

WHAT DOES IT TAKE FOR A SUCCESSFUL PENSION SCHEME?

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ABSTRACT

Labor market reform encompasses a wide range of issues aimed at increasing competitiveness, increasing productivity, and improving labor force lives. No issue, however, has been more critical than ensuring that the pension system delivers on its promises. This has been a major issue for the labor force, and it will continue to be so. Countries all over the world have made efforts to improve their pension systems. Some have privatized it in order to make it more efficient and less taxing on the government. The main objective of pension and retirement policies is to provide adequate income in old ages. Countries consider many elements to choose their pension system according to five pillar pension schemes. This paper tries to look at these different retirement plans around the world and to give an assessment of their characteristics. Using a simple model, it attempts to display the relationship between the type of pension system and its success. The findings of some simple pension reforms can be lightening the way for policymakers.

INTRODUCTION

Labor market reform includes a wide range of issues aimed at increasing competitiveness, boosting productivity, and improving the lives of the labor force (Lusinyan & Muir, 2013). However, no issue has been more important than ensuring that the pension system delivers on its promises. This has been a key issue for the labor force, continue to be to live gracefully after retirement. Countries around the world have tried to improve their pension systems (Whitehouse et al., 2009). Some have privatized it to make it more efficient and less taxing on the public sector (Grech, 2018). Some have continued to put more resources on their public sector pension systems to make it more comprehensive and accessible, though with levying higher taxes and social contributions on the active labor force and companies (Borzutzky & Hyde, 2016; Grech, 2018). There are also countries who have blended public and private sector pension system with the hope of benefiting from both systems' advantages and mitigate negative spillovers.

This paper tries to look at the different pension system around the world and to give an assessment of their effectiveness. Using a simple model, it tries to show the relationship between the type of pension system and its success. The paper then introduces the results of some simple pension reform simulations and discusses policy recommendations. The paper concludes with a brief discussion of its findings. Four annexes at the end go deeper into the stylized facts and model results.

METHOD

The qualitative approach method case report study is used in this study. The researcher will gain specific expertise or insight into the issue they have chosen to investigate, which is usually a current one, by using case study research. Case study research allows the researcher to investigate the phenomenon in its context. Case studies are empirical investigations in the sense that they are based on knowledge and experience, or, to put it another way, they entail data collection and analysis (Creswell & Poth, 2016). This study also included a review of the literature. A literature review article provides a comprehensive assessment of relevant literature and instantiates prior studies to construct a knowