on the long-term fiscal position of governments (particularly because of pensions and healthcare costs) as well as the growing importance of pension funds as intermediaries in the financial sector.

alternative schemes and the macroeconomic and fiscal policy consequences of a country's decision to shift to a DC scheme.

Box 1. Defined-Contribution and Defined-Benefit Schemes

Barr and Diamond (2009) provide a succinct definition of the principal alternative types of pension schemes:

“Defined-benefit (DB) pension: A pension in which the benefit is determined as a function of the worker's history of pensionable earnings. The formula may be based on the worker's final wage and length of service, or on wages over a longer period, for example the worker's full career. A DB system may be fully or partially funded, or unfunded. In a pure DB arrangement, the sponsor's contributions are adjusted to meet obligations. Insofar as the degree of funding is maintained, contributions are adjusted to meet anticipated obligations; thus, the risk of varying rates of return to pension assets falls on the sponsor.

Defined-contribution (DC) pension: A pension in which the benefit is determined by the value of assets accumulated toward a person's pension. Benefits may be taken as a lump sum, as a sequence of withdrawals, or by purchase of an annuity. Thus, the expected discounted value of benefits is equal to the value of assets, referred to as benefits being determined actuarially. Thus, a pure DC plan adjusts obligations to match available funds, so that the individual bears the portfolio risk.

Fully-funded pensions pay all benefits from accumulated funds. Partially funded pensions pay benefits both from accumulated assets and from current contributions.... **Notional defined-contribution (NDC)** pensions are financed on a pay-as-you-go or partially-funded basis, with a person's pension bearing a quasi-actuarial relationship to his or her lifetime pension contributions.

Pay-as-you-go (PAYG) pensions ... are [largely] paid out of current revenue (usually by the state, from tax revenue) rather than out of accumulated funds. Partially-funded pensions are often referred to as PAYG.”

During the 1990s and early 2000s, many countries adopted a multi-pillar framework with a first tier consisting of a publicly managed, tax-financed pension system; a second tier involving a privately managed funded scheme (usually of a DC type); and a third tier based on voluntary retirement savings. In some countries, a non-contributory **“zero pillar”** may exist in the form of demogrant, social pension or general social assistance grant, typically financed by local, regional or national governments, largely with the purpose of providing basic protection in old age. The World Bank played an active role in promoting multi-pillar pension schemes. Many European transition economies, with World Bank assistance, adopted this approach, as did a number of Latin American countries.

10. IMF research on pension reforms at the time⁷ addressed such questions as: Would there be adverse fiscal consequences from making explicit the formerly implicit public debts of DB schemes? How would the systems compare in providing social protection to the elderly? What might be the consequences of shifting risks away from the government and on to the individual retiree? Would governments have difficulty in financing the fiscal transition costs of a shift? How did the alternative types of schemes compare in their capacity to meet the recognized long-term costs of populations that would see a large increase in their elderly-dependency burden? Might there be a risk of implicit fiscal liabilities if such mandated schemes in fact left many elderly persons in poverty? Would the shift to a DC scheme enhance aggregate savings and possibly growth? Would such a shift raise specific governance issues in the administration of a social security system? And, finally, would the emergence of a new element of the financial sector—competing private-sector institutions for pension management—have any consequences for the stability of the financial sector?

⁷ See Mackenzie, Gerson and Cuevas (1997), Heller (1998), Heller and Gillingham (1999), Hemming (1998), Barr (2000), Brooks (2000), and Gillingham and Kanda (2001), among others.

11. Substantively, this research offered the staff's insights into the macroeconomic, fiscal, distributional, and institutional-governance issues relevant for countries considering alternative pension reforms. Issues of equity in DB schemes were occasionally addressed, principally in terms of assessments of whether redistributive elements were introduced into the benefit formulas of a scheme (addressing intra-generational equity issues) or in terms of the relative burdens borne by different generations (addressing inter-generational equity issues). For DC schemes, analyses focused on what replacement rates could be achieved as a function of the net market rate of return, as well as on the assumed contribution rate and the length of the contribution period, while highlighting the potential variance in outcomes that could arise from differences in administration and investment-management costs and swings in the value of financial markets.

12. The Fund's institutional perspective on the relative merits of DB and DC schemes at the time was considered relatively neutral. Its comparisons of DC and DB schemes recognized the shift in who bears some of the obvious risks in such schemes (rate of return, inflation, longevity, etc.). Barr's (2000) conclusion in a staff working paper on the relative merits of DB and DC schemes was the most succinct: "The key variable is effective government; from an economic perspective the difference between PAYG [viz., DB schemes] and funding [viz., DC schemes] is second order; and the range of potential choice over pension design is wide."

13. The varied research activity on pension reforms within the Fund was not crystallized into an explicit IMF position on pension issues and there were no guidance notes, handbooks, or technical manuals providing operational guidance to Fund staff on how to advise member countries on pension reform. Staff were expected to seek out FAD advice, relevant IMF working papers or other publications, and, if available, TA reports on pension reforms (though these were often confidential). In a 2004 speech in Jackson Hole highlighting the importance of pension reform in the formulation of fiscal policy, the First Deputy Managing Director noted that the Fund had by then gained "substantial expertise" on such issues in AEs and was ready to help emerging market countries "develop and implement durable pension reform" in Article IV discussions and through the provision of TA (Krueger, 2004). An FAD pamphlet on Fiscal Adjustment for Stability and Growth published the following year included a box summarizing key issues in pension reform.⁸

14. Much of the IMF's work on pensions in the context of surveillance was linked to its efforts to ensure that a country's fiscal policy was financially sustainable over the medium to long term. A 2003 Board paper called for intensified surveillance assessments of fiscal sustainability in the context of public sector debt sustainability analyses (DSA). Directors underscored that the DSA was a valuable tool for staff to focus discussions with the authorities on medium-term

⁸ IMF pamphlets, technical notes, and/or manuals do not represent the views of the IMF or IMF policy. While they are often written as technical guidance to member countries on a given topic, such publications are illustrative of the analytical perspectives of staff and they may explicate a role for the IMF. Staff position/discussion notes similarly showcase the latest policy-related analysis and research being developed by staff. On occasion, these publications are the result of, or the input for, Board papers or may contain guidance to staff.

developments and the associated risks (IMF, 2003a).⁹ The *Managing Director's Report on the Fund's Medium-Term Strategy* (IMF, 2005) included fiscal and debt sustainability among the core macroeconomic issues that Article IV surveillance had to focus on, and called for staff reports on advanced and/or systemically important economies to spell out the regional and global implications of longer-term trends such as aging. With many pension systems typically implying long-term fiscal liabilities to the government, analyses of unfunded pension liabilities inevitably were brought into such assessments of fiscal sustainability.

15. Agreement between the IMF and the World Bank on their division of labor on issues relating to pensions was clearly stated in the joint Board paper on *Bank/Fund Collaboration on Public Expenditure Issues* (World Bank and IMF, 2003).¹⁰ The paper recommended, and Directors agreed, that "the Fund should be the lead agency on the aggregate aspects of macroeconomic policy and their related instruments, and the Bank on issues relating to public expenditure composition and efficiency," including related areas such as pension reform and social protection and development (IMF, 2003b).

B. During the Evaluation Period

16. The period 2006–15 saw further intensification of the IMF's concern with pension issues, in part because of the impact of the financial crisis and the increasing challenge of population aging. Widening fiscal deficits attributable to the recession or countercyclical stimulus magnified concerns about the large implicit public debts that had been accumulating in many public pension systems, and about the perceived fiscal risks that could also arise in health sectors dealing with older populations. A staff position note on long-term trends in the public finances of the G-7 called attention to the "formidable challenge" facing AEs: of reducing debt ratios at a time when public finances were increasingly commandeered by aging-related spending (Cottarelli and Schaechter, 2010). The financial crisis also highlighted the need to reduce current pension outlays, particularly in countries where a recession had increased their effective budgetary burden. In a Board discussion on modernizing the framework for fiscal policy and public debt sustainability analysis in 2011, Directors "saw merit in assessing pressures from age-related and healthcare spending" (IMF, 2011a).

⁹ During this period, IMF staff examined the challenges of long-run sustainability in the United States (De Masi and others, 2004); in Germany (in a 2006 symposium organized jointly with the Bertelsmann Foundation); and in general (Heller, 2003). A chapter in the September 2004 *Global Financial Stability Report* warned that the significant market presence of pension funds carried risks for the financial sector and implicitly for the public sector, to the extent of any implicit guarantees (IMF, 2004).

¹⁰ In the review of World Bank-Fund collaboration since the mid-1990s, World Bank and IMF (2003) reported that the Bank had taken the lead on pension reform, with the Fund complementing this assistance in a limited number of cases. Specifically, the Fund had focused its TA efforts on helping member countries assess and strengthen the macro-fiscal sustainability of social security systems (including in the short run); it had also provided advice on the design of pension systems, but on a more limited basis and only in the absence of Bank involvement. The review also noted that there was often "cross-participation by Bank staff in Fund missions that address pension issues" (World Bank and IMF, 2003).

17. By this time, most AEs had already been assessing the actuarial solvency of their pension systems and the fiscal-sustainability consequences of aging populations (particularly in the European Union, with the work of the EU's Ageing Working Group). But the financial crisis now stimulated the IMF to emphasize the importance of public pension reform. The Board discussed these issues in a number of informal seminars during the evaluation period. For example:

- In 2009, the Board discussed *The State of Public Finances—Outlook and Medium-Term Policies After the 2008 Crisis* (IMF, 2009a). The paper drew attention to the fiscal risks of funded DC pension schemes, which had become more apparent with the significant losses experienced in the wake of the financial crisis—losses that had particularly affected systemically important AEs and EMEs. It highlighted not only the scale of the losses but also the risks associated with pension-fund exposure to potentially toxic assets. It recognized that such funded schemes could potentially create calls for government support for population groups adversely affected by losses.
- In 2011, the Board discussed *The Challenge of Public Pension Reform in Advanced and Emerging Economies* (IMF, 2011b). The paper highlighted the fiscal sustainability challenges facing many countries and examined the pros and cons of alternative reforms for restoring fiscal sustainability to a pension system (particularly a DB-type system), including: increasing the retirement age, reducing the possibility of early retirement pensions, raising contributions, reducing the replacement rate, and reducing the degree of adjustment of benefits for inflation.¹¹ This was the first staff paper substantively to highlight pension reform issues; earlier studies had focused on the aggregate fiscal implications of aging populations. While fiscal sustainability was its principal concern, the paper also suggested that “equity should be a key concern of pension reforms” and that tax-financed “social pensions”—most likely means-tested—“could be the most promising tool to address old-age poverty in the medium term in countries with low coverage rates” (IMF, 2011b).
- In 2013, the Board discussed *Jobs and Growth: Analytical and Operational Considerations for the Fund* (IMF, 2013a). The paper emphasized the need for member countries to consider the effects of rapid population aging and the link between pension policies—such as the labor-tax wedge, the effective retirement age, and rules for disability pensions—and employment growth. It noted the role that fiscal policy and, in particular, transfers through public pensions, had played in reducing income inequality in AEs. It also recommended “putting public pension systems ... on sound financial footing, while expanding coverage of minimum ‘social pensions’ to a larger share of the population” (IMF, 2013a).

18. The post-crisis period also saw a spate of IMF research on pension reform in specific countries (e.g., Bangladesh, Caribbean countries, China, European countries, India, Japan, Lebanon, Mauritius, and Russia). Some research papers dealt with the macroeconomic

¹¹ With the exception of the retirement age, most of the reforms were particularly germane to countries with public DB schemes.

implications of potential reforms.¹² Others stressed how the adoption of DC pension reforms could affect the financial sector. An FAD staff discussion note (Soto and others, 2011) sought to clarify the fiscal implications of recent European initiatives that (mindful of the relative treatment of implicit and explicit debt) partly reversed the move to a DC scheme. The April 2012 *Global Financial Stability Report* highlighted the fiscal implications for governments and private pension funds of “longevity risks,” and offered insights on how sensitive a government’s pension liability might be to an underestimation of longevity (IMF, 2012a). In effect, the templates provided by these different efforts provided models for research that were broadly disseminated for consideration by Fund staff.

19. Fund staff received guidance on how to consider the implications for fiscal sustainability of a government’s existing commitments to its pension system; see, for example, the technical manual on public debt dynamics and fiscal sustainability (Escolano, 2010) and the guidance note for staff on the assessment of public debt sustainability analysis (IMF, 2013b). The goal of such analysis of the DSA was to clarify the risks to solvency and to a government’s capacity to meet its financial obligations to pensioners. The long-term fiscal impact of aging populations on healthcare spending was also recognized, as were the welfare consequences of a failure to honor pension commitments. The 2012 “Guidance Note for Surveillance Under Article IV Consultations” (IMF, 2012a) indicated that “staff reports and discussions should take a medium-term view, including a discussion of medium-term objectives and planned policies, especially possible policy responses to the most relevant contingencies” and noted that “[f]or some issues, e.g., the macroeconomic impact of aging population, an even longer view may be appropriate.”

20. Fund staff also received guidance on considering the macro and equity effects of pension reforms. The 2013 “Guidance Note on Jobs and Growth” (IMF, 2013c) advised staff working on AEs where population aging is an issue to “consider how the growth of health and pension expenditure can be limited while maintaining adequate health and pension insurance” and suggested that staff working on developing countries find ways to improve the progressivity of public spending, including on pensions (IMF, 2013c). The 2015 “Guidance Note for Surveillance under Article IV Consultations” (IMF, 2015a) contained a detailed section on public finances and fiscal policy, and highlighted that vulnerabilities, including long-term spending pressures (e.g., from healthcare, pensions, and education) are also relevant for assessing sustainability. It emphasized that surveillance should cover macro-critical “fiscal structural issues”¹³ and that “building on technical assistance, staff could provide advice in areas such as ... pensions and public healthcare.”¹⁴ In 2014, FAD provided area desk economists with a detailed pension template to facilitate benchmarking of the main indicators of a pension system and back-of-the-

¹² In this they were abetted by the increased sophistication and applicability of FAD’s Global Fiscal Model.

¹³ According to IMF (2015a), an issue is “macro-critical” if it affects, or has the potential to affect, domestic or external stability.

¹⁴ This would necessarily raise the issue of whether the IMF had sufficient TA capacity to provide such advice.

envelope calculations on the financial impact of most typical reforms. In 2015, FAD introduced a tool for the spreadsheet analysis of pension reforms.

21. Thus, the period following the 2008 crisis witnessed a progressively stronger reaffirmation that Fund surveillance should consider pensions among the key policy issues relevant to fiscal sustainability and macro stability and, to some extent, equity. As noted above, equity issues were highlighted in policy papers, e.g., IMF (2011b) and IMF (2013a). A research volume issued by FAD, *Equitable and Sustainable Pensions: Challenges and Experiences* (Clements, Eich, and Gupta, 2014) sought to put equity on an equal footing with fiscal sustainability and it expressed concern that “low or falling pension coverage will leave large segments of the population without adequate income in old age and at risk of falling into poverty.” The book explored specific intra-generational equity issues, including the treatment of the poor and of women and the issue of equity across generations, all in an international context. It also explored how equity issues had emerged in countries that had adopted different approaches in their public and private pension frameworks. It addressed the key policy trade-offs that need to be confronted in pension reform, namely, the allocative costs associated with redistributive policies, the impact on fiscal balances of more comprehensive pension coverage, and the potential consequences for equity of shifting risks more on to individuals and families and away from the state in the context of DC pension schemes.

22. It should be noted, however, that while IMF management and the Board highlighted the importance of considering the equity and distributional consequences of pension reforms, to the extent that the Board provided guidance to the staff on how much to concentrate on pension issues that go beyond fiscal sustainability, it either emphasized that this is an area of shared expertise with other multilateral institutions (notably the World Bank and the OECD) or explicitly said that such issues should more appropriately be dealt with by the World Bank. De facto, Fund staff have sought guidance on these issues from FAD, including from the content of papers prepared for the Board or from analytical papers prepared by the staff.

III. OVERVIEW OF THE FUND’S INVOLVEMENT IN PENSION ISSUES IN MEMBER COUNTRIES

A. Coverage: Where, When, and How Was the Fund Involved?

23. This evaluation reviewed Fund documents for 126 member countries where IMF missions had discussions with country authorities on pension issues during the evaluation period. The search process extended to most member countries, and particularly to those whose populations would be aging over the next several decades.¹⁵ The evaluation sought to be comprehensive, omitting only those countries with no evidence of pension-related discussions with the Fund staff. The omitted countries were mostly LICs with either very limited pension schemes or populations showing very little aging or aging only much later in this century. Ultimately, the sample reviewed in this evaluation comprises 31 AEs, 66 EMEs, and 29 LICs (Table 1).

¹⁵ The UN’s Demographic Division provides long-term forecasts of the age structure of countries.

Table 1. Sample Countries

| Advanced economies ^a | Emerging-market economies ^b | Low-income countries |
|--|---|--|
| Australia, Austria, Belgium, Canada, Cyprus, ^{P,T} Czech Republic, Denmark, Finland, France, Germany, Greece, ^{P,T} Hong Kong SAR, Iceland, Ireland, ^P Italy, Japan, Korea, Luxembourg, Malta, The Netherlands, New Zealand, Norway, Portugal, ^{P,T} Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States | Albania, ^P Antigua & Barbuda, ^T The Netherlands-Aruba, ^c Azerbaijan, ^T Bahamas, Bahrain, Belarus, ^{P,T} Belize, Bosnia & Herzegovina, ^P Brazil, Bulgaria, ^{P,T} Chile, China, Colombia, ^T Costa Rica, ^T Croatia, ^T The Netherlands-Curacao and Sint Marten, ^c Dominican Republic, Ecuador, Egypt, ^T El Salvador, ^P Estonia, Fiji, ^T Guatemala, Hungary, ^{P,T} India, Indonesia, Iran, Iraq, ^P Jamaica, ^{P,T} Jordan, ^T Kazakhstan, Kosovo, ^P Kuwait, Latvia, ^{P,T} Lebanon, Lithuania, ^T Macedonia, ^P Malaysia, ^T Mauritius, Mexico, ^T Morocco, Namibia, Panama, ^T Paraguay, ^P Peru, ^P Philippines, Poland, ^P Qatar, Romania, ^P Russia, St. Kitts & Nevis, ^P San Marino, Saudi Arabia, Serbia, ^{P,T} Seychelles, ^P South Africa, Sri Lanka, ^P Suriname, Thailand, ^T Trinidad and Tobago, Tunisia, ^P Turkey, ^P Ukraine, ^{P,T} Uruguay, ^P Vietnam | Armenia, ^P Bangladesh, ^P Benin, ^P Bolivia, Cameroon, Cabo Verde, Côte d'Ivoire, ^P Dominica, ^P Ethiopia, Georgia, ^{P,T} Grenada, ^P Guyana, Haiti, ^P Honduras, ^P Kenya, ^{P,T} Kyrgyz Republic, ^P Malawi, ^{P,T} Mali, ^P Moldova, ^{P,T} Nepal, ^T Nicaragua, ^P Samoa, St. Lucia, ^T St. Vincent and the Grenadines, ^T Senegal, ^P Tajikistan, ^P Togo, ^P Uganda, ^P Zambia ^T |

Notes: Omitted from the sample are, among emerging economies, Algeria, Angola, Argentina, Barbados, Botswana, Brunei, Equatorial Guinea, Gabon, Libya, Montenegro, Oman, Palau, Swaziland, Syria, Turkmenistan, United Arab Emirates, and Venezuela; among LICs, Afghanistan, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Congo, Rep. of, Congo DR, Djibouti, Eritrea, The Gambia, Ghana, Guinea, Guinea-Bissau, Kiribati, Lao PDR, Lesotho, Liberia, Madagascar, Maldives, Marshall Islands, Mauritania, Micronesia, Mongolia, Mozambique, Myanmar, Niger, Nigeria, Papua New Guinea, Rwanda, Sao Tome and Principe, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Tanzania, Timor-Leste, Tonga, Tuvalu, Uzbekistan, Vanuatu, Yemen, Pakistan, Zimbabwe.

Superscript P denotes that a country had an IMF-supported program where pension issues were discussed during the evaluation period; superscript T denotes that a country received TA on pension issues during the evaluation period.

^a Based on the *World Economic Outlook* classification. The following countries switched classification to an advanced economy during the evaluation period: Czech Republic (2009); Estonia (2011); Latvia (2014); Lithuania (2015); Malta (2008); San Marino (2013); Slovak Republic (2009); Slovenia (2007).

^b The following countries graduated from eligibility for Fund concessional facilities, and thus switched classification from a low-income country to an emerging market economy during the evaluation period: Albania (2010); Armenia (2013); Azerbaijan (2010); Georgia (2014); India (2010); Sri Lanka (2010). For statistical purposes, of those economies that switched classification, the classification assigned reflects the grouping comprising the majority of time spent by a country during the evaluation period.

^c While Aruba and Curacao and Sint Marten are not classified by the *World Economic Outlook*, these economies could be considered EMEs.

24. “Deep” discussions on pension issues were evidenced by: (i) an SIP prepared for an Article IV Consultation or a dedicated box or annex in the staff report; (ii) a TA report prepared by an IMF mission in response to a request by a country; and/or (iii) structural conditionality related to pensions in a program document.¹⁶ Deep discussions on pension issues occurred in 92 countries (Table 2).¹⁷ In the 31 remaining countries, less detailed discussions on pension policy occurred during Article IV Consultations or program discussions. These were usually mentioned in the staff report or a program-related document.¹⁸

¹⁶ For most countries, the Fund usually did not discuss pension issues every year. Typically, pensions were more intensively considered only in countries with an IMF-supported program or in surveillance cases where pension reform raised important public policy issues. Ferreting out these discussions required a detailed search of all references to pensions in all reports on a country during the evaluation period.

¹⁷ This excludes the SIPs discussing pension issues for Central and Eastern Europe: new member states and for the Eastern Caribbean Currency Union.

¹⁸ One difficulty limited the detail of what could be learned from surveillance or program documents: IMF procedure limits the length of staff reports for Executive Board meetings, such that the discussion of most substantive topics will be very spare, covering only the essential points.

Table 2. Deep Coverage of Pension Issues by the IMF, 2006–15

| TA (Reports) | Programs with structural conditionality involving pension issues ^a | Surveillance (SIPs unless otherwise indicated) |
|--|---|--|
| Antigua & Barbuda (2010), Azerbaijan (2011, 2012, 2013 ^b), Belarus (2010), Bulgaria (2010), Colombia (2012), Costa Rica (2013), Croatia (2008), Cyprus (2013), Eastern Caribbean Currency Union (2011), Egypt (2009), Fiji (2006), Georgia (2011), Greece (2010, 2012, 2013, 2014, 2015), Hungary (2008), Jamaica (2012), Jordan (2010), Kenya (2012), Latvia (2010), Lithuania (2010), Malawi (2006, 2015), Mexico (2012), Moldova (2011), Nepal (2014), Panama (2015), Portugal (2013, 2014), Serbia (2009), St. Lucia (2010), St. Vincent & Grenadines (2008), Thailand (2015), Ukraine (2015), Zambia (2013) | Albania (2006–09 PRGF/EFF ^c , 2014–17 EFF), Armenia (2010–13 ECF/EFF), Benin (2006–09 PRGF, 2010–12 ECF), Bosnia & Herzegovina (2009–12 SBA, 2012–15 SBA), Bulgaria (2004–07 SBA), Côte d'Ivoire (2009–11 PRGF, 2011–12 ECF), Cyprus (2013–16 EFF), Dominica (2003–06 PRGF), Georgia (2006–07 PRGF), Greece (2010–12 SBA, 2012–16 EFF), Honduras (2010–12 SBA/SCF, 2014–17 SBA/SCF), Hungary (2008–10 SBA), Iraq (2005–07 SBA, 2007–09 SBA), Ireland (2010–2013 EFF), ^d Jamaica (2013–16 EFF), Kosovo (2012–15 SBA), Latvia (2008–11 SBA), Malawi (2006 PRGF), Mali (2006–08 PRGF), Moldova (2010–13 ECF/EFF), Nicaragua (2006 PRGF, 2007–11 PRGF), Paraguay (2006–08 SBA), Peru (2006–08 SBA), Portugal (2011–14 EFF), Romania (2009–11 SBA), Serbia (2009–11 SBA), Seychelles (2010–13 EFF), Sri Lanka (2009–12 SBA), St. Kitts & Nevis (2011–14 SBA), Togo (2008–11 PRGF), Turkey (2006–08 SBA), Uganda (2010–13 PSI), Ukraine (2010–12 SBA, 2014–15 SBA), Uruguay (2005–06 SBA) | Albania (2009 box), Australia (2015), Austria (2007), Belgium (2012), Bosnia & Herzegovina (2010*), Brazil (2006, 2007, 2012), Bulgaria (2010, 2014), Central and Eastern Europe: New Member States (2015), Chile (2006, 2007 box), 2009, 2014*), China (2006, 2015 box), Colombia (2015), Costa Rica (2013, 2014), Cyprus (2007, 2011, 2014), Czech Republic (2008, 2010*, 2013), Denmark (2008, 2013, 2014), Dominica (2006 annex), Dominican Republic (2007), Eastern Caribbean Currency Union (2007, 2008, 2010, 2013), Ecuador (2015), El Salvador (2006, 2014 box), Estonia (2007, 2015), Ethiopia (2013), Finland (2007, 2012, 2014), France (2013, 2015), Germany (2015), Greece (2006), Guatemala (2014), Guyana (2007), Haiti (2015), Hong Kong SAR (2006), Hungary (2006), Iceland (2013), India (2006 box), Indonesia (2015), Iran (2015), Ireland (2007, 2012), Italy (2012, 2014), Japan (2008, 2012), Korea (2007, 2010, 2012, 2013), Latvia (2010), Lebanon (2015), Luxembourg (2006), Macedonia (2009, 2015), Malawi 2006 (box), Malta (2013 annex), Mauritius (2013 annex, 2014 box), Mexico (2011), Moldova (2010, 2012), Namibia (2006), The Netherlands (2015), New Zealand (2015), Nicaragua (2012), Norway (2007), Poland (2010, 2011, 2014), Portugal (2013, 2015), Romania (2007, 2012*, 2015), Russia (2008, 2013 box, 2014 box), St. Kitts & Nevis (2015 box), San Marino (2010), Serbia (2013), Slovak Republic (2011 annex), Slovenia (2006*, 2011 box, 2015), Spain (2011, 2013), Suriname (2014), Switzerland (2006, 2015 box), Turkey (2008 box, 2013), Ukraine (2010 box, 2011 box), United States (2011), Uruguay (2011, 2015) |

Notes: "Deep" coverage is defined as: (i) an SIP prepared for an Article IV Consultation or a dedicated box or annex in the staff report; (ii) a TA report prepared by an IMF mission in response to a request by a country; and/or (iii) structural conditionality related to pensions in a program document.

* Indicates the paper was descriptive rather than analytical.

^a Information in parenthesis refers to period and type of IMF-supported program engagement: ECF=Extended Credit Facility; EFF=Extended Fund Facility; PRGF=Poverty Reduction and Growth Facility; PSI=Policy Support Instrument; SBA=Stand-By Arrangement; SCF=Stand-By Credit Facility.

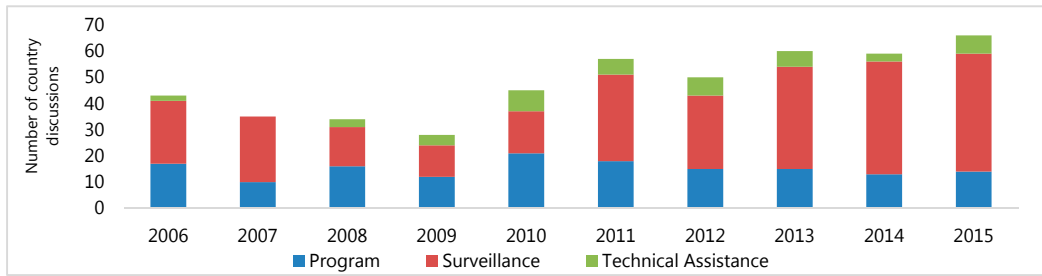
^b No TA reports were available for the 2011 and 2013 TA missions.

^c Structural conditionality set by the European Commission.

^d While no related structural conditions were included in the program, pension issues were a focus of policy discussions.

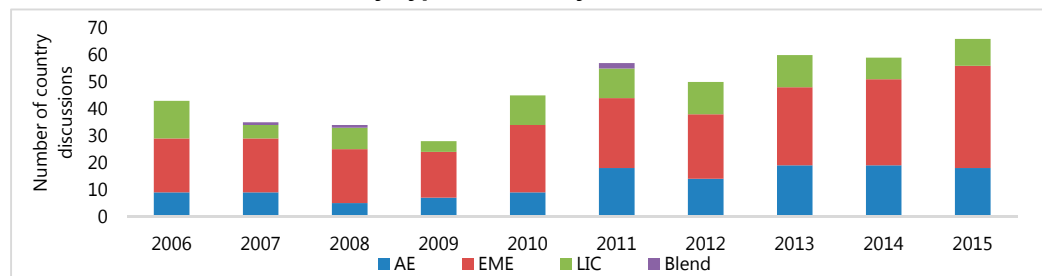
25. Overall, the Fund significantly increased its involvement in pension issues during the evaluation period. The incidence of pension discussions—whether in the context of an Article IV discussion, an IMF-supported program, or a TA mission—fell initially but rose in 2010 through 2015 (Figure 1), with an average of 37 discussions in the first five years and 57 in the second. For each type of economy, pension issues were much more intensively discussed after 2009, with a rising frequency among EMEs in 2013–15 (Figure 2). Across the sample as a whole, roughly 60 percent of the Fund's involvement took place during an Article IV surveillance mission (viz., outside of a program context), while for another 10 percent of countries, the Fund's involvement was in the context of a TA mission.

Figure 1. Frequency of IMF Discussions with Authorities on Pensions, by Type of Engagement, 2006–15



Source: Author's calculations.

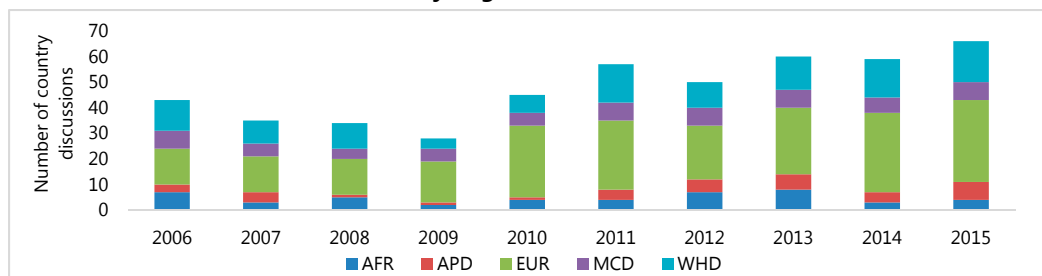
Figure 2. Frequency of IMF Discussions with Authorities on Pensions, by Type of Economy, 2006–15



Notes: Blend data reflect discussions with the Eastern Caribbean Currency Union.
 AE=advanced economy (per the *World Economic Outlook*); EME=emerging market economy; LIC=low-income country (per the list of countries eligible to use the Fund's facilities for concessional financing).
 Source: Author's calculations.

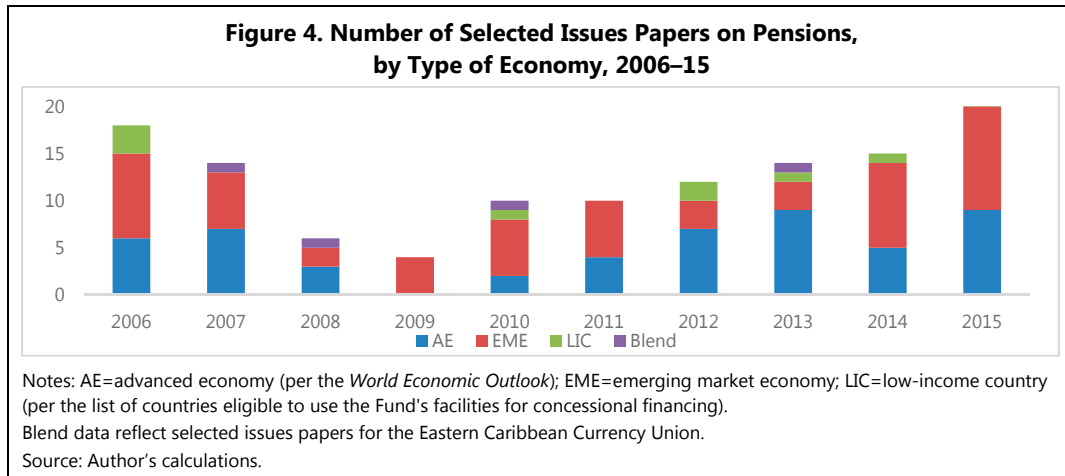
26. Regionally, European Department (EUR) countries dominated the countries for which pensions were a topic of discussion. Next in the ranking were Western Hemisphere Department (WHD) countries, while Asia and Pacific Department (APD), African Department (AFR), and Middle East and Central Asia Department (MCD) countries each accounted for roughly 10–13 percent of the involvement (Figure 3). In the broader Eurasian region, virtually all of the EMEs (except Turkey) for which pension issues were discussed were transition economies in Eastern and Central Europe or the former Soviet Union.

Figure 3. Frequency of IMF Discussions with Authorities on Pensions, by Region, 2006–15



Note: AFR=African Department; APD=Asia and Pacific Department; EUR=European Department; MCD=Middle East and Central Asia Department; WHD=Western Hemisphere Department.
 Source: Author's calculations.

27. Richer coverage of pension issues in bilateral surveillance—evidenced by SIPs or by boxes or annexes in Article IV staff reports—dropped in the middle of the evaluation period, and then rose during 2011–14, with a further sharp increase in 2015 (Figure 4). SIPs on pension issues were prepared at least once during the evaluation period for 90 percent of the 31 AEs and more than 40 percent of the 66 EMEs in the sample.¹⁹ TA on pension issues—which reflects both demand and supply factors—doubled during the evaluation period, from 2 to 4 countries on average per year in 2006–10 to 3 to 8 countries per year in 2010–15. Just under 30 percent of the EMEs in the sample received TA, compared to 25 percent of AEs and 10 percent of LICs.



28. These statistics only reveal the number of countries that had discussions on pensions with the Fund in a given year. Equally of interest is whether the Fund's involvement on this issue in a country was ongoing and active or merely occasional. Here involvement is characterized as "intensive" either if pensions were mentioned in at least four of the Article IV staff reports for the country during the evaluation period or if they featured in discussions related to IMF-supported programs. Among the 31 AEs, there were 4 (Cyprus, Greece, Ireland, and Portugal) in which pension reform was part of the program discussions, and among the AE surveillance cases there were at least 16 countries for which Fund involvement was "intensive" (as characterized above) over the evaluation period. Of the 66 EMEs, there were 25 where pension reforms featured in program discussions²⁰ and another 16 where coverage of pension issues in surveillance discussions was "intensive."

29. Long-term projections assessing the financial sustainability or evolution of pension outlays featured in about half of the SIPs and more than a third of the TA reports reviewed. In contrast, discussion of pension reform options, or of their potential equity or allocative effects,

¹⁹ In general, once a topic has been covered in an SIP, it is unlikely to be treated again for at least five years. Appendix Table A.1 lists all the SIPs, annexes, or text boxes identified for this evaluation.

²⁰ Of these, structural conditionality on pensions featured in the following EMEs: Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, El Salvador, Georgia, Hungary, Iraq, Jamaica, Kosovo, Latvia, Macedonia, Paraguay, Peru, Romania, St. Kitts and Nevis, Serbia, Seychelles, Sri Lanka, Turkey, Ukraine, and Uruguay.

occurred in fewer than a quarter of SIPs and TA reports, though again with increased frequency in the second half of the evaluation period. In its TA to member countries, the Fund tended to focus more on parametric reforms to existing DB schemes.

30. Early in the evaluation period, pension issues were occasionally reflected in structural conditionality in Fund-supported programs, with no obvious regional concentration. Yet, by 2008, structural conditionality on pension issues had come to be included in many more programs in Europe than in other regions, with a high of 12 programs with such conditions by 2010 (in contrast with no more than 4 in any other region). European countries' predominance persisted through 2015, dropping gradually to about 7 programs. It reflected both the aging of these countries and the well-developed nature of European pension systems (often with excessively generous provisions that entailed both short- and long-term budgetary challenges). In other regions, structural conditionality on pension issues typically featured in 3 to 4 programs at most. The countries, programs, pension policy objectives, and specific conditionality measures are listed in Appendix Table A.3.

31. Often conditionality (particularly in the form of structural benchmarks) was used in IMF-supported programs to encourage pension reform. The evaluation identified 77 structural conditions related to pension reform across IMF-supported programs for 34 countries during the evaluation period. One-third of the conditions called for actions by the authorities to articulate a strategy for pension reform and to clarify the underlying objectives and trade-offs. Such actions were intended to form the basis for more specific policy steps to address weaknesses (principally those creating excessive fiscal pressures) in the prevailing pension system. Almost 40 percent of the program conditions called for steps involving submission of pension reform legislation to parliament and the requirement of parliamentary approval of the said legislation.

32. The IMF's motivation for the conditionality on pension reforms ranged from: (i) the need for parametric reforms to address short-term budgetary pressures or reduce a deficit in the prevailing pension scheme; (ii) rationalizing an actuarially unsustainable pension system; (iii) redressing preferential pensions accorded to particular occupational groups; (iv) addressing constraints on the investment portfolios allowed for private pension funds (typically to allow them greater exposure to foreign assets or to loosen provisions that required them to hold government bonds); (v) strengthening the regulatory policy framework as it related to pension funds; and occasionally (vi) addressing issues of elderly poverty or broadening the coverage of the pension system. Long-term sustainability and short-term budgetary restraint were the dominant motives, featuring in 21 and 18 of the 34 countries, respectively, as pension-related structural conditionality.

B. Motivation(s): Why Did the Fund Get Involved?

33. As mirrored by the statistics on conditionality, the principal underlying motive for the IMF's focus on pensions during the evaluation period was the need for pension systems to achieve long-term fiscal sustainability. To a large extent, this concern can be linked to demographic trends:

- Of the 31 AEs in our sample, long-term fiscal sustainability was highlighted in 23 countries. Virtually all of these AEs will have a high elderly-dependency burden by 2050 and almost all are rapidly aging, i.e., the elderly-dependency rate will rise by more than half from its 2015 level.²¹ In only 8 of these countries (France, Hong Kong, Iceland, Italy, New Zealand, Singapore, Sweden, and Switzerland) was fiscal sustainability *not* the principal concern that motivated the Fund's discussion on pension issues.
- Similar results emerged for the EMEs: long-term fiscal-sustainability concerns dominated the pension discussions in 46 of the 66 EMEs in our sample. Virtually all of the sample EMEs could be characterized as rapidly aging.
- In the 29 LICs where there was discussion on pensions, long-term fiscal sustainability was the principal factor in at least 18; 17 of the LICs in the sample exhibit demographic trends suggestive of an aging population.

34. Short-term budgetary pressures were a second important factor motivating the IMF's focus on pensions. Such pressures, in addition to long-term pressures, were an issue in 5 AEs. Among EMEs, immediate budgetary concerns were the principal focus in 19 countries in our sample, while among LICs, such concerns arose in 6 countries.

35. Beyond these sources of fiscal concern, Fund staff viewed pensions as influencing other macro-critical issues. The following arguments often surfaced. First, with pensions largely financed by payroll taxes, high mandated contribution rates could adversely affect employment demand; similarly, pension-benefit provisions might encourage many workers to drop out of the labor market (as happened in Greece) or limit their participation (as in Japan and Germany). Pension provisions could also influence emigration rates (as in Lithuania). Second, in countries with mandated DC schemes involving private pension-fund managers, regulations on investment portfolios (concerning foreign assets or government bonds) could have important impacts on domestic liquidity, the exchange rate, and government borrowing costs, with obvious potential macroeconomic policy effects. Third, pension systems could influence both savings rates and longer-term growth prospects. In a few countries, including China and Malaysia, the absence of an adequate social insurance framework was seen as a factor underlying excessively high savings rates, which in turn affected macroeconomic policy and even global economic adjustment. In

²¹ We define 30 percent as a high or heavy elderly-dependency rate. An increase in this rate by more than 50 percent from its 2015 level by 2050 is defined as rapid.

other countries, pension policies affected the fiscal rules adopted to constrain macroeconomic and foreign-exchange-rate policies (sometimes in the context of the returns on natural resources).

36. In some countries, issues of elderly poverty or equity motivated the Fund staff to focus on the nature of pension policy. As discussed below in Section IV, such poverty issues were flagged in 2 AEs, 16 EMEs, and 3 low-income economies. Issues of inter-generational and intra-generational equity were highlighted in 6 AEs and 9 EMEs.

C. Content: What Advice/Recommendations Did the Fund Offer?

37. During the evaluation period, Fund staff discussed a range of policy recommendations related to pension reform with country authorities. Some of these recommendations focused on immediate budgetary pressures. Others were tailored to achieve long-term sustainability for the pension system and were expected to be implemented only gradually. They primarily featured in surveillance discussions but occasionally emerged as structural conditions in IMF-supported programs.

38. In countries with DB schemes the following specific recommendations were most commonly offered:

- *Raising the retirement age:* This was frequently discussed and was often embodied in structural conditionality (as in Albania, Greece, Ireland, Jamaica, Portugal, Serbia, and Ukraine).²² The Fund staff usually argued for a gradual increase in the specific age of eligibility for a full pension (often narrowing the differential between men and women). Such proposals directly confronted the need to correct for changing demographic conditions that implied far longer periods of likely pension income than had been foreseen when such pension schemes were established and their contribution rates determined.²³ In Russia, for example, staff argued that a later retirement age would increase the years of contributions and thus effectively increase the ultimate replacement rate. In Hungary, staff noted that a gradual increase in the retirement age in a DC scheme would shorten the payout period while lengthening the period of contribution to an individual's retirement account, thus helping to sustain or increase the effective replacement rates of second-pillar pensions (which would otherwise drop significantly with rising longevity). In Mauritius and Moldova, on the other hand, staff noted that

²² Programmed increases in the retirement age were included as structural benchmarks in IMF-supported program arrangements with Albania (2014), Jamaica (2013), Portugal (2013, 2014), and Ukraine (in relation to women's retirement age in 2009, 2011, 2015). Ireland initiated such increases in connection with its policy program with the IMF. Serbia agreed in 2010 to tighten its early retirement rules (though this was not a structural benchmark in the SBA).

²³ Fund staff increasingly argued for automatic mechanisms that periodically link adjustments of the retirement age to observed changes in life expectancy, similar to those introduced in a number of countries such as Aruba, Colombia, Cyprus, Netherlands, Norway, Portugal, Slovak Republic, Spain, Sweden, and Switzerland.

raising the retirement age could have a disproportionately adverse impact on the lifetime pension receipts of the poor relative to the well-off (who tend to live longer).²⁴

- *Tightening eligibility for early retirement pensions:* Recommendations ranged from ensuring actuarial fairness in what benefits are received in the case of early retirement (as in Cyprus and Serbia), to more restrictive pension levels for early retirees, or limitations on any pension benefits for such early retirees.
- *Eliminating preferential pension treatment of particular groups:* The issue of “in” and “out” groups—where some cohorts or categories of workers receive preferential pensions—was often raised with authorities. In a few cases, such as Latvia, some cohorts had been unintended beneficiaries of policy changes, as a result of the way in which pension indexation policies had been pursued at different points of time. In numerous other cases, pension systems accorded participants differential treatment by gender, occupational group, or employment group (as in Cyprus, Iran, Ireland, Jamaica, Jordan, Latvia, Lebanon, Macedonia, Moldova, Nicaragua, Paraguay, Poland, Portugal, Ukraine, and Uruguay). But while eliminating these preferences would have contributed to intra-generational equity, the political sensitivity of such a change often blocked reform.
- *Changing the contribution rates of workers and employers:* Recommendations to reduce contribution rates emerged when the rates were seen as unjustifiably high vis-à-vis the pension benefits to be received (as often arose in situations where the pension system was inappropriately providing benefits of a social-assistance character) or when a high contribution rate was seen as burdensome to employers and employees and as either deterring formalization of the labor market or contributing to noncompliance in contributions (as in Japan).²⁵ More common were recommendations to increase the contribution rate to help restore fiscal sustainability. Such recommendations were sometimes tempered by concern that contribution rates might already be too high or that adverse labor-market effects might ensue (e.g., in Cyprus, El Salvador, Estonia, Japan, Netherlands, Portugal, Seychelles, and Uruguay).²⁶ In some instances, the Fund made this

²⁴ In Mauritius, the staff provided analysis that 40 percent of the basic pension is paid to the 20 percent who are richest, because they live much longer than the poorer cohorts.

²⁵ Where rates were seen as unjustifiably high, such a recommendation was typically combined with a suggestion to raise the value-added tax rate as a complementary source of financing for pension outlays. Where a high contribution rate was seen as deterring participation in the formal labor market, or deterring pension contributions, the staff recommended that eligibility for government benefits in other spheres (notably agricultural subsidies or health insurance) be withheld from people who had not made pension contributions—an approach that was discussed in Greece, Serbia, and Ukraine.

²⁶ An increase in contribution rates essentially represents a trade-off of concerns. The benefit is to protect the overall short- and long-term financial viability of the pension system and to continue funding the benefits to existing retirees. The cost is the additional burden on workers and the reduced rate of return obtained by current contributors. The latter can also negatively affect the supply of labor, strengthen incentives for participation in

- recommendation in connection with a noncontributory pension scheme, as happened in Jamaica, where the authorities agreed, as part of the Fund program in 2013, to seek legislation imposing pension contributions on public sector workers and thus enabling the burden of civil-service-pension financing to be shifted from the general taxpayer on to civil-service employees.
- *Reducing pension outlays:* In cases where there were immediate budgetary pressures, the most common recommendation for reducing pension outlays involved a freeze in pensions, particularly when overall pension outlays were large as a share of GDP. Less drastic recommendations involved revisions in the approach used for indexing pensions, typically shifting from wage indexation to either price indexation or a blend of wage and price indexation (the so-called Swiss approach, typically 50-50).²⁷ The nature of the indexation mechanism for pensions was discussed often in Fund surveillance (e.g., in Aruba, Brazil, Czech Republic, Jordan, Latvia, Norway, Poland, Slovak Republic, and Vietnam) and was an issue in some IMF-supported programs as well (e.g., in Jamaica, Ireland, Portugal, and Ukraine). Revising the indexation mechanism was a highly sensitive political issue in some countries. In some cases, to achieve a more gradual long-term financial impact, the Fund staff recommended (in the context of either a TA mission or a Fund program) the country authorities to reduce the benefit accrual rate for each year of contributions, revise the basis on which pensions were determined (away from the final salary and toward a lifetime-adjusted career average or the average of a defined number of final years of salary), or reduce the scale of benefits for new entrants to the scheme (as in Ireland, for new entrants to the civil service).
 - *Rationalizing spending on survivors' pensions and other social assistance categories:* Pension schemes that provide generous survivor benefits and/or disability pensions may be burdened with social assistance costs that are arguably not a form of social insurance. Financing of social assistance payments through the pension system arose as an issue, *inter alia*, in IMF discussions with Albania, Azerbaijan, Bosnia, Bulgaria, Fiji, Georgia, Lithuania, Moldova, and Serbia. IMF staff recommendations for reform included: financing social assistance benefits through the general budget rather than from wage-based contributions to the social insurance system; tightening the eligibility rules for survivors' benefits; and tightening the criteria for disability benefits.

the informal sector, and disproportionately increase the burden on younger generations because it is people of working age who pay pension contributions.

²⁷ Indexing to prices will lead to a gradual decline in real pensions relative to the average wage as labor productivity increases. It might only be seen as palatable in the short run if presented as a way of financing a cut in contributions, with current take-home pay raised at the expense of lower average PAYG pensions during retirement. Over time, reliance on price indexation can become challenging from a political economy perspective, as pensioners would not share in the benefits from productivity growth. This leads to the problem that pension benefits, while fiscally sustainable, become no longer "socially sustainable," as the elderly perceive a deterioration in their living standards (particularly if housing prices increase faster than the consumer price index).

- *Taxing pension incomes:* The consensus view of tax-policy practitioners is that taxes should be collected on pension income at some point over the life cycle.²⁸ Recommendations leading to ultimate taxation of pension income (in situations where pension contributions were originally deductible from taxable income) were made in the context of IMF pension discussions with Ireland, Japan, Lithuania, Portugal, and Sweden.
 - *Fostering equity and protecting the elderly poor:* as discussed below in paras 56 and 57, policy proposals in Article IV reports (often in SIPs) were motivated by expressed staff concerns about low replacement rates, the inadequacy of a safety net for the elderly, poverty among the elderly, the absence of pension system coverage for large segments of the population, or a bias toward middle- and upper-income groups. In some of its TA or program negotiations, the Fund staff offered guidance to country authorities on the criteria for specific cutbacks in benefits (as in Greece, as discussed in Box 2 and Appendix I) with a bias toward protecting those elderly receiving the lowest benefits and toward containing or even cutting back the benefits received by higher-income pensioners.
39. On balance, certain patterns can be seen in IMF advice:
- Many transition countries in Eastern and Central Europe were not only aging rapidly but had features in their pension systems that favored specific groups in the economy (certain categories of workers, the military and/or the police) and also had been used to absorb (through early retirement or disability provisions) many older workers who had become unemployed in the economic transition process. Generosity in the benefits of the system or in the retirement-age provision, particularly for women, contributed to the costliness of these systems. Fund staff sought to address these sources of costly pensions (recommending increasing the retirement age, freezing pensions for a period, limiting the generosity of the pension-indexation mechanism, or reducing the special benefits accorded to certain groups) particularly as part of program conditionality (as in Albania, Bosnia, Bulgaria, Romania, Serbia, and Ukraine).
 - In some AEs (notably, Cyprus, Ireland, Portugal, and Greece), and a few EMEs (Jamaica, Seychelles, and Uruguay), the financial crisis was the catalyst that forced reconsideration of costly budgetary features of pension schemes (such as a low retirement age, costly retirement-benefit levels, favorable pensions for public sector workers, and favorable tax treatment of pensioners relative to other groups) that were maladapted to the aging of their populations. In Greece, many of these features figured prominently in the program discussions, making it the unusual case in which the Fund had to weigh in heavily on the

²⁸ Many pension schemes encourage savings for retirement by making contributions tax-deductible from gross income at the time of contribution and exempting from tax the income earned on such savings while it is accumulating in a pension savings account. In such cases, the standard treatment is for the pension to be taxed when it is drawn from the pension account; if withdrawals are not taxed, the pension system becomes a mechanism for tax avoidance.

social protection front even as it sought to realize an immediate budgetary adjustment (Box 2).

Box 2. The IMF and Pension Reform in Greece

The IMF's experience in Greece during 2010–15 highlights both the strengths and limitations of the Fund's capacity to work on pension issues. The Greek pension scheme was not only financially unsustainable over the long term but also a principal source of short-term budgetary pressure. Initially, the Fund and the Greek authorities introduced important policy changes that reduced the scale of future pension liabilities and tackled the weaknesses arising from the long-term parameters and organization of the system. But as Greek output declined and outstanding debt was excessively high, the challenge became how to limit current spending on existing pensioners. Since the exchange rate and the rate of inflation in Greece could not be used to reduce real spending, cuts in nominal spending were required.

A number of challenges confronted the IMF staff:

- The Greek pension system was highly complex, with different pension institutions and agreements with multiple groups of employers and employees. Court challenges could (and did) overturn some of the earlier specific policy reforms. Institutional weaknesses—lack of data, multiplicity of institutions, lack of analytical capacity, and weak revenue administration—all required intensive TA that would take time to have an impact.
- Since budgetary retrenchment required some pension entitlements to be cut, this forced the IMF staff, in discussions with authorities, to confront difficult trade-offs on how to be fair, how to protect the poor, and yet still maintain some link between contributions and benefits. Without such a link, the incentives of many younger workers to make pension contributions from their wages would be further weakened. Yet high contribution rates were partly responsible for the high rate of unemployment.
- Over the years, the Greek pension system's role had broadened beyond social insurance to become the principal vehicle for social assistance, thus engendering the resistance of society and the authorities to any reforms. Creation of an independent social assistance system would be a time-consuming endeavor not easily achieved in the context of a financial crisis. While the Fund staff was highly conscious of these issues, many Greek officials did not believe the Fund staff fully recognized their importance.

The EFF-supported program introduced cuts on pensions to current retirees, including to main, supplementary, and lump-sum pensions, and eliminated seasonal bonuses to current retirees. These measures represented the core of the fiscal package that closed the primary fiscal deficit.

The Greek negotiations highlighted the limits of the Fund's capacity to engineer speedy reforms of a pension system that was highly complex in its policy framework and institutional administrative structure and processes. The Fund's area department and TA experts reached agreement with the authorities on long-term reforms—changing the age of retirement, reducing accrual rates, etc.—since these reforms would not entail immediate burdens on existing pensioners or arouse political resistance. But introducing policies that entailed substantial organizational and administrative reform, or immediate cutbacks in payments to existing pensioners, proved far more difficult. These were challenging both to design and to agree on with the principal political actors, both in terms of the time pressures and the implied policy choices. The Fund benefited from technical guidance from the OECD and the European Commission.

Thus, the Fund's experience in Greece underscores its limitations as an interlocutor on pension policy reform. While it could analyze the macro-fiscal sustainability challenges arising from the pension system, its capacity to design and quickly implement quickly detailed analytical and administrative reforms was much more limited. In similar situations in other countries, the Fund's position contrasted with that of the World Bank, where pension reforms were often the focus of a detailed project to be carried out with a large number of dedicated staff over several years.

40. Defined-contribution schemes received far less attention than defined-benefit schemes in IMF surveillance and program discussions. This was partly because fewer countries had adopted DC schemes by this point, and such schemes as existed were younger than most traditional DB schemes. But perhaps more importantly, DC schemes—managed by private pension funds—did not entail a government pension liability. During the evaluation period, the Fund did discuss

emerging issues in countries with well-established DC schemes. The discussions had four main themes:

- The fiscal implications of the transition from a DB scheme to a DC or NDC scheme (e.g., in Chile, Croatia, Lithuania, Panama, and the Slovak Republic). Such transitions included the emergence of policies in Central and Eastern Europe to either cut back on mandated contributions to the DC scheme (in Latvia, Estonia and Lithuania) or to effectively revert from a DC or NDC scheme to a DB scheme (e.g., in Hungary and Poland, respectively; also see Box 3 below).
- Challenges faced by the private financial sector in operating these schemes, and regulatory issues faced by the government (e.g., in Costa Rica, Denmark, El Salvador, Iceland, Mexico, Netherlands²⁹, Switzerland, and Uruguay).
- The adequacy of DC schemes as vehicles for retirement savings (e.g., in El Salvador, Hungary, Romania, Russia, the United Kingdom, and the United States).
- Tax treatment of pensions accumulated under such schemes (e.g., in Australia and Ireland).

Box 3. The IMF and Pension Reform in Poland

In early 2014, the Polish authorities decided to backtrack from their earlier DC pension scheme reforms and to shift both financial assets and a significant share of employee-employer contributions from the second pillar toward the first-tier DB scheme. World Bank staff, having heavily supported Poland's earlier 1998 DC reform, opposed this move, as did the OECD and the private-sector institutions responsible for managing the second-pillar pension funds. The Fund was initially inclined to support the Bank, but based on its own analysis of the fiscal implications of the new policy change, over time it ultimately decided to support the authorities' position. Discussions on the change occurred over four years, recognizing that pension issues were highly sensitive politically and socially. The changes that were made to the system in 2014 arose from concerns that the original assumptions underlying the 1999 reforms had proven quite optimistic about the rates of growth and real wages. There was also concern about the quality of the investment performance of the second pillar, the fiscal costs associated with the transition making explicit the liabilities of the previous DB system, and the effects of the change on the fiscal policy requirements of meeting EU guidelines on the public debt share.

During 2012–14, Fund staff analyses showed that the proposed reform would make the system more sustainable. The changes were expected "to deliver an improvement in the fiscal accounts of around 30 percent of GDP in net present value terms during 2014–60 (matched by an increase in gross implicit pension liabilities)" (IMF, 2014). The authorities noted that the Fund's principal concern was with fiscal sustainability, though it had a secondary concern with social protection issues. Thus, while arguing that the move improved fiscal aggregates, the staff also noted that a drop in projected replacement rates "increases fiscal risks stemming from old-age poverty" (IMF, 2014). But in this regard the Fund did not explicitly counsel as to what should be the level of any minimum pension or target replacement rate.

In interviews for this evaluation, the Polish authorities stressed how important the IMF's support had been, both in terms of technical work in monitoring and analyzing the fiscal consequences of the reform and in factoring in the macroeconomic foundations of the change in the system. While the authorities led the reform process in terms of its design and analysis, they also stressed the value of having the Fund as an advisor, providing "another pair of eyes" in verifying the authorities' assumptions and calculations. This was seen as particularly important given the World Bank's opposition.

²⁹ Privately managed investment accounts play an important role in the DB system of The Netherlands.

41. Few Article IV missions to countries with DC schemes offered specific recommendations for reform. Those that did were bunched in the last few years of the evaluation period, and focused on three areas. One of these was the need for a later age of retirement, reflecting the higher replacement rate that would be gained by a longer period of contributions and a reduced period of retirement. This recommendation was highlighted in the staff reports for Mexico (2011) and Russia (2013, 2014). A second area concerned provisions limiting the investment portfolio of a privately managed pension fund, as in Chile (2007) and Uruguay (2013), where the staff recommended relaxing the limits on foreign assets in the portfolio or on the required purchase of government debt instruments. A third area related to provisions that guaranteed a minimum return and/or low mandated management fees, as in the Slovak Republic (2011) and Switzerland (2015), where staff recommended lowering the guaranteed minimum return and linking it more closely to market-based measures of achievable returns. Where countries had provisions that guaranteed a minimum return and/or low mandated management fees, the staff expressed concerns about the risk of insolvency of pension funds or the prospect that the funds might undertake excessive risks. Note was taken about the possible risk of refunding—whereby employees might find their pension benefits reduced to restore solvency.³⁰

IV. THE FUND'S INVOLVEMENT IN PENSION ISSUES IN MEMBER COUNTRIES

42. Having reviewed the coverage and scope of the Fund's involvement on pension issues, what can be said about its quality and effectiveness in this sphere during the evaluation period? In what follows, we evaluate the Fund's involvement in the context of its operational country work by asking the following questions: (i) Were pension issues analyzed when macro-critical and omitted when not? (ii) Did the Fund's advice on pensions consider the distributional implications and trade-offs for social protection, including future pension policy challenges from a social protection perspective? (iii) Was the Fund's pension advice supported by relevant analysis and international experience? (iv) Did the Fund coordinate its operational work on pensions with that of other organizations? (v) Did country authorities find the Fund's pension advice relevant and useful?

A. Were Pension Issues Analyzed When Macro-Critical?

43. In general, what makes a pension issue macro-critical usually relates to long-term pressures: the prospect that the public sector may be exposed to significant future explicit or implicit liabilities, particularly once the demographic tide shifts and begins to raise the share of the elderly in the population and the government's liabilities come to be borne by a shrinking active work force. In such a scenario, DB schemes, built on the concept of social solidarity during periods of low elderly-dependency rates, may be threatened because of the increasing burden

³⁰ Later, these staff concerns were significantly reinforced in the 2016 Article IV staff reports for Chile (the originator of the DC concept) and El Salvador (these reports were produced after the evaluation period). In these two cases, staff warned that the social sustainability of the DC system might need to be reinforced by reducing the cost of pension fund administration and by raising contribution rates and retirement ages and expanding mandatory coverage.

they require current workers to bear. Rising public debt after the global financial crisis of 2007–08 made the growing liabilities of DB schemes a macro-critical concern in many countries. Pension debts that seemed manageable before the crisis were now seen as financially unviable, and certainly as a source of weakness in governments' future capacity to carry out active counter-cyclical fiscal policy.

44. Pension issues may also be macro-critical if they are a source of short-term budgetary pressure. During the financial crisis, some countries could not easily finance current pension spending, whether because of a precipitous fall in revenues during the recession and/or because pension spending would have forced sharp cuts elsewhere in the budget. In these countries, pension policy required politically challenging actions that affected people already drawing pensions.

45. The previous section highlighted the Fund's growing involvement with pension issues and the main motivations for this. Many of the countries for which pension issues were discussed in detail in the context of surveillance, programs, or TA (listed in Table 2 above) are AEs and EMEs with aging populations. In these countries, pension issues were raised at least every few years as part of the surveillance discussions with country authorities. The motive was to underscore the Fund's concern and the need for detailed sustainability analyses that could prepare the ground for reforms when politically propitious.

46. In a number of cases listed in Table 2, pensions were sufficiently important in the context of an IMF-supported program that structural conditionality was used in support of pension reform. In at least half of such programs,³¹ issues of long-term financial sustainability (often the subject of more detailed analysis in surveillance papers) were critical factors underlying the use of conditionality. The form of conditionality—whether prior action, structural performance criterion, or structural benchmark—partly depended on the macro-criticality and urgency of the required policy action, but it was also influenced by short-term budgetary pressures. In many of the other programs, program conditionality addressed financial deficits or critical financial weaknesses of public-sector pension funds (primarily for civil servants or public-enterprise workers)—that had implications for fiscal policy (e.g., in Benin, Côte d'Ivoire, Honduras, Jamaica, Mali, Seychelles, Togo, Uruguay). In a few cases, as in Kosovo and Sri Lanka, concerns about the impact of private pension funds on the domestic financial market led to the need for conditionality to ensure policy actions.

47. Two key factors contributed to the Fund staff's work on pensions. First, the financial crisis intensified the Fund's efforts to identify all sources of macro-critical risk and vulnerabilities. Even if a country's elderly-dependency rate would not be burdensome for a decade or more, the staff was concerned that demographic factors could be sources of fiscal vulnerability. Second, as

³¹ Long-term financial sustainability issues were particularly prominent in Albania, Bosnia, Bulgaria, Dominica, Greece, Hungary, Latvia, Malawi, Moldova, Nicaragua, Peru, Portugal, Romania, Serbia, St. Kitts and Nevis, Turkey, and Ukraine.

noted earlier, the analytical tractability of the finances of a pension system facilitated the staff's work. This is particularly true for those countries—which constitute a significant majority—that use DB pension schemes in the public sector. The key variables that determine the fiscal trajectory of potential liabilities of a DB system over time and the financial viability of such schemes were amenable to a discussion of pension reform options.

48. In a few countries, pension issues were not part of the surveillance agenda. Certainly, in the AEs, Canada, France, and Germany, public pensions did not appear to be a major focus of Fund surveillance. A number of reasons may have been important there, such as the authorities having considerable technical depth on pension issues; an already ongoing domestic academic and professional focus on the issue; or a staff view that the authorities were in command of the legislative dialogue on pension issues and that the political sensitivity of the issues deterred a focus by the Fund. In some AEs, country authorities resisted an active discussion of pension issues in the context of surveillance.

49. Our review of surveillance and program documents also found negligible or very limited Fund coverage of pension issues in 14 EMEs (Barbados, Bhutan, Botswana, Brunei, Cambodia, Guadeloupe, Libya, Macao, Oman, Pakistan, Turkmenistan, United Arab Emirates, Venezuela, and Zimbabwe) and 12 LICs (Djibouti, Ghana, Maldives, Mauritania, Mongolia, Myanmar, Papua New Guinea, Rwanda, Uzbekistan, Vanuatu, West Bank/Gaza, and Yemen). But only 7 of these cases suggest the prospect of significant population aging in the next several decades (Bhutan, Cambodia, Djibouti, Maldives, Rwanda, Vanuatu, and Venezuela). Among these 7, the World Bank was involved in pension issues in Bhutan, Djibouti, and Rwanda, and the Fund did raise the issue in the Maldives—suggesting at least that some attention was being paid to the macro-critical consequences of aging.

50. In two types of situation, where pensions might have constituted a macro-critical issue, the Fund's coverage could be seen as having been too limited:

- First, though the emergence of mandated second-pillar DC systems seemed to release governments from the fiscal liabilities associated with DB systems, various factors such as low net returns on assets, minimum guarantees, or inadequate compliance might create implicit fiscal liabilities or undercut the ability of DC schemes to provide an adequate pension to retirees. In some countries, this perceived fragility has created tensions about whether the mandatory nature of DC schemes has led to a violation of the implicit contract with contributing workers. The social protection accorded by a DC scheme might be further compromised if it only covers a small fraction of the population. Because DC schemes do not entail explicit fiscal obligations, Fund staff may have ignored the potential fiscal liabilities posed by such schemes. While such issues received attention in a few countries with DC schemes (e.g., in Chile, El Salvador, the Slovak Republic, and Switzerland), in most others (roughly 20), IMF surveillance was infrequent or focused primarily on financial-sector concerns that related to the privately managed pension funds (e.g., in Mexico, the Slovak Republic, Uruguay). Most countries with DC schemes

also had zero or first pillars that provided a basic, low-replacement-rate pension benefit that received more attention in surveillance than did the effectiveness of the mandatory second pillar in promoting an adequate accumulation of assets at retirement.

- A second possibly important area where the Fund's efforts to assess the macro-criticality of pensions could have been strengthened is "longevity risk," i.e., the risk that governments, corporations, pension funds, and insurance companies have underestimated longevity. The IMF's April 2012 *Global Financial Stability Report* noted that: "if individuals live three years longer than expected—in line with underestimations in the past—the already large costs of aging could increase by another 50 percent, representing an additional cost of 50 percent of 2010 GDP in advanced countries and 25 percent of 2010 GDP in emerging economies.... [For] private pension plans in the United States, such an increase in longevity could add some 9 percent to their pension liabilities" (IMF, 2012b). The evaluation team found no clear examples in which Fund staff included simulations of longevity risk in an Article IV surveillance discussion.

51. On balance, the evidence suggests that the Fund was conscientious over the evaluation period in assessing the macro-criticality of pension systems in member countries, with the surveillance process increasingly focused on long-term financial sustainability. There were few countries where pension issues appear to have been macro-critical and yet not the subject of Fund surveillance.

B. Did Fund Pension Advice Consider the Implications for Social Protection?

52. We have noted that financial sustainability is not an *objective* of a social protection scheme but rather a constraint that it must satisfy. To be sure, ensuring the financial sustainability of a pension scheme is not irrelevant to social protection objectives, but restoring financial sustainability as the sole objective could also leave the scheme falling short of achieving meaningful social protection. What is important to emphasize is that when the Fund staff discusses the need for policy actions to address fiscal sustainability or short-term budgetary pressures, the policy choices it recommends can have important consequences for social protection. To what extent did the Fund staff analyze pension systems in terms of the principal objectives of a policy framework for social protection?

53. From the point of view of social protection, a pension scheme has two important functions: (i) addressing the vulnerability to poverty of those already elderly, particularly in the context of a financial crisis in a country; and (ii) providing a means to relieve households and individuals of the burden of such social risks as disability, old age, or death of a family member in the future. The former function relates to the welfare of those already elderly, particularly those receiving pension benefits. The latter relates to the scheme's perceived viability to provide risk protection not only for people who are now close to retirement but also for those whose retirement may be two or three decades in the future. For people of working age, participation in pension schemes is likely to be critical to their own future old-age support and also to the

financial viability of the schemes for current pension support to retirees and those soon-to-be retired.

54. Inevitably then, many of the Fund's policy recommendations on pension reform have implications for how a reduction in the government's financial burdens for pension support will be distributed among these different cohorts, present and future. For example, would such recommendations imply reduced support for current retirees, either now or in future, in terms of reduced real pensions in the context of inflation? Would such recommendations throw them into poverty? Would a recommended reform mean that their pensions do not keep up with the wages of people in the labor force? Should support be reduced (either directly, by reducing prospective pensions, or indirectly, by raising taxes on their pension income) along progressive lines, such that better-off groups bear the principal net burden of pension cutbacks? Or will the policy choices primarily affect the perceived incentives of currently-working people to participate in the pension scheme, as they consider the implicit rate of return over their working lives to their participation? In other words, the Fund's pension advice has important distributional implications, both intra- and inter-generationally, and will shape the effectiveness of a pension scheme as a social protection mechanism.

Fiscal sustainability and social protection

55. The distributional implications of the Fund's advice raise three important questions for an assessment of the Fund's involvement in pensions:

- First, did the Fund's efforts to restore the sustainability of a pension scheme consider the scheme's ability to meet its social protection objectives? Here, the nature of the policy dialogue with country authorities would need to be examined in order to obtain insights as to how the Fund staff approached social protection concerns. Did the Fund seek to achieve greater fairness for those either receiving or financing a pension scheme? Did the Fund's proposals address people not covered by an existing pension scheme? Did they help a country adjust to the reality of a changing demographic picture?
- Second, how did the Fund address situations where a financially sustainable pension scheme was likely to be inadequate in addressing social protection concerns? For example, in some countries, a pension system may only serve a small share of the population—largely those in the civil service and the formal sector. In such cases, fiscal sustainability may end up only providing protection for the "in's" of the society, with scant attention paid to others (including future generations). In other countries, a pension scheme may provide universal coverage but too low a rate of income replacement to meet the risks of old age.
- Third, was the Fund's involvement in pensions a recognition of how quickly long-term factors, in particular the aging of the population, can bear down on a country's policy options? In other words, were fiscal sustainability concerns the initial focal point around which larger social protection concerns began to emerge?

56. Documentary and interview evidence shows that the Fund staff was aware that some population groups would be worse-affected by pension reforms than would others, and that efforts would be needed to limit the burden borne by those pensioners receiving limited pensions. The need for such efforts partly reflected country authorities' desire to make reforms more politically palatable, but it also reflected a basic concern to spread adjustment burdens more equitably, as well as a concern to shield as much as possible those pensioners most at risk of poverty. When focusing on equity, the staff sought to achieve fairer burden sharing whether intra-generationally, among different groups, or inter-generationally, including the burden on workers not yet born. When focusing on poverty, the staff sought to address the low replacement rates implied by a country's pension system and/or the low population coverage rates of workers in the system. Often, an equity or poverty focus emerged most clearly in the SIPs prepared for an Article IV consultation mission (and also occasionally in FAD TA reports), but such a perspective can occasionally be seen in conditionality in Fund-supported programs.

57. The following are examples where issues of equity and/or elderly poverty motivated staff discussions on pensions during Article IV consultations:

- *Addressing poverty among the elderly:* Low replacement rates can be a source of future fiscal vulnerability; this issue emerged in Albania (2011), Latvia (2010), Mauritius (2013 and 2014), Poland (2014), Russia (2008), and Serbia (2013).³² In the 2014 Article IV consultations with Poland, in particular, the Fund urged the authorities to "address legacy flaws in the pension system and consider measures to deal with the sharp drop in future replacement rates" (IMF, 2014). In other instances, the staff emphasized the inadequacy of the existing SSN for the elderly,³³ as in the 2015 Article IV consultation with Lebanon, where the Fund "considered that strengthening the safety nets and reforming the pension system could improve equity and fiscal sustainability" (IMF, 2015b). In the 2012 Article IV discussions with Japan, the staff warned that any cuts in the replacement ratio to realize fiscal savings would worsen the financial status of low-income elderly pensioners, and Directors highlighted the need for pension reform to contain social security spending "while balancing inter-generational equity" (IMF, 2012c).
- *Identifying poor pension coverage as a source of vulnerability for many elderly:* Perhaps the most important social protection issue facing many EMEs and LICs is the limited coverage

³² An SIP for the 2008 Article IV consultation with Russia suggested that the replacement rate would decline to 22 percent in 2050 and explored the macroeconomic effects of alternative options for financing a stable (though still low and questionably adequate) replacement rate of 30 percent. An SIP for the 2013 Article IV consultation with Serbia presented simulations showing that the replacement rate would fall from 70 percent in 2011 to 43 percent by 2027 and emphasized the need for reforms to reduce the overall public pension expenditure to sustainable levels "while not imperiling social sustainability" (Nestorovic, 2013).

³³ An SIP for the 2012 Article IV consultation with Korea (Elekdag, 2012) noted that around 70 percent of the elderly were receiving the basic old-age pension benefit which was set at only 5 percent of the average wage, implying that the benefit spread resources very thinly over a large segment of the elderly population, while doing little to reduce income inequality among the elderly.

of existing pension systems. Appendix Table A.2, drawn from a 2012 World Bank discussion paper (Pallares-Millares and others, 2012), reveals how small a share of the working-age population at the time was covered by public pension schemes in many EMEs and LICs facing population aging. Many countries confront the challenge that a large proportion of the elderly in the future may lack any social insurance coverage, creating a potential implicit fiscal liability if governments are pressured to provide income support for these groups. This challenge surfaced in a number of Article IV consultations with EMEs such as China (2006, 2010), Colombia (2012), Ecuador (2015), El Salvador (2016), Indonesia (2015), Iran (2015), Jamaica (2012), Lebanon (2015), Malaysia (2013 and 2014), Mexico (2011 and 2012), and the Philippines (2012); and with LICs, notably Bangladesh (2013), Honduras (2014), and Nicaragua (2012).³⁴ The Fund urged China to “expand pension coverage for rural residents, and increase the portability of pensions” (IMF, 2009b). In El Salvador (2016), where only 24 percent of eligible workers were contributing to the DB pension system and only 11 percent of the elderly were receiving a pension, the Fund advised the authorities to adjust the pension system to “include changes essential to ensure its long-run fiscal and social sustainability” (IMF, 2016). Appendix Table A.2 highlights that, for the most part, the issue of coverage was at least flagged during surveillance discussions in countries where it would have warranted attention (viz., in the context of an aging population).³⁵

- *Highlighting intra-generational equity concerns in pension-system design or where the pension system appeared to favor middle- and upper-income groups:* In a number of countries, the Fund staff raised questions when an excessively large share of pension spending appeared to go to particular groups. Issues of intra-generational inequity arose in Cyprus (2013), Ireland (2010), Japan (2012, as mentioned above), Latvia (2010), Lebanon (2015), Mauritius (2012), Poland (2014, as mentioned above), Romania (2009), Portugal (2013), and Ukraine (2010 and 2014).³⁶ In the 2012 Article IV discussions with

³⁴ An SIP for the 2012 Article IV consultation with Nicaragua (Fenochietto, 2012) noted that participants in the pension system were only 23 percent of the labor force, that there was no minimum pension, and that no elderly benefits existed for those not covered by the pension system. But the staff also warned that any increase in the contribution rate could deter workers from entering the formal labor force.

³⁵ Wider pension coverage may conflict with fiscal sustainability concerns. In Jamaica in 2013, for instance, Fund staff expressed concern that, with public debt already at 140 percent of GDP, expanding pension coverage from its then-low levels would have to be accompanied by policy reforms that would make the overall pension system actuarially sound and would contain pension costs to the government. In Honduras in 2015, staff noted that efforts to extend pension coverage in 2014–15 had been delayed because of the need to minimize pressures on the public finances. A 2012 TA report for Colombia noted that legal provisions for pensions to equal or exceed the minimum wage made it fiscally unviable to provide pensions to the approximately 40 percent of the workforce whose market wage was below the minimum wage.

³⁶ An SIP for the 2011 Article IV consultation with Cyprus (Simone, 2011) highlighted the pension differential between public and private sector employees as well as the preferential treatment of specific groups of employees (e.g., members of the army and police force). A 2010 TA report for Latvia highlighted how discrepancies in the choice of the rate of return credited on NDC balances each year had led new retirees

Ireland, staff argued, and Directors concurred, that a targeted reduction in state pensions should be considered as a way to deliver immediate savings while protecting the most vulnerable (IMF, 2012d). In the 2012 Article IV discussions with Japan, staff suggested “clawing back benefits from wealthy retirees” (IMF, 2012c). In the 2015 Article IV discussions with Lebanon, staff highlighted the dramatic difference in pension treatment between public and private sector employees and called for a unified pension scheme for public and private sector employees over the longer term “to address the system’s sustainability and equity concerns” (IMF, 2015b). In the 2014 Article IV discussions in Mauritius, the staff argued for means-testing of the universal basic pension. The staff highlighted instances where the tax treatment of pensions was a source of intra-generational inequity—in Colombia (2012), Ireland (2012), and Cyprus (2014).³⁷ Finally, the staff called attention to instances where disability pensions proved to be a source of abuse and thus inequity in the distribution of pension benefits—in Albania (2014), Azerbaijan (2012), Hungary (2006), and Poland (2014).³⁸

- *Highlighting inter-generational equity concerns in pension system design:* Examples were found in Portugal (2012) and Slovenia (2006).³⁹

58. The question of whether the Fund was sufficiently forward-looking in identifying policy challenges for social protection that could emerge over the medium- to long term raises a number of problematic issues. How far into the future should the Fund staff’s assessments have focused? How should the Fund have assessed macro-critical risks that were of a highly implicit nature, including social or political pressures that might arise in the future and transcend any

(those who retired after the financial crisis) to receive higher pensions than those who had retired earlier. An SIP for the 2014 Article IV consultation with Poland (Krogulski and others, 2014) noted that special occupational pension schemes were “more generous than the regular system.” A 2013 TA report for Portugal commented on the vastly different pension benefits received by workers in the civil service relative to those in the private sector, and an SIP for the 2012 Article IV consultation (Lemgruber and Soto, 2013) noted that 40 percent of Portugal’s old-age pension spending was received by the top quintile in the income distribution.

³⁷ In Ireland, pension contributions can be deducted for tax purposes at the higher rate of income tax (41 percent) but capital gains and pension [payments] are only taxed at 20 percent. As an SIP for the 2012 Article IV consultation (Abbas, 2012) noted, this resulted in the rich receiving significantly higher subsidies for pension contributions. A 2012 TA report for Colombia similarly noted that pensioners received generous tax preferences. In Cyprus, Simone (2014) suggested subjecting public pension gratuities (viz., lump-sum payments received at the start of retirement) to the income tax.

³⁸ A 2012 TA report for Azerbaijan noted that lax disability criteria allowed workers who were not truly disabled to effectively retire early. In Poland, Krogulski and others (2014) highlighted that “maintaining the current disability formula implies growing incentives for misuse.” An SIP prepared for the 2006 Article IV consultation with Hungary (Corbacho, 2006) stressed the need to tighten eligibility criteria for disability pensions, which “[had] been used to finance premature labor market withdrawal and as a substitute for unemployment insurance.”

³⁹ A 2012 TA report for Portugal warned that back-loading pension policy reforms would impose much of the adjustment burden on future generations and asked whether current retirees would want their children and grandchildren to both pay higher taxes today and receive lower pensions when they retire. An SIP for the 2006 Article IV consultation with Slovenia (Tuladhar, 2006) examined the generational burden of fiscal policies.

existing legislated public policy commitment. And, once again, given the IMF's mandate, were social protection challenges, particularly those of the long term, sufficiently macro-critical as to warrant a focus in the Fund's surveillance?

59. From a social-protection perspective, the *absence* of a macro-critical issue such as fiscal sustainability means that the vulnerabilities of the elderly were less likely to have been addressed by Fund surveillance. During the evaluation period, four situations can be identified:

- First, when population aging was not likely to be relevant until well into the second half of this century: in such cases, the future pressures that would be caused by an increase in the elderly-dependency rate were of less concern than the adequacy of *existing* SSNs for those elderly now in poverty. Particularly in many LICs, where fertility rates remain high and the aging process is far into the future, the Fund staff gave pension issues limited or negligible attention. This would seem appropriate in terms of a prioritization of focus in surveillance.
- Second, when population aging was envisaged within the next two to three decades and pension system coverage was very limited: in this situation, which characterized many EMEs, e.g., in Latin America and the Caribbean region, the question was how viable existing private mechanisms were for inter-generational support, and whether a government should have been anticipating this challenge by establishing backup mechanisms that could be used for consumption-smoothing. Appendix Table A.2 suggests that the Fund staff did examine some social protection issues in situations of low pension coverage even when fiscal sustainability was not an immediate concern.
- Third, when the existing pension system was assessed as fiscally sustainable in the context of an aging population: such an assessment would typically lead Fund staff to ignore social protection issues related to the elderly. Where the Fund worked with countries to *restore* fiscal sustainability to the pension system, the issue of social sustainability was at least discussed (in China, notably, and in Central Europe, including in Moldova and Poland); policy recommendations in this regard aimed to raise workers' savings, increase progressivity in the taxation of the wealthier groups of elderly, and strengthen the financing of social assistance.
- Fourth, when there was a DC scheme in place: social protection issues that could arise under DC schemes include those related to inadequate coverage (as noted above) as well as inadequate asset accumulations that would create welfare challenges for future pensioners. As noted earlier, Fund staff highlighted potential social protection concerns in only a few users of DC schemes.

60. In summary, while the Fund seems to have done well in addressing the obvious macro-critical issues associated with existing pension systems, the less obvious future social protection policy challenges were sometimes not covered when they were not macro-critical. *A fortiori*, to the extent that one broadens social-protection concerns to matters of equity, poverty, and adverse

allocative effects associated with pension system design, the Fund's surveillance was even spottier. But often these concerns relate to how a country wishes to address such fundamental issues as how family support relationships are structured. If a country preferred that the government not play a primary role in social protection, it is questionable whether the Fund should have raised the issue as a source of concern for surveillance in the absence of strong evidence of adverse implications for social and political stability.

Fiscal adjustment and social protection

61. How were distributional issues addressed when the Fund's pension advice was motivated by short- and medium-term budgetary pressures and the need for fiscal adjustment? One way to address this question is to examine a sample of Fund-supported programs. Among the 43 IMF-supported arrangements that entailed structural conditionality on pension reform (listed in Table 2, 10 in particular included program provisions that addressed distributional issues associated with the reforms: Albania, Armenia, Bosnia and Herzegovina, Cyprus, Greece, Hungary, Ireland, Latvia, Portugal, and Ukraine (Appendix Table A.3).

62. Two principal approaches to addressing distributional concerns were apparent: (i) protecting the pensions received by the poorest group of elderly; and (ii) limiting the pensions received by either the top group of pensioners or by "privileged pensioners." Policies shaped by the former approach included: the introduction of means-tested social pensions for those elderly not qualifying for a pension (e.g., in Albania and Portugal) or for all citizens above normal retirement age (e.g., in Greece); the shielding of cutbacks from those elderly receiving low pensions and family-support instruments (e.g., in Greece and Portugal); and allowing for increases in small pensions (e.g., in Latvia). Policies to limit the pensions received by the privileged sought fiscal savings through cutbacks in the benefits of those groups. They included: restricting pension benefits for certain categories of privileged pensioners (e.g., in Bosnia and Herzegovina, in relation to ex-veterans and their dependents, and in Ukraine in relation to "special" pensions); enabling only the poorest disabled to receive disability benefits (e.g., in Hungary); reviewing all specific pension regimes (e.g., in Latvia); suspending 13th and 14th month payments for those receiving the highest pensions (e.g., in Greece and Portugal and the 13th month pension for all pensioners in Hungary in 2009); introducing a progressive reduction in monthly pension income for the higher-pension recipients (e.g., in Greece in 2013) or levying special contributions on pensions above a given threshold (e.g., in Portugal).⁴⁰

63. In program discussions on pension reform, the Fund staff occasionally raised concerns about social sustainability (e.g., in Hungary); emphasized the need for a well-targeted and sustainable social security system (e.g., in Portugal and the Seychelles); or expressed concern about fair burden sharing for any fiscal adjustment directed at pensioners (e.g., in Latvia and

⁴⁰ Such 13th and 14th month pension payments paralleled receipt of 13th and 14th month salary payments required to be made by employers (and arising from collective labor agreements) made at Christmas, Easter and in the Summer (with the latter two payments equaling half of a month's bonus payment).

Portugal). Programs in 34 countries included structural conditions on pension reform, and 8 of these entailed policies to reduce the number of special and privileged pensions, thus moving to unify pension systems across beneficiaries. Two-thirds of the pension-related program conditions also focused on parametric reforms, particularly to the replacement rate and the retirement age(s). Often these conditions required the development of an actuarially-based strategy on which to base further policy reforms consistent with longer-term financial sustainability. Reforms to the indexing formula or benefit freezes were also observed, in some cases in programs that sought to contain the rate of growth of spending on pensions (e.g., in Albania, Armenia, Bulgaria, Cyprus, Greece, Ireland, Moldova, Portugal, Serbia).

64. Judging the allocative and distributional implications of a pension system can prove complex and is most likely beyond the scope of what Fund macroeconomists can readily address, either in surveillance or in the context of program discussions. Tables 3 and 4 note where and when the Fund staff examined these issues, either in a TA context or in surveillance. In some cases, and as noted below, some of the underlying analysis was carried out by World Bank experts and used by the Fund staff in its surveillance advice or in the discussions on structural conditionality. It is hard to judge how much more should have been examined within the resource constraints and competing priorities confronted by Fund mission teams.

| Table 3. Policy Issues Related to Pensions Addressed in TA Reports, 2006–15 | |
|--|---|
| Principal Issues | Country and Year of TA Report |
| Pension outlay projections | Antigua & Barbuda (2010), Azerbaijan (2011, 2012, 2013), Belarus (2010), Bulgaria (2010), Colombia (2012), Egypt (2009), Hungary (2008), Jordan (2010), Kenya (2012), Malawi (2015), Mexico (2012), Nepal (2014), St. Vincent & Grenadines (2008), Thailand (2015) |
| Pension reforms: pros and cons | Antigua & Barbuda (2010), Azerbaijan (2011, 2012, 2013), Belarus (2010), Bulgaria (2010), Colombia (2012), Egypt (2009), Georgia (2011), Hungary (2008), Jordan (2010), Kenya (2012), Latvia (2010), Malawi (2006, 2015), Nepal (2014), St Vincent & Grenadines (2008), Zambia (2013) |
| Allocative and distributional effects | Azerbaijan (2011, 2012, 2013), Belarus (2010), Bulgaria (2010), Egypt (2009), Georgia (2011), Hungary (2008), Kenya (2012), Latvia (2010), Malawi (2015), Portugal (2013), Zambia (2013) |
| Tax policy issues | Hungary (2008), Moldova (2011) |
| Pension administration | Antigua & Barbuda (2015), Fiji (2006), Greece (2012–15), Hungary (2008), |
| Disability pensions issues | Hungary (2008), Cyprus (2013), Jordan (2010) |

C. Was the Fund’s Pension Advice Supported by Relevant Analysis and International Experience?

65. To answer this question, one can examine the different analyses used by Fund staff to assess countries’ pension systems. Table 2 above lists TA reports and SIPs on pensions during the evaluation period. The TA reports were usually produced by small mission teams of FAD staff members and external consultants with expertise on pensions. SIPs were usually prepared by

area department (or sometimes FAD) staff, most of whom are macro- or fiscal economists but not pension specialists.

| Principal Issues | Country and Year of SIP |
|---|--|
| Pension outlay projections | Austria (2007), Belize (2015*), Bulgaria (2010, 2014), Chile (2009), PR China (2015) Costa Rica (2013, 2015), Cyprus (2007, 2011), Denmark (2008), Dominica (2006), Dominican Republic (2008) , ECCU (2010), Ecuador (2015), El Salvador (2006, 2014*), Estonia (2007), Finland (2012, 2014), Greece (2006), Hong Kong (2006), Iran (2015), Ireland (2007, 2012), Korea (2007), Lebanon (2015), Luxembourg (2006), Macedonia (2009, 2015), Mauritius (2013), Namibia (2006), Nicaragua (2012), Norway (2007), Panama (2006), Poland (2010, 2014), Romania (2007), Russia (2008), San Marino (2010), Serbia (2013), Slovak Republic (2011)*, Slovenia (2006, 2015), Spain (2011, 2013), Suriname (2014), Ukraine (2010*, 2011*) |
| Pension reforms: pros and cons | Belgium (2012), Bosnia (2010), Central and Eastern Europe (2015), Chile (2007*, China (2006), Cyprus (2011), Czech Republic (2010), ECCU (2007, 2008), Ecuador (2015), El Salvador (2014*), France (2013), Greece (2006), Guyana (2007), Ireland (2012), Japan (2008, 2012), Mauritius (2013, 2014), Moldova (2010, 2012), Netherlands (2015) Panama (2006), Portugal (2015), Romania (2007, 2012), Russia (2008, 2013*), Slovenia (2015), Suriname (2014), Switzerland (2006) |
| Macroeconomic impacts of pension reform | Brazil (2012), Czech Republic (2008), ECCU (2007), Iceland (2013), Ireland (2007), Cyprus (2007), Korea (2007), Poland (2010, 2011), Slovenia (2006) |
| Allocative and distributional effects | Australia (2015), Brazil (2007), Central and Eastern Europe (2015), Colombia (2015), Cyprus (2007, 2011), ECCU (2013), Finland (2007), Germany (2015), Ireland (2007, 2012), Italy (2012), Japan (2008, 2012), Korea (2010, 2012), Lebanon (2015), Mauritius (2013), Moldova (2010, 2012), Netherlands (2015), New Zealand (2015), Nicaragua (2012), Poland (2014), Portugal (2013, 2015), Romania (2015), Russia (2008, 2014*), Serbia (2013), Slovenia (2006), Turkey (2013), Ukraine (2005), Uruguay (2015) |
| Tax policy issues | Albania (2009*), Chile (2014), Cyprus (2014), Ireland (2012), New Zealand (2015), Romania (2015), Slovenia (2015) |
| Impact on financial sector | Chile (2006, 2014), India (2006*), Malawi (2015) |
| Issues arising from DC systems | Chile (2006, 2014), El Salvador (2006), Mexico (2011, Netherlands (2015), Poland (2011, 2014), Switzerland (2015*), Uruguay (2011) |

*= Annex, appendix, or text box in an Article IV staff report.

66. How deeply did the Fund’s analyses delve into the policy issues associated with the operation of a pension system? Were they simply descriptive? Were they only devoted to long-term sustainability assessments and, if so, did the Fund only warn countries about financial risks, without necessarily addressing social-protection risks? Or did the analytical work burrow more deeply, exploring alternative pension reforms, examining allocative and equity effects, and/or considering social protection issues? Some SIPs highlighted key pension issues and presented cross-country material, but with only limited analytical work; others assessed the fiscal sustainability of the pension system and the implications of parametric changes. Tables 3 and 4 classify the broad policy content of TA reports and SIPs on pension issues.

67. The following pension-related topics were identified in SIPs: (i) projections of pension outlays over several decades, usually with broad judgments made on actuarial soundness; (ii) the pros and cons of alternative pension reform proposals, ranging from parametric changes to

wholesale reform of the pension framework (including introduction of a multi-pillar system); (iii) the macroeconomic effects of pension reform based on the Fund's Global Fiscal Model; (iv) the likely allocative and distributional effects of the pension system (e.g., the impact on labor-market behavior, or estimates of which groups were the principal beneficiaries); (v) the treatment of the pension system under the tax code; (vi) the supervision and regulation of pension funds; and (vii) issues arising in the operation of DC schemes. In the case of TA reports, which typically contained narrower but more intensive analyses, two other topics received attention, viz., (viii) pension administration (including collection of social security contributions); and (ix) disability and survivor benefits. Each TA report or SIP may have covered more than one topic.

68. Not surprisingly, pension projection models were used in some 85 percent of the SIPs and two-thirds of the TA reports. TA reports often included a discussion of alternative pension reform options. Distributional and allocation issues were addressed in at least half of the TA reports. Less common were discussions of disability pensions, tax issues, and pension administration issues (Greece being a particular exception). Beyond sustainability issues, SIPs delved into a broad range of topics; about 40 percent of them addressed pension reform alternatives and distributional and allocation issues, and about a quarter addressed macroeconomic impacts. Policy challenges of DC systems were discussed in two pivotal countries: Chile (the country that initiated the major DC reform), and Poland (which adopted an NDC scheme in the late 1990s and then retreated from it a decade later). Tax-policy and financial-sector effects of pension systems received only limited attention.

69. The Fund staff consistently incorporated international experience into these reports or policy analyses. That it could do so reflects the Fund's ready access to analyses of country cases carried out by the Fund and the Bank as well as by other international agencies. This practice extended beyond simple cross-country data comparisons to include experiences in more detailed facets of implementation and policy.

D. Did the Fund Coordinate Its Operational Work on Pensions with That of Other Organizations?

70. As noted in Section II above, per the framework established by the 2003 Board decision on Bank-Fund collaboration, the IMF was designated as the lead agency on public sector spending and revenues while the World Bank was designated as the lead agency for pension reforms and social protection. While this framework remained in place during the evaluation period, by 2006 the context for the collaboration on pension issues had changed following internal World Bank developments in its position on multi-pillar systems and the relative merits of DB and DC pension schemes;⁴¹ capacity building (through development of the Pension Reform

⁴¹ In 2006, the World Bank Independent Evaluation Group issued a critical assessment of the Bank's pension work, noting that the Bank "frequently neglected the primary goal of reducing poverty and improving retirement income adequacy *within a fiscal constraint*." The evaluation also stressed that "despite expectations, in many

Options Simulation Toolkit (PROST));⁴² and the Bank’s own Social Protection and Labor Strategy.⁴³

71. During the evaluation period, collaboration with World Bank staff most often took place in countries where the Bank had already played an active role in pension reform efforts.⁴⁴ It was often the case that the Bank played the principal role—sometimes paired with other institutions such as the United States Agency for International Development (USAID), the Inter-American Development Bank (IDB) and occasionally the International Labor Organization (ILO)—and the Fund drew on the Bank’s work (including the PROST) either as the principal background source for Fund policy recommendations or as an input to the Fund’s own analysis of the macro- and fiscal implications of the pension system.⁴⁵ This occurred in the context of both surveillance (e.g., in China, Croatia, the Czech Republic, Lebanon, and Mauritius) and Fund-supported programs (e.g., in Armenia, Bulgaria, El Salvador, Honduras with the IDB, Latvia, Macedonia, Romania, Serbia, and Tunisia).

72. At times, the Fund worked jointly with the World Bank on pension reform, as in Croatia and in Jamaica with respect to reform of public-sector pensions, and in Ukraine. When authorities asked the Fund for TA on pension reform, the Bank often provided an expert to join the IMF TA mission (as happened for the expenditure rationalization mission in Croatia). Fund and Bank staff occasionally worked jointly on pensions in the context of a financial sector assessment program, as in Chile and Mexico. Bank staff often expressed keen interest in the Fund’s involvement, particularly in a program context, to provide leverage through conditionality that the Bank could benefit from or because the Fund’s endorsement could lend credibility to the proposed reforms.

73. Of the 43 IMF-supported program arrangements with structural conditionality on pension issues (Table 2), the Fund worked with the World Bank in at least 39 cases; it also worked with other institutions such as the IDB (e.g., in El Salvador, the Eastern Caribbean Currency Union,

countries with multi-pillar systems, funded pensions remain poorly diversified and pension coverage had not increased” (World Bank, 2006).

⁴² The PROST is a tool to assist in evaluating the financial sustainability of a pension system and the financial impact of alternative reform options. Fund staff relied on the PROST in many instances over the evaluation period.

⁴³ The World Bank’s 2012–22 Social Protection and Labor Strategy includes pensions as only one element of a much broader framework of programs to achieve social protection (see World Bank, 2012).

⁴⁴ As a result of the World Bank’s widespread engagement in the area of pensions in most EMEs and LICs since the 1990s, there were few countries by the start of the evaluation period where the Bank’s policy presence on pensions had not been felt and where the Bank had not played an active role in either pension design or administration.

⁴⁵ Even when the IMF was the provider of TA on pension reform (e.g., in Croatia), Fund economists consulted with World Bank experts, drawing on their institutional and empirical databases on the country’s pension system.

Honduras, and Jamaica); the European Commission (EC) and the European Central Bank (ECB) as part of the Troika during the European financial crisis (e.g., in Greece, Hungary, Ireland, Latvia, and Romania); and occasionally with USAID (e.g., in Armenia) to determine the conditions.

74. Almost without exception, Fund economists appreciated the input from World Bank experts and the efforts made by Bank staff to provide guidance and data, including the use of the Bank's PROST model. Also worth emphasizing is that in almost no cases did the Fund staff seek to pursue a different approach to pension reform from that advocated by the Bank. One case where such a difference of opinions emerged was in Poland in relation to its decision to revert from its NDC scheme (Box 3 above). In a few cases, the two institutions' pension reform discussions appear to have operated on separate tracks, e.g., in Lebanon, where the Bank's focus was largely on the public sector pension system and the Fund had concerns about the operation of the private sector pension system; in Brazil, where the Fund's focus was largely on the macroeconomic impact of the indexation system; and in Latvia, where the Bank's focus was principally on the adequacy of pensions and the Fund's focus was on fiscal sustainability. The differences may have reflected the different timeframes bearing on the work programs of the two institutions in a country. For example, in Armenia, the Bank had long been the government's principal partner on pension reform, but the Fund ultimately played a critical role in supporting pension reform after Constitutional Court rulings had weakened the country's pension-reform initiative.

75. In certain situations the Fund did not collaborate with the World Bank on pension reform: (i) in surveillance mode, particularly when the Fund's concern focused principally on potential long-run fiscal vulnerabilities arising from the public pension system (as noted earlier, the Fund staff had the expertise to prepare these projections and analysis); (ii) in countries where the Bank had not traditionally worked, notably AEs—in such cases, the Fund tended to seek the assistance of other institutions such as the OECD;⁴⁶ and (iii) in response to a request from a country for an independent Fund perspective—including cases (such as Poland's) where the country differed with the Bank on the appropriate pension reform strategy.

76. Besides the World Bank, the OECD is one of the principal agencies with expertise on pension issues, particularly as these relate to the financial sector. OECD research and surveillance provide an important independent perspective on pension issues, but IMF country surveillance or program missions rarely included OECD staff. The ILO, too, has accumulated substantial expertise on pension issues, particularly as relates to actuarial issues and social-protection initiatives more generally; it has been an important promoter of the concept of a universal social pension, an issue increasingly on the frontlines of discussion in recent years. IMF staff interacted with the ILO

⁴⁶ The IMF partnered with the EC and the ECB in the euro area crisis programs in Cyprus, Greece, Ireland, and Portugal. IMF surveillance of EU members drew on the work of the EC's Ageing Commission in covering pension issues.

on pension reform issues during the evaluation period in a few countries, e.g., Honduras and Lebanon.

77. Two principal challenges complicated the Fund's operational ability to rely on other institutions such as the World Bank for substantive support on pension issues.

- First, effective collaboration depends on the staffing capacity and ability of other organizations to provide support to the IMF within specific timeframes. This may have been more of an issue in those programs where time was of particular essence in a negotiating situation. Differences in the timeframe required for decision making were conspicuous in the negotiations on pension reform in Greece, where the effectiveness of the Fund staff in its discussions with the authorities was severely complicated by the different institutional clearance requirements confronted by the EC negotiating team.
- Second, the Fund may have principally focused on seeking reforms that sought greater fiscal sustainability for pension schemes, whereas other institutions may have placed greater emphasis on other objectives for pension reform (e.g., strengthening compliance, achieving equity, removing allocative distortions in the policy framework, or eliminating preferential systems). Even when partner institutions shared the same policy objectives, their relative priorities may still have differed. Such differences in policy priorities emerged in the context of Greece, where the Fund's Troika partners had different policy concerns with regard to pension reforms—for example, the EC had to consider that some policy reforms might set a precedent that would apply in other European countries. This is a multidimensional issue that does not just apply to pensions reforms and may require difficult trade-offs, implying deeper social spending reforms in some countries rather than others.

E. Was the Fund's Pension Advice Relevant and Useful?

78. The Fund's role in pension reform is largely advisory, and thus is several steps removed from facilitating the achievement of its intended effects. It is ultimately subject to the decisions of political authorities about the specifics and timing of the measures to be adopted and, most importantly, still many steps removed from interactions with affected citizens. The *outcomes* of the Fund's advice can be assessed in terms of whether it resulted in the recommended changes, in the design features of a pension scheme or, more broadly, in the fiscal path of pension outlays over several decades. The *impact* of the Fund's advice on the lives of those affected citizens is even more difficult to measure, as it bears on the timing or magnitude of the pension benefits that they would ultimately receive, the effect on their savings or labor-market behavior, and/or other indirect consequences for their families. A judgment on the impact of IMF advice also relates importantly to the key objectives of social protection policies, viz., whether such policies have strengthened a country's mechanism for consumption-smoothing by its citizens and minimized the numbers of elderly subject to poverty, now and in the future. This evaluation

cannot offer evidence on outcomes or impacts other than to assess how the IMF's advice was perceived by government authorities.

79. Two different approaches can be used to assess whether the Fund's advice on pensions was relevant and useful. One is to review country authorities' specific goals in undertaking pension reform. In some countries, the authorities sought to ensure that pension schemes were compatible with the government's short- or long-term budgetary targets, while remaining consistent with social-protection objectives. In other countries, they sought to strengthen the structure of a pension scheme to achieve social-protection objectives, perhaps because a system was seen as socially unsustainable due to an inadequate replacement rate or inadequate coverage of the elderly population. What is apparent from the documentary and interview evidence gathered for this study is that fiscal sustainability, while important, was not the only pension-reform objective of member countries and that the Fund's policy responses were sufficiently detailed to help the authorities address their goals and assess trade-offs.

80. An alternative approach is to obtain insights on whether Fund staff and country authorities had a constructive dialogue on pension reform. Interviews with Fund staff members and government officials were conducted to gauge the quality of this dialogue. IMF staff members were asked about the authorities' views regarding the Fund's involvement in pension issues, and country officials were asked (i) how they would characterize the technical quality of the IMF's work and (ii) whether the Fund staff was constructive in working with them on pension reform. Limitations of time and resources precluded coverage of the views of officials in every member country where pension issues arose. As much as possible, authorities were interviewed in countries where the Fund's involvement on pension issues was relatively intense during the evaluation period.

81. In general, staff members reported that they had a good relationship with finance ministry officials but that relations had sometimes been less smooth with the staff of other ministries (notably ministries of labor or social affairs or the equivalent). Even with agreement at the technical level, discussions at the political level were at times contentious. On balance, Fund staff members believed that there had been an open and productive dialogue with authorities on the pros and cons of alternative pension policies, and that the authorities had appreciated being informed about the pension reform experiences of other countries. In a few instances, where the authorities differed with other multilateral partners on pension reforms, the Fund's efforts to serve as an honest broker were welcomed. However, Fund staff members also noted instances where their insufficient appreciation of the political sensitivity of some pension issues or of the role of pensions in a country's social and economic circumstances made the relationship with the authorities difficult. Efforts by the staff to discuss these issues openly in public fora were not always welcomed by country authorities.

82. On balance, the authorities' views largely echoed the staff's perspective. Interviewees viewed the Fund staff as "constructive" and "positive." Many country officials appreciated the credibility obtained from the Fund's support of the government's policy proposals and the

traction that Fund support provided in dealing with legislators and the public. But reservations were also expressed. Some officials noted that the Fund staff was slow to grasp the complexities of the pension and social protection system, with a “learning by doing” character in the early phases of the discussions. In the context of program reviews, the turnover of Fund staff often required repeating the discussions of earlier missions. Some officials felt that the IMF staff was too preoccupied with fiscal consolidation and unwilling to understand the complexities of the role played by the pension system and of the economic and social issues entailed by many reforms.⁴⁷ Some officials, particularly those from non-finance ministries, noted that they felt “cowed” by the Fund staff and that it was difficult to stand up to them in negotiations.

83. The Fund, as it presently operates, lacks the instruments to help a pension reform “live in society” (in the words of one former government official). As noted above, the nature of the Fund’s involvement is largely advisory, subject to the decisions of political authorities about the specifics and timing of measures to be ultimately adopted, and is many steps removed from interactions with affected citizens. In almost all cases, governments recognize the enormous political sensitivity of issues affecting pensions. They understand how difficult it is to explain, rationalize, and justify why such reforms are necessary, particularly given the usually negative political consequences. And rarely do they wish the IMF staff to be on the frontline of such a discussion with their citizenry.

V. FINDINGS AND LESSONS

A. Findings

84. The evaluation period witnessed a marked expansion in the Fund’s analysis and focus on pension issues, as reflected in the attention shown in surveillance, in particular, but also in programs and TA. Fueled by increased attention to fiscal risks and to the effects of the financial crisis, the staff’s efforts on pension-related issues could be viewed as ahead of the expectations embodied in Fund management and Board directives at the beginning of the evaluation period. By the end of the evaluation period, the Fund’s engagement and guidance to staff in the area of pensions had taken these concerns into consideration.

85. On balance—and particularly with the increased recognition of the effects of aging populations—the staff’s focus reflected its awareness that a member’s policy commitments in the sphere of pensions could have adverse fiscal consequences of a macro-critical nature. Usually, this focus emerged with the surveillance process highlighting a concern for the long-term consequences of existing pension policies for financial sustainability. In a number of cases, the implied long-term vulnerabilities were serious enough to warrant conditionality in the context of a Fund-supported program. When the weaknesses of a pension system’s present financial position threatened a country’s current macroeconomic policy framework, conditionality

⁴⁷ This view was most often expressed by (former) Greek officials, who argued that Fund staff should have had a better understanding of the social protection system and the social impact of reform measures (Box 2).

requiring urgent policy actions was included in Fund-supported programs. There were very few countries where the pension system's fiscal consequences were macro-critical and yet not the focus of Fund surveillance.

86. The Fund's focus on pensions during the evaluation period was largely on public DB pension systems. Since DC pension schemes do not create explicit fiscal obligations with macro-critical consequences, Fund surveillance of these schemes was more limited, and thus the Fund staff was less active in discussing any social-protection weaknesses or implicit fiscal consequences of such schemes. Such issues had begun to emerge only by the end of the evaluation period.

87. In considering policy actions to remedy pension-system deficits or to restore financial sustainability to a pension scheme, the Fund staff was often sensitive in its recommendations to the potential distributional or allocative consequences of alternative policy actions. Often, the staff argued for policies to address inter- or intra-generational inequities or to limit adverse effects on the lowest-income pensioners. The staff often advocated pension policies that would limit adverse effects on labor markets and employment.

88. The work carried out by the Fund staff in its diagnosis of pension-system challenges was of good quality, benefitting from the experience of other countries in confronting similar situations and in using state-of-the-art analytical tools to simulate the financial impact of alternative policy options.

89. While the Fund did well in addressing macro-critical issues associated with existing pension systems, it did not always cover some of the key social-protection issues in pension systems, such as the extent of coverage of the population or the adequacy of the pension that most retirees could expect. The social sustainability of the pension system was only infrequently raised as an issue. Often, the social protection issues that arose were related to fundamental decisions that were traditionally considered as outside the Fund's mandate. Judging the allocative and distributional implications of a pension system can prove complex and may have been beyond the scope of what Fund macroeconomists could readily address, either in surveillance or program discussions. To increase the Fund staff's focus on social protection issues would thus require either increased staff resources—accompanied by an expanded skill base in the Fund—or much richer modalities of collaboration with institutions that specialize in pension issues (beyond the financial or actuarial).

90. During the evaluation period, the Fund staff strongly benefited from the specialized input, data, and guidance on pension issues provided by the World Bank and other institutions. But, particularly in a program context, there were limits to the Fund's operational ability to rely on other institutions for substantive support, especially when there were institutional differences in the timeframe required for decision making or in policy objectives or priorities.

91. On balance, the country authorities who were interviewed expressed positive views about the Fund's efforts in the sphere of pension policies, particularly regarding its efforts to diagnose financial problems and to explore the financial impact of alternative policies. They recognized that the Fund's role in prioritizing policy alternatives was less influential, given the political sensitivity of the issues at stake.

B. Lessons for Fund Pension Advice

92. Discussions with Fund economists and country authorities revealed some insights on the Fund's approach to pensions, which would be relevant if the Fund were to seek more of a role on social protection for the elderly. For example:

- Fiscal sustainability should not be confused with, nor necessarily seen as adequate for, social sustainability. The measures that may be required to ensure fiscal sustainability may imply, for many insured, a replacement rate that is relatively low and possibly below the minimum wage or poverty threshold. Even when the replacement rate is adequate, many elderly people may still be left uncovered by the pension system and dependent on charity, family members, or whatever alternative SSN is available.
- The Fund's "go-to" solution for pension reform—increasing the retirement age—may create hidden intra-generational inequities. Fund pension experts often advocate an increase in the retirement age required to qualify for a full pension benefit (a move often linked to increases in longevity). While on average this makes sense given the increasing longevity of many elderly, this may create policy challenges if there is a large discrepancy between the life expectancy of middle- and upper-income groups and that of lower-income groups. On average, the latter may, as a consequence, receive fewer years of benefits than those who live longer. While the low retirement ages currently prevailing in many systems argue for a higher age for benefit eligibility, this may have regressive distributional effects. Fund staff have noted the importance of allowing for early retirement, disability pensions, and access to social assistance programs. In practice, directly conditioning the age of retirement on lifetime earnings (and possibly on assets to take account of bequests) would be extremely problematic.
- Fund economists often rely on cross-country comparisons of the replacement rate when recommending an appropriate policy target for the rate or for a minimum pension guarantee. But these targets need to reflect the country's own demographic factors (e.g., the expected longevity of retirees or the age structure of the population), political factors (particularly for some occupational groups in the labor force), economic considerations (adequacy relative to the poverty line or to the median wage), and social factors (e.g., family support networks).
- The experience in Greece highlights that it is important to be aware of the role pensions play in a society and of whether they interact with other fiscal transfers. Social-insurance

schemes may be financing not only pensions but also other forms of social assistance, thus widening the constituencies affected by any reform. Spending on pensions can also emerge indirectly from the tax system, creating hidden inequities, as seen in Ireland.

- Finally, a multi-pillar pension system with a mandatory funded DC scheme is not exempt from social-protection or fiscal-sustainability problems. Governments may find they face higher pension liabilities if they are forced to address the financing of minimum pension guarantees, a weak prudential and regulatory environment resulting in poorly performing portfolios, or a deficient pension design (e.g., an inappropriate statutory age of retirement or undue provisions for early retirement). Social-protection challenges may arise from: the failure of many workers to satisfy a minimum contribution requirement, creating a need for a backup SSN; savings accounts being drawn down too precipitously at retirement; the unavailability of indexed annuities, leaving the elderly with inadequate accumulated DC account assets; and the absence of clear rules that frame how the rights to accumulated assets are to be divided in cases of divorce or remarriage, for example, potentially leaving important groups more vulnerable than would be suggested by a formal DC scheme.

93. This raises the issue of what it means for the IMF to be concerned about social protection in a country. Is it sufficient to focus only on the adequacy and financial viability of existing schemes, regardless of their limitations? Or should the Fund's concern for fiscal sustainability be supplemented by concern for social sustainability, including the plight of those vulnerable elderly subject to an extremely low replacement rate or the absence of coverage? While these questions can be raised in an Article IV surveillance context, addressing them meaningfully in more than a handful of countries would require a commitment of TA resources far beyond the Fund's current capabilities. Here again, the Fund's main role may be in urging countries to seek pension expertise from other multilateral or regional development institutions, while emphasizing that the proposed policy solutions should be accommodated without significant macro-fiscal risks. Should the Fund seek to achieve social-protection objectives if a pension system does not pose macro-critical challenges? Doing so could prove controversial given the politicized character of pension reform and the additional staff likely to be required to do this work. But not doing so could provoke questions about how committed the IMF really is to social-protection objectives. As an influential advisor, the Fund can also play an important advocacy role in seeking to balance social and economic concerns.

94. If the Fund were to become more involved in pension policy from a social-protection (as opposed to macro-fiscal) perspective, it would need to give greater attention to issues such as:

- The macroeconomic consequences of imminently aged populations, even when there is no obvious pension funding issue in the present. The consequences of longevity risk, in particular, would need to be incorporated in sustainability analyses related to both the public and private pension sectors;

- Social protection gaps in a country's pension framework, particularly inadequate minimum replacement rates and low coverage rates; and
- Risks to social protection in second-pillar DC schemes, such as weak compliance, low interest rates, weak investment performance, and increased risk taking by pension-asset-management firms.

95. To effectively integrate social-protection considerations into its work on pensions, the Fund would need to:

- As part of surveillance, periodically undertake a richer analysis of the social-protection attributes of a country's pension system. Such an analysis would illuminate gaps in social protection and highlight priorities for pension policy reforms to be further discussed, either with IMF TA or with the World Bank or other institution that has relevant expertise.
- Provide more detailed and sophisticated analysis of pension reforms. For example, policy measures that entail cuts in pension benefits, increases in contributions, or higher taxes inherently raise important equity issues in terms of burden sharing and the impact on social-protection objectives. The Fund would need to consider reintroducing a Poverty and Social Impact Analysis unit in FAD with broad *multidisciplinary* expertise (rather than being staffed only with economists), to troubleshoot on social-protection policy issues, particularly in program-lending situations.
- Go beyond pensions and address related social protection issues for elderly groups, such as access to healthcare or the burden on society for long-term care for those very elderly people afflicted with dementia. Judging the adequacy of a pension system requires an understanding of how the elderly obtain and pay for healthcare. Concern for the elderly should not be at the exclusion of the welfare of families, and in particular the younger generation: the capacity of the working-age population to assist in the support of the elderly requires them to be productive and employed, and it is not realistic to ignore the high priority they assign to child rearing and the welfare of the young.⁴⁸

96. In an institution with a largely macroeconomic and financial focus, few Fund mission teams are likely to have much expertise either on pensions or on broader social protection issues. For the Fund to take on a broader role in these areas would require taking on human-resource and knowledge-sharing challenges. Specifically:

⁴⁸ In addition, there are social protection issues that relate not only to old-age protection but also to the problem of unemployment more generally as technological advances progressively reduce the demand for many white-collar workers and services. Societies will need to be more ambitious in designing and financing social protection schemes, including the possibility of universal minimum incomes (see Gibson, 2015). Though the IMF may not be the key institution to develop such schemes, it may have to assess the potential economic ramifications of the technological changes affecting its member countries and the financial, fiscal, and macroeconomic challenges of the more ambitious social protection schemes.

- To enhance its role in social protection, the Fund would need greater access to relevant expertise, both to provide TA to countries and to assist area departments. The Fund currently has limited capacity (beyond a few FAD experts) to provide in-depth technical guidance to country authorities on the financing and benefit issues associated with the design of a pension scheme, or to analyze the equity consequences of alternative pension reforms. While Fund economists are able to carry out aggregative fiscal projections of pension systems, they have less capacity to model detailed reforms of a pension system's features. Such analyses would normally require the skills of an actuary working for longer than would normally be possible during a Fund-supported program mission.
- Greater efforts to strengthen the transmission of knowledge on pension systems and social protection more broadly within the Fund will help, given the inevitable turnover of staff in the area departments.⁴⁹ However, a half-day (or even one-week) in-house training seminar cannot substitute for expertise accumulated over an academic or Fund career.
- The challenges of changing the role that pensions play in a country's culture are complex and time-consuming. Off-the-shelf projection models, while useful for sustainability projections, have limits when it comes to analyzing reforms, since they focus principally on expenditures rather than revenues. In any case, they do not provide much additional value in many AEs and EMEs where technical capacity already exists. The experience of other countries may provide only limited guidance on how to approach reform in an area that can be highly sensitive politically, traverses legal minefields, and has complex cultural and societal roots. As seen in Greece, pension issues can quickly become highly complicated, especially where social protection issues add an additional layer of complexity. In Greece, this led Staff to emphasize the need for bolstering the provision of social assistance, especially for the long-term unemployed, and reducing the tax wedge to improve employment prospects and reduce the burden on the pension system as a safety net of last resort. What has worked in a staff member's own country should not be considered as applicable in another one.

⁴⁹ At least in 2016, the IMF's internal training catalog did not mention any training courses or seminars for IMF staff on pension issues.

APPENDIX 1. CASE STUDY OF IMF INVOLVEMENT IN PENSION ISSUES IN GREECE: 2006–15

1. The following case study evaluates the Fund's involvement in Greek pension issues in the period starting five years before the first Fund-supported program in May 2010 and ending at the expiration of the second program in January 2016. At the time of writing, discussions are still ongoing on a potential successor program to be supported by the Fund.

Surveillance: 2005–10

2. IMF surveillance advice regarding the Greek pension system prior to the financial crisis was clear, both in the diagnosis provided in a 2006 SIP (Roehler, 2006) and in subsequent Article IV staff reports issued during the period. The 2006 Article IV mission highlighted the severe aging of Greece's population that was anticipated (more than in any other EU country); the significant financial deficits experienced by the highly fragmented pension system; the sharp projected increase in pension costs; and the weak capacity of government agencies (principally the National Actuarial Authority of Greece, but also the revenue administration) to address the issues that needed to be confronted in any reform effort. It emphasized the urgency of reform and the need for a transparent national dialogue for the reform agenda to be achieved. The Fund subsequently issued strong warnings in the various consultation reports during the period (in 2007 and 2009). Despite a reform in 2008 that consolidated 133 pension funds into 13 funds, the 2009 Article IV mission underscored the urgent need for further pension reform to address generous early retirement incentives and "very high" replacement rates—all issues that would be confronted in subsequent years in the context of the Fund-supported program with Greece. An SIP for the 2009 consultation (Traa, 2009) emphasized that the net present value of Greece's liabilities had reached almost 400 percent of GDP (rather than the formal public debt of 98 percent of GDP estimated as applicable to the Maastricht criterion).

Stand-By Arrangement: 2010–12

3. In the initial IMF-supported program with Greece, the focus of pension discussions was based on the recognition that the pension system was actuarially unsustainable. The EC estimated that pension outlays, already a large share of GDP, were expected to double by mid-century. While recognizing the system's numerous complex features—its high degree of fragmentation, the shortfall in available data, the differences that prevailed across the various pension systems—negotiations with the authorities and the Troika partners (the lead players being the Fund and the EC, with a less active role on pensions played by the ECB) centered on the parametric changes required to achieve long-term sustainability. The agreed program was reflected in the structural benchmark calling on the National Actuarial Authority to produce a report assessing whether the parameters of the new system would significantly strengthen the system's long-term actuarial balance by end-June 2010. Reforms that were introduced reduced and harmonized the accrual rate at which benefits would accumulate in the different pension schemes, made cutbacks in the extra pensions received for the 13th and 14th months, and gradually introduced a later age of eligibility for full pension benefits. Contribution rates were

not raised, given that they were already comparatively high and were a factor promoting noncompliance and early retirement. Protection of those pensioners receiving low pensions was enunciated as the authorities' key priority. The Fund concurred, though staff members mentioned in interviews with the evaluation team that they had had concerns that pension benefits were being flattened too much. Ultimately, the authorities did legislate some important pension reform measures¹ (though the extent to which these early reform measures were implemented remains unclear).

4. Technical assistance by FAD was formally provided under the auspices of the EU's Task Force on TA for Greece. FAD provided TA on pensions during 2010–11, in concert with knowledgeable pension experts from the European Commission, the Greek National Actuarial Authority, and the Council of Economic Advisors. The analytical focus of FAD's work was guided by the strategy of the authorities and spanned a range of areas including pensions policy, pension administration, and collection of social security contributions.

Extended Fund Facility: 2012–14

5. A number of unanticipated developments kept the issue of pensions on the front burner of program negotiations. Three in particular were notable:

- First, the Greek economy remained mired in a recession, with unemployment rising, wages falling, and the burden of government spending on pensions proving even more onerous in the wake of a reduction in nominal GDP. Pension spending reached almost 18 percent of GDP and state transfers to the pension system from the central government budget hit about 10 percent of GDP. Indeed, pension spending increased by almost 5 percentage points of GDP during 2009–15.
- Second, the effect of the new pension law was to incentivize many workers to take advantage of the peculiar weaknesses of the pension system's design. Essentially, once a worker had contributed to the system for 15 years, there was very little payoff to continue working. In part this stemmed from workers' ability to heavily weight their pensions on their pre-crisis wages and in part from other system features that gave little additional benefit for further years of contributions at the high contribution rate. As a result, the stock of pensioners ballooned and contribution receipts slackened (with the increase in retirees and high unemployment rates), further adding to the burden of pension outlays on the budget.

¹ According to a statement by the Alternate Executive Director for Greece on the occasion of the Fund's discussion on the authorities' 2012 request for an Extended Arrangement Under the Extended Fund Facility, these included: unification of a number of pension funds; an increase in the effective retirement age to 65 and linked to life expectancy; an increase in the minimum contributory period for retirement on full benefit; a linking of pension benefits more tightly to life-time contributions; an increase in retirement penalties for early pensioners; and abolition of voluntary exit plans.

- Third, legislation was introduced that in retrospect (based on the Court ruling) did not fully take account of the complexity of existing pension laws. As a result, in 2015, the Council of State overruled some of the policy reforms enacted in the context of the program. This has raised questions as to how much long-term budgetary savings will ultimately be realized from these reforms. Ironically, the Council's decisions reflected the view that too much flattening had resulted, with too much of a burden being borne by a small share of the population.

6. Pension reform issues were critical elements of the negotiations during 2014–15. Discussions in 2014 focused entirely on the completion of the structural benchmark on pension reforms, to which the authorities had committed under the 5th review of the EFF-supported program, while ensuring the achievement of the medium-term growth fiscal targets agreed by the authorities under the program. The structural benchmark sought a structural improvement in the pension system to enhance contribution-benefit links and encourage contribution and labor force participation. These discussions led the authorities (in their Letter of Intent of May 2014) to propose that supplementary and lump-sum pensions would only be financed by the own contributions of workers, as of the beginning of 2015. Discussions thus focused on the structural features of the pension system, which provides both contributory and noncontributory benefits (various lump-sum and supplementary benefits and the EKAS “social solidarity grant”), overlain with various minimum pension guarantees and benefit top-ups. Combined, these features implied that the lowest-income pensioners received replacement rates that exceeded 80 percent of average wages (and more than 100 percent at the lower end). Evaluation interviews with staff members involved indicated that such outcomes were far in excess of the norm in most European countries. Discussions in 2015 had to change focus to preserve the savings that had been overturned by the Council of State ruling.

7. Other features, such as much-reduced contribution rates for particular groups in the labor force (notably farmers and self-employed, who had high-noncompliance rates), privileged pensions for some occupational and industrial groups, and the categorization of many occupational groups as “arduous” professions allowing early retirement, all came to the fore. The fact that the Greek pension system essentially served both a social insurance and an untargeted social assistance role in society was also in play. Though benefits were not targeted to those most in need, any efforts to cut them would have had a long reach, affecting not only pensioners but also many younger family members who depended on the elderly for financial support. The fact that the distribution of pensioners was heavily weighted toward lower-income groups protected by minimum pension rights further complicated the political challenge of reducing outlays.

8. Addressing these issues was obviously contentious politically. Options were constrained by the need to limit the possibility of other adverse judicial rulings, the need to respect vested pension rights, the extremely weak database on contributors to the different pension funds, and the need to avoid increases in contribution rates that would worsen compliance rates and incentivize work in the informal sector. Very importantly, evaluation interviews with Fund staff

members indicate that an effort was made to ensure that pension cutbacks would not weaken the position of the lowest-income pensioners, and to ensure them of at least a minimally appropriate replacement rate relative to wages and the poverty level. This meant that in cutting aggregate pension outlays, the focus had to largely be on wealthier pensioners. But “flattening” the benefit curve in this way would further weaken the incentive of workers to contribute to the system. Compounding the challenge was the continuing weak economic environment, with wages falling or stagnant and with little inflation to raise nominal wage levels or reduce real pensions. Vested rights of pensioners further increased the difficulty of ready success.

9. According to those involved, the Fund’s focus in these discussions centered on the following objectives:

- Realizing the necessary budgetary savings in order to reduce reliance on state transfers and free fiscal space for other urgent budgetary priorities that could help to restore growth in the Greek economy.
- Not jeopardizing the reforms that had already been implemented to restore long-term financial sustainability to the pension system; this would require introducing (as has been increasingly the case in other pension systems) automatic adjustment rates for key parameters in order to ensure actuarial sustainability.
- Not raising (and ideally reducing) contribution rates, as a means of strengthening the demand for labor and reducing unemployment (particularly given Greece’s 50 percent youth unemployment rate).
- Harmonizing and unifying the highly fragmented and costly institutional structure of the pension system as a means of reducing unnecessary administrative costs to the system. Over the long term, the integration of social security contributions and tax payments would enhance efficiency.
- Ensuring that the pension system would protect the lowest-income pensioners while providing a reasonable return to workers contributing to the system for their pension benefits.
- Gradually putting in place a budget-based social assistance system so that the pension system could be more insurance-based. This would require rationalizing the complex system of the minimum, basic, and targeted rights in the pension system, which results in preferential treatment of some groups.
- Eliminating special privileges for different categories of workers, particularly as related to early retirement.
- Addressing the question of lax standards in qualifying those workers eligible for pensions.

10. The Greek authorities, in 2015 and more recently in mid-2016, legislated a number of important measures consistent with these objectives: significant cutbacks in the EKAS benefit, addressing some inconsistencies in the complex structure of minimum pensions, cutbacks in

supplementary pensions, cutbacks in the lump sum received by the self-employed upon retirement, and an increase in social security contributions (particularly affecting farmers and self-employed professionals). While many of the cutbacks applied to existing pensioners, other measures were designed to come into effect only over the longer term. Other concerns of the Fund, such as the still-low age of retirement and the incentives for early retirement, were not addressed.

Assessment

11. As a case study for this evaluation, Greece is a good illustration of the challenges encountered in the Fund's involvement in pension issues. The institutional, legal, and technical details of the pension system in Greece were complex. The policy environment was difficult. The Fund could not rely on the World Bank for specialized and detailed advice on pension reforms as it could in the vast majority of countries where it had dealt with pension issues in a program context. The Fund was thus, in one sense, on its own, but at the same time it partnered with the EC and the ECB and was required to square its policy proposals with its partners.

12. Judging by the amount of TA provided, the extent of the analytical work carried out by Fund staff, and the heavy mission presence (staffed by some of its strongest and most knowledgeable fiscal and pension experts), the Fund was full-throated in its involvement. Yet the complexity of the Greek pension system was such that many issues—behavioral, legal, cultural, and institutional—were not fully grasped in the early phases of the work. Interviews with staff members and country authorities involved during that period revealed that neither the Fund nor its counterparts in Greece fully understood some of the legal wrinkles in the system that led to the adverse ruling by the Constitutional Court. Nor did they foresee how strong would be the reaction of many workers, who sought early retirement in anticipation of the policy changes that were initially enacted. The fact that pension benefits played such an outsized role in the Greek society—in the absence of a complementary social assistance system—made it difficult to disentangle pensions as a form of social insurance from pensions as a source of social transfers.

13. The institutional fragmentation of the Greek pension system, and its enormous weaknesses in administrative effectiveness—in terms of both benefits and revenue collection—weighed heavily on the Fund staff and meant that it took time to be able to think creatively and effectively on many of the issues. Another part of the challenge was to help the Greek authorities address the many institutional reforms required to make the pension system function more efficiently.

14. The Greek example is also instructive from a social protection point of view. Because such large up-front budgetary cutbacks were required from the pension system, the Fund had to address politically contentious issues regarding how to distribute their burden. In effect, this forced judgments on distributional issues relative to macroeconomic, fiscal, and allocative-efficiency

effects.² Ultimately, the authorities decided what policy measures to enact. Certainly, there seems to have been a shared view that the lowest-income pensioners should be shielded—and that this should be done by flattening the benefit curve even at the cost of weakening the linkage between benefits and contributions. But reaching these judgments took time, illustrating how the politics of pensions at a particular moment can dictate what reforms can be accomplished.

15. Finally, it is important to share some of the insights derived from interviews with Greek authorities and involved Fund staff members. Some former Greek officials criticized the Fund staff as:

- Lacking an understanding of social protection effects: The Fund’s preoccupation with the bottom line—the need for clear fiscal savings—led many on the Greek side to believe that the Fund team was insensitive to the social-protection effects of measures and failed to do the necessary poverty and social impact analyses.
- Failing to recognize the complexity of the Greek pension system, including the issues that would arise in the transition to the new system, the complicated system of vested rights, the behavioral reactions of Greek workers to the new policies, and the legal challenges posed by efforts to deal with these issues. Some former officials noted that the details of the pension system were not transparent. Indeed, the early period of negotiations was characterized by one interviewee as “the age of innocence.”³
- Underestimating the macro effects of the totality of policy changes negotiated in the program, including the increase in unemployment (and the rise in the number of new pensioners) and the depth of the recession. This meant that estimates of the macro implications of reform and the effects on social security revenue were overstated.

16. But there was also acknowledgment among the former Greek authorities interviewed that the Fund’s TA experts were helpful in uncovering and diagnosing problems in the system and offering strategies for remediation.⁴ They noted that whatever efforts the Fund may have made to protect the lowest-income pensioners were unlikely to have been recognized or appreciated by pensioners confronted with some cut in their pensions. Such public perceptions rendered it difficult for the Fund and the authorities to communicate with the general public on reform needs.

² Some staff felt in retrospect that a more difficult but more comprehensive effort to introduce a more rational and better-designed system might ultimately be more effective than the prolonged piece-meal reforms that were carried out. Some noted that the grandfathering of existing pensioners created inter-generational inequities and may not have been an appropriate strategy in a situation of insufficient fiscal space.

³ Some staff said that they realized only belatedly (i) the extent of the exemptions (by pension fund and by occupation, particularly in the public sector) in the Greek pension legislation; and (ii) the (large) number of self-employed who were eligible for early retirement even after the extension of the retirement age.

⁴ One IMF staff member noted that these reform proposals were very familiar to the technical staff in the government and indeed *derived* from ideas that the latter had been considering in the past.

Appendix Table A.1. Selected Issues Papers (SIPs), Annexes, and Text Boxes on Pension Issues, 2005–16

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| Albania | "Pension Reform and Combating Informality," (Box) in <i>IMF Country Report</i> No. 09/73, February 2009 "Albania's Pension System and Fiscal Challenges" (Annex) in <i>IMF Country Report</i> No. 11/313, October 2013 |
| Algeria | "Meeting Algeria's Fiscal Challenges," (SIP) <i>IMF Country Report</i> No. 14/342, December 2014 |
| Aruba | "Long-run Growth and Fiscal Sustainability in Aruba," (SIP) <i>IMF Country Report</i> No. 05/203, June 2005 |
| Australia | "Sustaining Income Growth in Australia," (SIP) <i>IMF Country Report</i> No. 15/275, September 2015 |
| Austria | "Long-Run Fiscal Challenges in Austria," (SIP) <i>IMF Country Report</i> No. 07/143, April 2007 "Austria's Long-Run Fiscal Sustainability in Light of Current Tax and Expenditure Trends," (SIP) <i>IMF Country Report</i> No. 16/51, February 2016 |
| Azerbaijan | "The Inclusiveness of Azerbaijan's Growth," (SIP) <i>IMF Country Report</i> No. 11/333, December 2011 |
| Belgium | "Towards Job-Creating Labor Market Reform," (SIP) <i>IMF Country Report</i> No. 12/56, March 2012 |
| Belize | "Social Security and Pension Plan for Public Officers," (Annex) in <i>IMF Country Report</i> No. 16/92, March 2016 |
| Bosnia & Herzegovina | "The Case for Pension Systems Reform," (SIP) <i>IMF Country Report</i> No. 10/347, November 2010 |
| Brazil | "Public Expenditure Trends and Options to Strengthen the Expenditure Framework," (SIP) SM/06/168, May 2006 "The Efficiency of Social Expenditure in Brazil," (SIP) SM/07/245, July 2007 "Macroeconomic Implications of Pension Reform in Brazil," (SIP) <i>IMF Country Report</i> No. 12/192, June 2012 "Fiscal Challenges of an Aging Population in Brazil," (SIP) <i>IMF Country Report</i> No. 16/349, November 2016 |
| Bulgaria | "Bulgaria: Fiscal Policy Challenges," (SIP) <i>IMF Country Report</i> No. 10/159, April 2010 "Fiscal Policy and Social Protection," (SIP) <i>IMF Country Report</i> No. 14/24, January 2014 |
| Cameroon | "Poverty, Inclusiveness and the Budget," and "Public Wage Bill Determinants," (SIP) <i>IMF Country Report</i> No. 14/213, July 2014 |
| Central and Eastern Europe: New Member States | "The EU Fiscal Framework and Pension Reform," (SIP) <i>IMF Country Report</i> No. 15/98, April 2015 |
| Chile | "Addressing the Long-Run Shortfalls of the Chilean Pension System," (SIP) <i>IMF Country Report</i> No. 05/316, July 2005 "Deepening Liquidity in Chilean Fixed-Income Markets," (SIP) <i>IMF Country Report</i> No. 06/336, September 2006 "Reforming the Pension System," (Box) in <i>IMF Country Report</i> No. 07/219, June 2007 "A Longer-Term Approach to Fiscal Policy I Chile," (SIP) <i>IMF Country Report</i> No. 09/272, September 2009 "Chile's Experience with Inclusive Growth," (SIP) <i>IMF Country Report</i> No. 14/219, July 2014 |
| China | "Social Spending in China," (SIP) <i>IMF Country Report</i> No. 06/249, July 2006 "Toward an Equitable, Sustainable, and Integrated Social Insurance System," (Box) in <i>IMF Country Report</i> No. 15/234, August 2015 |

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| Colombia | <p>"Colombia's Fiscal Rule and Adjustment in the Context of Resource Wealth," (SIP) <i>IMF Country Report</i> No. 14/167, 2014</p> <p>"Colombia's Experience with Inclusive Growth," (SIP) <i>IMF Country Report</i> No. 15/143, June 2015</p> |
| Costa Rica | <p>"Assessing Fiscal Vulnerability and Medium-Term Sustainability," (SIP) <i>IMF Country Report</i> No. 13/80, March 2013</p> <p>"Assessing Fiscal Vulnerability and Medium-Term Sustainability," (SIP) <i>IMF Country Report</i> No. 15/30, February 2015</p> |
| Cyprus | <p>"Pension Reform: Addressing the Consequences of Aging," (SIP) <i>IMF Country Report</i> No. 07/71, February 2007</p> <p>"The Cypriot Pension System: Issues and Reform Options," (SIP) <i>IMF Country Report</i> No. 11/332, November 2011</p> <p>"Achieving A Durable Fiscal Consolidation," (SIP) <i>IMF Country Report</i> No. 14/314, October, 2014</p> |
| Czech Republic | <p>"Strengthening the Fiscal Framework," (SIP) <i>IMF Country Report</i> No. 07/85, February 2007</p> <p>"Tax and Welfare Reform in the Czech Republic—Structural Implications and Challenges," and "Tax and Pension Reform in the Czech Republic—Implications for Growth and Debt Sustainability," (SIP) <i>IMF Country Report</i> No. 08/40, January 2008</p> <p>"Structural Reform Agenda to Ensure Fiscal Sustainability and Promote Growth," (SIP) <i>IMF Country Report</i> No. 10/59, February 2010</p> <p>"The Fiscal Strength of the Czech Republic," (SIP) <i>IMF Country Report</i> No. 13/243, August 2013</p> |
| Denmark | <p>"Demographic Change and Fiscal Sustainability in Denmark," (SIP) <i>IMF Country Report</i> No. 08/380, December 2008</p> <p>"Composition of Public Expenditure," (SIP) <i>IMF Country Report</i> No. 13/23, January 2013</p> <p>"Household Debt in Denmark," (SIP) <i>IMF Country Report</i> No. 14/332, December 2014</p> |
| Dominica | <p>"The Reform of Dominica Social Security," (Annex) in <i>IMF Country Report</i> No. 07/1, January 2007</p> |
| Dominican Republic | <p>"An Analysis of Potential Pension Liabilities in the Dominican Republic," (SIP) SM/08/05, January 2008</p> |
| Eastern Caribbean Currency Union | <p>"Social Security in the Eastern Caribbean Currency Union," (SIP) <i>IMF Country Report</i> No 07/97 March 2007</p> <p>"Can the ECCU Afford to Grow Old?" (SIP) <i>IMF Country Report</i> No. 08/96, March 2008</p> <p>"Rationalizing Public Expenditures in the ECCU," (SIP) <i>IMF Country Report</i> No. 11/32, January 2011</p> <p>"Social Conditions and Growth in the ECCU," (SIP) <i>IMF Country Report</i> No. 13/39, February 2013</p> |
| Ecuador | <p>"The Pension System in Ecuador," (SIP) <i>IMF Country Report</i> No. 15/290, September 2015</p> |
| El Salvador | <p>"Experience Under Pension Reform," (SIP) <i>IMF Country Report</i> No. 06/241, July 2006</p> <p>"An Unsustainable Pension System," (Box) in <i>IMF Country Report</i> No. 15/13, January 2015</p> <p>"The Salvadoran Pension System: In Search of Sustainability," (SIP) <i>IMF Country Report</i> No. 16/209, June 2016</p> |
| Estonia | <p>"Population Aging and Fiscal Sustainability in Estonia," (SIP) <i>IMF Country Report</i> No. 07/256, July 2007</p> <p>"Estonia: Income Convergence and Medium-Term Growth Potential," (SIP) <i>IMF Country Report</i> No. 15/337, December 2015</p> |
| Ethiopia | <p>"Challenges for Growth and Inclusiveness," (SIP) <i>IMF Country Report</i> No. 13/309, October 2013</p> |

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| Finland | <p>"Enhancing Employment Rates in Finland: The Role of Activation Strategies," (SIP) <i>IMF Country Report</i> No. 07/278, August 2007</p> <p>"From Short-Term Vulnerabilities to Long-Term Sustainability," (SIP) <i>IMF Country Report</i> No. 12/254, August 2012</p> <p>"Fiscal Policy: Promoting Growth and Ensuring Sustainability," (SIP) <i>IMF Country Report</i> No. 14/140, May 2014</p> |
| France | <p>"Which Expenditure Saving to Sustain Medium-Term Fiscal Consolidation?" (SIP) <i>IMF Country Report</i> No. 13/252, August 2013</p> <p>"Expenditure Reforms," (SIP) <i>IMF Country Report</i> No. 15/179, June 2015</p> |
| Georgia | <p>"Will the Increase in Social Expenditures Contribute to Better Social Outcomes?" (SIP) <i>IMF Country Report</i> No. 13/174, June 2013</p> |
| Germany | <p>"Pensions and Growth," (SIP) <i>IMF Country Report</i> No. 04/340, November 2004</p> <p>"Women in the Labor Market and the Demographic Challenge," (SIP) <i>IMF Country Report</i> No. 15/188, July 2015</p> |
| Greece | <p>"Greece: Issues in Pension Reform," (SIP) <i>IMF Country Report</i> No. 06/05, January 2006</p> <p>"Revenue Administration and Fiscal Consolidation," (SIP) <i>IMF Country Report</i> No. 13/255, June 2013</p> |
| Guatemala | <p>"Fiscal Sustainability Assessment," (SIP) <i>IMF Country Report</i> No. 14/288, September 2014</p> |
| Guyana | <p>"Guyana: National Insurance Scheme Reforms," (SIP) <i>IMF Country Report</i> No. 07/93, March 2007</p> |
| Haiti | <p>"Haiti's Public Sector: Explaining the ECF's Fiscal Target," (SIP) <i>IMF Country Report</i> No. 15/158, June 2015</p> |
| Hong Kong | <p>"The Implications of an Aging Population for Hong Kong SAR," (SIP) <i>IMF Country Report</i> No. 06/51, February 2006</p> |
| Hungary | <p>"Hungary: Developing a Medium-Term Fiscal Strategy," (SIP) <i>IMF Country Report</i> No. 06/367, October 2006</p> |
| Iceland | <p>"Expenditure Policy in Iceland: Moving Beyond the Crisis," (SIP) <i>IMF Country Report</i> No. 16/180, June 2016</p> <p>"Lifting Capital Controls: The Effect of a Potential Rebalancing of Residents' Investment Portfolio," (SIP) <i>IMF Country Report</i> No. 13/257 July 2013</p> |
| India | <p>"Financial Market Implications of India's Pension Reform," (Box) in <i>IMF Country Report</i> No. 07/63, February 2007</p> |
| Indonesia | <p>"Managing Fiscal Risks in Indonesia," (SIP) <i>IMF Country Report</i> No. 15/75, March 2015</p> |
| Iran | <p>"Medium-Term Perspective to Fiscal Policy Design," (SIP) <i>IMF Country Report</i> No. 15/350, December 2015</p> |
| Ireland | <p>"Who Saves in Ireland? The Micro Evidence," (SIP) <i>IMF Country Report</i> No. 05/370, October 2005</p> <p>"Policy Challenges of Population Aging in Ireland," (SIP) <i>IMF Country Report</i> No. 07/326, September 2007</p> <p>"Medium-Term Fiscal Consolidation in Ireland: Growth-Friendly, Targeted, Sustainable," (SIP) <i>IMF Country Report</i> No. 12/265, September 2012</p> |
| Italy | <p>"Fiscal Devaluation in Italy: Towards a More Export, Employment, and Growth Friendly Tax System," (SIP) <i>IMF Country Report</i> No. 142/168 July 2012</p> <p>"Future Challenges Facing Italy's Financial Sector," and "Improving Public Spending Allocation and Performance in Italy: An Efficiency Analysis," (SIP) <i>IMF Country Report</i> No. 14/284, September 2014</p> |
| Japan | <p>"Options for Pension Reform," (SIP) <i>IMF Country Report</i> No. 08/254, June 2008</p> <p>"Issues and Options for Pension Reform in Japan," (SIP) <i>IMF Country Report</i> No. 12/209, July 2012</p> |

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| Korea | <p>"Achieving Long-Term Fiscal Sustainability in Korea," (SIP) <i>IMF Country Report</i> No. 07/345, October 2007</p> <p>"Are Korean Households Saving Too Little," (SIP) <i>IMF Country Report</i> No. 10/218, August 2010</p> <p>"Social Spending in Korea: Can it Foster Sustainable and Inclusive Growth?" (SIP) SM/12/219, August 2012</p> <p>"Towards a Rules-Based Fiscal Framework in Korea in the Context of Population Aging," (SIP) <i>IMF Country Report</i> No. 13/332, December 2013</p> |
| Latvia | <p>"Latvia's Fiscal Adjustment: Achievements and Remaining Needs," (SIP) SM/10/181, July 2010</p> |
| Lebanon | <p>"Lebanon's Pension System: Some Unpleasant and Unfair Arithmetic," (SIP) <i>IMF Country Report</i> No. 15/137, June 2015</p> |
| Lithuania | <p>"Emigration from Lithuania: Determinants and Implications," (SIP) <i>IMF Country Report</i> No. 06/163, April 2006</p> <p>"Income Tax Reforms to Improve Labor Market Outcomes," (SIP) <i>IMF Country Report</i> No. 07/137, April 2007</p> <p>"Toward a Sustainable and Inclusive Consolidation in Lithuania: Past Experience and what is Needed Going Forward," (SIP) <i>IMF Country Report</i> No. 13/82, March 2013</p> |
| Luxembourg | <p>"Preserving the Sustainability of the Pension System," (SIP) <i>IMF Country Report</i> No. 06/165, April 2006</p> <p>"The Fiscal Position—Sound for Now, but Significant Challenges Ahead," (SIP) <i>IMF Country Report</i> No. 14/119, May 2014</p> |
| Macedonia | <p>"The Case for Fiscal Prudence," (SIP) <i>IMF Country Report</i> No. 09/61, February 2009</p> <p>"Fiscal Rules to Ensure Sustainability," (SIP) <i>IMF Country Report</i> No. 15/243, September 2015</p> |
| Malawi | <p>"Pension Reform, (Box) in <i>IMF Country Report</i> No. 06/9, March 2006</p> <p>"Financial Sector Stability Analysis," (SIP) <i>IMF Country Report</i> No. 15/346, November 2015</p> |
| Malaysia | <p>"A Medium-Term Fiscal Strategy," (SIP) <i>IMF Country Report</i> No. 14/82, February 2014</p> |
| Malta | <p>"Pension and Healthcare Reform," (Appendix) in <i>IMF Country Report</i> No. 13/203, July 2013</p> <p>"Pension Reform in Malta," (SIP) <i>IMF Country Report</i> No. 16/21, January 2016</p> |
| Mauritius | <p>"Mauritius: Further Pension Reforms? (Box) in <i>IMF Country Report</i> No. 14/107, May 2014</p> <p>"Pension Reform Options," (Appendix) in <i>IMF Country Report</i> No. 13/97, April 2013</p> |
| Mexico | <p>"Long-Term Fiscal Challenges in Mexico," (SIP) <i>IMF Country Report</i> No. 11/249 August 2011</p> |
| Moldova | <p>"Fiscal Consolidation and Structural Reforms in Moldova," (SIP) <i>IMF Country Report</i> No. 10/232, July 2010</p> <p>"Fiscal Imbalance and Road to Sustainability," (SIP) <i>IMF Country Report</i> No. 12/289, September 2012</p> |
| Namibia | <p>"The Sustainability of Namibia's Universal Pension Grant in Light of Changing Demographics," (SIP) <i>IMF Country Report</i> No. 06/153, April 2006</p> |
| Netherlands | <p>"Fiscal Sustainability and Optimal Consolidation Paths in the Netherlands," (SIP) <i>IMF Country Report</i> No. 11/143, May 2011</p> <p>"Reforming Occupational Pension Schemes in the Netherlands," (SIP) <i>2015 Article IV Consultation, IMF Country Report</i> No. 16/46, February 2016</p> |
| New Zealand | <p>"Options for Tax Policy Reform," (SIP) <i>IMF Country Report</i> No. 16/40, February 2016</p> |

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| Nicaragua | "Achieving Sustainability: Reforming the Nicaraguan Pension System," (SIP) <i>IMF Country Report</i> No. 12/257, September 2012 |
| Norway | "Alternative Fiscal Rules for Norway," (SIP) <i>IMF Country Report</i> No. 07/173, May 2007 "Long-Run Fiscal Challenges," (SIP) <i>IMF Country Report</i> No. 13/273, July 2013 |
| Panama | "The Social Security System—A Pending Reform," (SIP) <i>IMF Country Report</i> No. 06/26, January 2006 "Pension Reform: From a Defined Benefit to a Dual System," (SIP) <i>IMF Country Report</i> No. 06/40, February 2006 |
| Paraguay | "Fiscal Structural Challenges and Reform Agenda," (SIP) <i>IMF Country Report</i> No. 07/214, June 2007 |
| Poland | "A Leap Beyond Traditional Fiscal Indicators: Measuring Poland's Intertemporal Net Worth and Deriving its Policy Implication for Poland," (SIP) <i>IMF Country Report</i> No. 10/119, May 2010 "Private Pension Systems in Emerging Europe: The Uncertain Road Ahead," (SIP) <i>IMF Country Report</i> No. 11/167, July 2011 "The Polish Pension System: Fiscal Impact of the 2014 Changes and Remaining Policy Challenges," (SIP) <i>IMF Country Report</i> No. 14/174, June 2014 |
| Portugal | "Growth-Friendly, Equitable, and Sustainable Fiscal Reform in Portugal," (SIP) <i>IMF Country Report</i> No. 13/19, January 2013 "Status of Fiscal Adjustment and Challenges Ahead," (SIP) <i>IMF Country Report</i> No. 15/127, May 2015 |
| Romania | "The Impact of Aging on the Public Sector in Romania," (SIP) <i>IMF Country Report</i> No. 07/220, June 2007 "Potential Reform and the Output Gap," (SIP) <i>IMF Country Report</i> No. 12/291, October 2012 "Cutting Labor Taxes in a Constrained Budget Environment," (SIP) <i>IMF Country Report</i> No. 15/80, March 2015 |
| Russia | "The Macroeconomics of Pension Reform (SIP) <i>IMF Country Report</i> No. 08/308, September 2008 "Pension Reform in Russia," (Box) <i>2013 Article IV Consultation, IMF Country Report</i> No. 13/310, October 2013 "Pension Reform," (Box) <i>2014 Article IV Consultation, IMF Country Report</i> No. 14/175, July 2014 |
| St. Kitts & Nevis | "The Social Security Board," (Box) in <i>IMF Country Report</i> No. 15/248, September 2015 |
| San Marino | "The Pension System in San Marino: Issues and Options for Reforms," (SIP) <i>IMF Country Report</i> No. 10/66, March 2010 |
| Serbia | "Exploring Options for Enhancing Fiscal Consolidation," and "Pension Reform," (SIP) <i>IMF Country Report</i> No. 13/207, July 2013 |
| Slovak Republic | "Medium and Long-Term Fiscal Issues in Slovakia," <i>Annex, 2011 Article IV Consultation IMF Country Report</i> No. 11/122 June 2011 |
| Slovenia | "Impact of Aging on Fiscal Sustainability in Slovenia," (SIP) <i>IMF Country Report</i> No. 06/250, July 2006 "Pension Reform" (Box) in <i>IMF Country Report</i> No. 11/121 May 2011 "Social Spending Reform and Fiscal Savings in Slovenia," (SIP) <i>SM/15/42</i> , February 2015 |
| Spain | "Re-Assessing Spain's Fiscal Sustainability: 3 Percent and Beyond," (SIP) <i>IMF Country Report</i> No. 11/216, July 2011 "Spain—Pension Projections," (SIP) <i>IMF Country Report</i> No. 13/245, August 2013 |
| Suriname | "Fiscal Sustainability and Aging Pressures in Suriname," (SIP) <i>IMF Country Report</i> No. 14/317, October 2014 |

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| Sweden | "The Swedish Fiscal Framework: Towards Gradual Erosion?" (SIP) <i>IMF Country Report</i> No. 05/344, September 2005 |
| Switzerland | "A Comparison of the Swiss, Dutch, and the U.K. Pension Systems, with Emphasis on the Occupational Pension Pillars," (SIP) <i>IMF Country Report</i> No. 06/203, June 2006 "Guaranteed Rates of Return in Swiss Pension Funds," (Box) <i>2015 Article IV Consultation, IMF Country Report</i> No. 15/132 May 2015 |
| Thailand | "Population Aging and its Fiscal Implications," (SIP) <i>IMF Country Report</i> No. 16/140, May 2016 |
| Turkey | "Social Security Reform," (Box) in <i>IMF Country Report</i> No. 08/272 August 2008 "Budget Rigidities in Turkey," (SIP) <i>IMF Country Report</i> No. 13/364, December 2013 "Private Savings in Turkey: Developments and Policy Options," (SIP) <i>IMF Country Report</i> No. 16/105, April 2016 |
| Ukraine | "Rebalancing Ukraine's Public Pension Finances," (SIP) <i>IMF Country Report</i> No. 05/416, November 2005 "Pension Reform: (Box) <i>Request for Stand-By Arrangement, IMF Country Report</i> No. 10/262 August 2010 "Pension Reform," (Box) First Review Under the Stand-By, <i>IMF Country Report</i> No. 11/52 February 2011 |
| United States | "Fiscal Challenges Facing the U.S. State and Local Governments," (SIP) <i>IMF Country Report</i> No. 11/202, July 2011 |
| Uruguay | "Balance-Sheet Mismatches and Cross-Sectoral Vulnerabilities," (SIP) <i>IMF Country Report</i> No. 06/427 June 2006 "Uruguay's Pension System: Overview," (SIP) <i>IMF Country Report</i> No. 11/376, December 2011 "Inclusive Growth: The Tale of Uruguay," (SIP) <i>IMF Country Report</i> No. 15/82, March 2015 |

Note: This list includes work completed prior to and after the evaluation period for background. Reports or equivalent prepared for surveillance that was conducted other than during the evaluation period are not under assessment for the purposes of this evaluation.

Appendix Table A.2. Article IV Discussions of Pension Issues in Aging Countries with Low Pension Coverage

| | Active Coverage ^a (In percent) | Share of Old Age Beneficiaries in Population Over 65 (In percent) | Pension Coverage Discussed |
|--------------------|--|--|--|
| Bangladesh | 3 | 33 | Yes (2012, 2013, 2016) |
| Belize | 42 | ... | Yes (2015) |
| Bhutan | 14 | 7 | Negligible (2010 PRSP); WB involvement |
| Bolivia | 9 | 33 | Yes (2008, 2011) |
| Cape Verde | 25 | 16 | No |
| Chile | 39 | 55 | Yes (2014 SIP) |
| China | 28 | 84 | Yes, throughout |
| Colombia | 20 | 26 | Yes (2012) |
| Costa Rica | 40 | 21 | Yes (2013) |
| Djibouti | 27 | 14 | Negligible (mentioned in PRSP, 2009); WB involvement |
| Dominican Republic | 19 | 14 | Yes (2008 SIP) |
| Ecuador | 18 | 21 | Yes (2006, 2015 SIP) |
| El Salvador | 16 | 20 | Yes (2008, 2014, 2016 SIP) |
| Fiji | ... | 24 | Yes (2013) |
| Guatemala | 15 | 10 | No |
| Guyana | 27 | 58 | Yes (2007 SIP, 2010) |
| Honduras | 11 | 4 | Yes |
| India | 10 | 18 | No |
| Indonesia | 9 | 8 | Yes (2013, 2015 SIP) |
| Jamaica | 13 | 29 | Yes, throughout |
| Lao PDR | 6 | 9 | No |
| Macedonia | 33 | 63 | Yes, 2009 |
| Maldives | 24 | 42 | Yes (2009) |
| Mexico | 19 | 18 | Yes (2011, 2013) |
| Morocco | 24 | 20 | Yes (2013, 2014) |
| Nicaragua | 15 | 19 | Yes (2011, 2012 SIP, 2013) |
| Papua New Guinea | 3 | 1 | No (Some WB involvement mentioned) |
| Paraguay | 9 | 5 | Yes (2007, 2012) |
| Peru | 16 | 29 | Yes (2011, 2015) |
| Philippines | 17 | 21 | No |
| Rwanda | 5 | 11 | Negligible; WB involvement |
| St. Lucia | 35 | 20 | Yes (2010) |
| Serbia | 40 | 57 | Yes, throughout |
| Sierra Leone | 5 | ... | Yes (2016 (SIP)) |
| Solomon Islands | 46 | ... | No |
| Sri Lanka | 24 | 8 | Yes (2009–2012) |
| Thailand | 18 | 23 | Yes (TA 2015) |
| Tunisia | 49 | 49 | Yes (2009, 2012, 2013, 2014, 2015) |
| Vanuatu | 22 | 25 | No |
| Venezuela | 24 | ... | No |
| Vietnam | 15 | 15 | Yes (2007) |

Source: World Bank (2012) for data on pension coverage.

Note: In this table, the country sample was restricted to countries with an active pension coverage rate of less than 50 percent, that will see a doubling by 2050 of the elderly-dependency rate, and also an elderly-dependency rate of at least 20 percent by 2050. But the sample excludes countries with a high elderly-beneficiary rate (typically associated with some form of SSN or universal minimum pension).

^a Total number of active members as a share of the working age population.

Appendix Table A.3. IMF-Supported Program Conditionality on Pension Policies

| Country (Program) | Pension Policy Objectives in the Program ^a | Program Measures ^b |
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| Albania (2014–17 EFF) | To close the 5 percent of GDP financing gap in the current social insurance system (ST). | <ul style="list-style-type: none"> ● Establish a Pension Reform Commission to devise a reform strategy of the pension system (SB). ● Council of Ministers to approve a pension reform strategy (SB). ● Pensioners above age 70 not qualifying for a pension should receive a means-tested social pension. |
| Armenia (2010–13 ECF/EFF) | To address Armenia’s unfavorable population dynamics and old age poverty and the lack of long-term funding in local currency (LT). | <ul style="list-style-type: none"> ● Complete first set of estimates of the fiscal cost of the pension reform (SB). ● Submit by government to Cabinet two pension reform decrees to establish: (i) procedures for managing the guarantee fund for mandatory, funded contributions; and (ii) quantitative and currency restrictions on investing mandatory funded pension assets in financial instruments (SB). ● Structural reform was seen as addressing long-term social unsustainability of existing pension system (projected 30 percent replacement rate). |
| Benin (2005–09 PRGF) | To improve actuarial balance of civil service pension fund (ST). | <ul style="list-style-type: none"> ● Completion of strategy for reform of the civil service pension fund (FNRB) (SB). |
| Benin (2010–14 ECF) | | <ul style="list-style-type: none"> ● Presentation to the National Assembly of a draft law governing pensions based on the final report on the actuarial audit of FNRB (SB). |
| Bosnia and Herzegovina (2009–12 SBA) | To address high cost of current pension outlays and address significant cost of privileged pensioners; also to institute reforms to the pension system (ST). | <ul style="list-style-type: none"> ● No new privileged or special rights for retirement will be introduced prior to the pension system reform (Federation) (SB). ● Adoption by government of the Law on Pension and Disability Insurance in accordance with the Strategy of the Pension System Reform (RS) (SB). ● Reform privileged pensions by entity governments (Federation, RS) (Structural benchmark). ● Prepare a strategy for pension reform by entity governments (Federation, RS) (SB). ● The IMF staff pushed for a central registry on noncontributory benefits to keep track of who might be receiving more than one kind of benefit. ● Heavy focus on containing and ultimately reducing the inequity due to many privileged pension recipients (ex-veterans and their dependents). |
| Bosnia and Herzegovina (2012–15 SBA) | | <ul style="list-style-type: none"> ● Adopt a new law on privileged pensions in the Federation in line with IMF staff recommendations (PA/SB). ● Refrain from introducing new privileged or special rights for retirement (SB). ● Submit to the Federation parliament the amendments to the relevant legislation to implement the Federation pension reform strategy (SB). |

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| Bulgaria (2004–07 SBA) | To strengthen the sustainability of the pension system; address issues of indexation and disability pensions (LT). | <ul style="list-style-type: none"> • Adopt a law to base the annual adjustment of pensions on 75 percent of the increase in the average consumer price index in the previous year and 25 percent of the increase in the average insurable income in the previous year (SB). |
| Côte d'Ivoire (2009–11 PRGF) | To strengthen finances of civil service (CGRAE) and private sector pension funds (CNPS) (limiting their losses) through parametric reforms and other measures (ST). | <ul style="list-style-type: none"> • Validation of the unpaid social security contributions to CNPS (Private Sector Social Security Fund) and CGRAE (Civil Service Pension Fund) by public enterprises and entities concerned and elaboration of a plan to settle these (PA). • Adoption of the CNPS Reform Plan and the decree establishing the Inter-Ministerial Committee in charge of monitoring the reform of the CGRAE (SB). • Adoption of the draft law on the CNPS reform (SB). • Adoption of the CGRAE reform plan (SB). |
| Côte d'Ivoire (2011–15 ECF) | | <ul style="list-style-type: none"> • Adopt, in the Council of Ministers, reform plans for the CNPS and the CGRAE for submission to Parliament (SB). • Validate the amount of unpaid social security contributions owed to the CNPS and CGRAE by the public enterprises and entities concerned and draw up a plan to clear the outstanding amounts (SB). |
| Cyprus (2013-16) | To rationalize the current finances of the pension system through increased contributions and rationalized benefits; Also, improve long-term sustainability of the pension system and achieve inter and intra-generational fairness: (ST/LT). | <ul style="list-style-type: none"> • Analyze impact of additional reform options in terms of benefit reduction. • Reduce preferential accorded to specific groups of employees. • In streamlining Easter allowance, limit benefits to pensioners with monthly pension income of at most €500. |
| Dominica (2003–06 PRGF) | To reduce high unfunded liabilities of pension and social security system (LT). | <ul style="list-style-type: none"> • Cabinet approval of action plan to eliminate the unfunded liabilities of DSS (SB). |
| Georgia (2004–07 PRGF) | To alleviate extreme poverty, rationalize the social assistance strategy and to work on the design of a long-term financially sustainable pension reform (LT). | <ul style="list-style-type: none"> • Publish a strategy paper on pension reform to put the social security system on a sounder fiscal footing (SB). |
| Greece (2010–12 SBA) | To both reduce current pension outlays' share in GDP and address long-term unsustainability of the pension system (ST/LT). | <ul style="list-style-type: none"> • The National Actuarial Authority to produce a report to assess whether the parameters of the new system significantly strengthen long-term actuarial balance (SB). • Adopt a comprehensive pension reform that reduces the projected increase in public spending on pensions over the period 2010–60 to 2½ percent of GDP (SB). • The National Actuarial Authority to produce a report for the main supplementary funds to assess whether the parameters of the new system significantly strengthen long-term actuarial balance (SB). |

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| Greece (2012–16 EFF) | | <ul style="list-style-type: none"> • Adopt pension reform package based on actuarial studies to be completed in September 2014 on the whole pension system including supplementary and lump-sum funds (SB). • Government to adjust pensions, with protections for low-income pensioners, and the social security contribution base, to permit a fully-funded reduction in rates (cumulatively 5 percent from January 1, 2012) (SB). • Adopt legislation to reform the system of social security contributions to: (i) broaden the contribution base; (ii) simplify the contribution schedule across the various funds; (iii) shift funding away from nuisance taxes and onto contributions; and (iv) reduce contribution rates by 3.9 percentage points. The reforms will be fully phased in by January 1, 2016 and will be revenue-neutral and preserve the actuarial balance of the various funds (SB). • For pensioners receiving less than €2,500 a month, provide new flat bonus of €800 a year. • Weight benefit reduction toward higher-pension earners. • Avoid cutbacks to minimum pensions and family support instruments not cut—Introduce means-tested minimum guaranteed income. • Provide means-tested social pensions for all citizens above normal retirement age. |
| Honduras (2010–12 SBA/SCF) | To move toward universal pension coverage while also ensuring long-term fiscal sustainability of pension system through reduction of actuarial deficit (LT). | <ul style="list-style-type: none"> • Present a law reform proposal that allows changing the bases of defined benefits, to reduce the actuarial deficit of IMPREMA, INJUPEMP, and INPREUNAH (SB). • Present a law reform proposal for INJUPEMP to Congress (SB). • Present a law reform proposal for INPREMA to Congress (SB). |
| Honduras (2014–16 SBA/ 2014–17 SCF) | | <ul style="list-style-type: none"> • Submit to Congress legislation to reform the Social Security Institute (IHSS) to strengthen its actuarial position and improve its governance (SB). • Approval of the law reforming the IHSS (SB). |
| Hungary (2008–10 SBA) | To rationalize short-term pension outlays; also rationalize disability pensions (with World Bank assistance) (ST). | <ul style="list-style-type: none"> • Submission to parliament of all legislative changes required to implement the measures required on pension reform (SPC). • Staff emphasizes the need to protect the poor. • Provide increased disability benefits only to poorest disabled. • Staff notes that authorities' pension projections imply a sustained decline in the average pension relative to wages, which may prove unrealistic for social reasons. |
| Iraq (2005–07 SBA) | To address short-term pressures arising from pension outlays (ST). | <ul style="list-style-type: none"> • Reform of pension law in line with sustainable pension system (SB). |
| Iraq (2007–09 SBA) | | <ul style="list-style-type: none"> • Enact the amendments to the pension law to make it fiscally sustainable (SPC). |
| Ireland (2010–13 EFF) (conditionality set by the EU) | To reduce pension outlays in 2013 (ST). | <ul style="list-style-type: none"> • Protect socially vulnerable as a central policy goal. • Reduce public service pensions on a progressive basis. |

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| Jamaica (2013–16 EFF) | To make the pension system actuarially sound and to contain pension costs to the government, with a focus on medium to long term (LT). | <ul style="list-style-type: none"> • Table changes in legislation for the new public sector pension system expected to be implemented by April 2016 (SBA). |
| Kosovo (2012–13 SBA) | To prevent Pillar II pension funds from excessive exposure to holdings of government debt; parametric reforms to ensure fiscal sustainability of pension system. | <ul style="list-style-type: none"> • Passage of the Pension Fund Law in a version that limits (i) exposure of the pillar II pension fund to the government to 30 percent of the fund's assets and (ii) annual investments of the fund in government paper to 50 percent of inflows into the fund in the previous calendar year (PA). |
| Latvia (2008–11 SBA) | To rationalize pension spending and ensure fairness in burden of any cutbacks; prepare sustainable pension reform (ST/LT). | <ul style="list-style-type: none"> • Pension reforms (SB). • Review all specific pension regimes. • Make sure that burden on contributors does not rise further and more generally that the burden of fiscal adjustment should be fairly distributed. • Move toward medium-term and integrated approach to social welfare payments. • Recognize that many elderly were largely unaffected by cutbacks in the crisis. • Allow increases for small pensions. |
| Malawi (2005–08 PRGF) | To rationalize existing pension system and address short term fiscal pressures (ST/LT). | <ul style="list-style-type: none"> • Implement adjustment formula to the current pension system (PA). |
| Mali (2004–07 PRGF) | To address fiscal pressures from non-civil service pension fund over the medium term (ST/LT). | <ul style="list-style-type: none"> • Identification by the government of a specific package of parametric reforms that will gradually reduce the projected deficit of the CRM from the present level over the medium term (SPC). • Submission to the National Assembly of a draft law authorizing the parametric reforms designed to gradually reduce the CRM's pension deficit over the medium term (SPC). • Assessment of the impact of parametric reforms on the financial position of CRM over the medium term (SB). • Presentation to the National Assembly, with the 2007 Budget, of a draft law authorizing the parametric reforms and a draft decree that will gradually reduce the projected CRM deficit over the medium term (SB). |
| Moldova (2010–13 ECF/EFF) | To achieve long-term fiscal sustainability of the pension system, reduce short-term pension deficits and prevent an unsustainable decline of the already low pension replacement rate. | <ul style="list-style-type: none"> • Parliament will adopt legislation to phase out early retirement privileges of civil servants, judges, and prosecutors (SB). |
| Nicaragua (2002–06 PRGF) | To rationalize the finances of the pension system and then introduce reforms both for fiscal purposes but also to improve coverage and adequacy of pension system (LT). | <ul style="list-style-type: none"> • Preparation of a detailed strategy and implementation plan on pension reform (SPC). • Defer implementation of social security law pending review for the new government after November 2005 elections (PA). • Complete a review of the pension reform strategy, with TA from the World Bank (SB). |
| Nicaragua (2007–11 PRGF) | | <ul style="list-style-type: none"> • Publication of technical proposal on options to reform the pension system and reduce its actuarial gap (PA). • Complete the study on the actuarial status of the pension system (SB). • Finalize technical proposal on options to reform the pension system and reduce its actuarial gap (SB). |

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| Paraguay (2006–08 SBA) | To reduce the deficit of the PAYG public pension system: address low pension coverage of the system and high budgetary transfers to the pension system (ST/LT). | <ul style="list-style-type: none"> • Develop an action plan for a comprehensive pension reform (SB). |
| Peru (2007–09 SBA) | To increase foreign investment limits of private pension funds. | <ul style="list-style-type: none"> • Submit to Congress amendment to the Law of Pension Funds that would significantly raise the limit for foreign investments by private pension funds (SB). |
| Portugal (2011–14 EFF) | To contain and reduce current budgetary spending on pensions (ST). | <ul style="list-style-type: none"> • Submit to Parliament a legislative proposal that aligns the rules and benefits of the public sector pension fund, CGA, to the general pension regime (SB). • Freeze of pensions exempts those earning lowest wages and pensions. • Suspend 13th and 14th monthly payment for pensions with monthly pension benefits exceeding €1,100; lowest pensions will be marginally increased. • Freeze in pensions: protect vulnerable groups: exempt those with lowest pensions. • Special contributions on pensions levied only above a monthly threshold of €1,500; reduce pensions above €1,500. • Preserve minimum socially acceptable income levels. • Enhance fairness of overall pension system. • Means-test survivors' pensions provided for both CGA and General Pension system. |
| Romania (2009–11 SBA) | To contain pension spending and move toward long-term financial sustainability (ST/LT). | <ul style="list-style-type: none"> • Parliamentary approval of pension reform legislation (PA). • Enactment of the pension reform legislation (PA). • Passage of revised pension legislation (SB). |
| Serbia & Montenegro (2002–06 EFF) | To restrain budgetary outlays on pensions and to address long-term unsustainability (ST/LT). | <ul style="list-style-type: none"> • Serbia: Parliament to enact a pension system reform increasing the retirement age by 2 years for men and women over a period of at most 4 years; shift to inflation-based indexation of benefits over a period of at most 4 years; and replace quarterly with annual indexation (SPC). • Serbia: Government to adopt a formal decision on a pension system reform that will increase the retirement age by 2 years for men and women over a period of at most 4 years; shift to inflation-based indexation of benefits over a period of at most 4 years; and replace quarterly with annual indexation (PA). • Montenegro: Adopt a pension law that shifts pension indexation to the Swiss formula (arithmetic average of wage and price increases) and raises the minimum retirement age by 3 to 5 years in a phased manner (SB). |
| Serbia (2009–11 SBA) | | <ul style="list-style-type: none"> • Government to submit to parliament a comprehensive pension law, incorporating both parametric reforms and a revised indexation formula, effective April 2011 (PA). • Government to re-submit to parliament the pension law with only two changes (PA). • Government to submit to parliament a draft pension reform law including measures as specified in TMU ¶ 20 (SB). |

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| Seychelles (2009–13 EFF) | To improve fiscal sustainability of the contributory pension system (LT). | <ul style="list-style-type: none"> • Launch a strategic plan for the reform of the social security system (SB). • Seek a well-targeted and sustainable social security system. |
| Sri Lanka (2009–12 SBA) | To establish a regulatory framework for the pension system. | <ul style="list-style-type: none"> • Introduce a regulatory framework for private-sector superannuation funds (SB). |
| St. Kitts & Nevis (2011–14 SBA) | To ensure long-term financial sustainability of the pension system (LT). | <ul style="list-style-type: none"> • Draft proposal for a comprehensive pension reform (SB). |
| Togo (2008–11 PRGF) | To clear civil service pension liabilities and put system on sound financial footing (LT). | <ul style="list-style-type: none"> • Conduct a financial and organizational audit of the CRT (Pension Fund of Togo) and begin an actuarial study of the institution (SB). |
| Turkey (2005–08 SBA) | To make the pension system financially sustainable (LT). | <ul style="list-style-type: none"> • Parliamentary approval of pension reform legislation (SPC). • Parliamentary approval of the administrative social security reform law (SPC/SB). • Parliamentary submission of pension reform legislation (PA). • Submit the Retirement Benefits Authorities Bill to parliament (SB). |
| Uganda (2010–13 PSI) | To liberalize the pension sector policy framework (moving to a multi-pillar pension system), strengthen the regulatory framework and to ensure actuarial soundness of the Public Service Pension Scheme and the National Social Security Fund. | |
| Ukraine (2010–12 SBA) | Policy reforms to reduce high level of pension outlays and put pension system on a sounder footing in view of the aging of the population (ST/LT). | <ul style="list-style-type: none"> • Submit to Parliament legislation on pension reforms consistent with commitments in the MEFP ¶ 11 (PA). • Enactment of legislation on pension reforms consistent with commitments in the MEFP ¶10 (SB). |
| Ukraine (2014–15 SBA) | | <ul style="list-style-type: none"> • Parliamentary passage of pension reform legislation, as agreed with IMF staff, that revises the parameters of the pay-as-you-go system to make it more sustainable, abolishes special pensions, and lays the conditions for the adoption of a funded system that would complement the pay-as-you-go system (SB). • Harmonize special pensions. • Maintain level of minimum subsistence level entering calculation of pensions. |
| Uruguay (2005–06 SBA) | Parametric reforms to strengthen public finances through reform of the specialized pension funds (police, military, and bank employees)—with World Bank assistance (ST/LT). | <ul style="list-style-type: none"> • Begin to implement the reform of the pension fund for the military and bank employees (SPC). • Begin to implement reform of pension fund for police (SPC). • Submit to Congress reform of the pension fund for the military and bank employees (SPC). |

Notes: ECF: Extended Credit Facility; EFF: Extended Fund Facility; SBA: Stand-By Arrangement; SCF: Stand-By Credit Facility; PRGF: Poverty Reduction and Growth Facility; PSI: Policy Support Instrument.

^a ST= short-term budgetary focus; LT= long-term sustainability focus.

^b PA= Prior Action; SB=Structural Benchmark; SPC=Structural Performance Criterion.

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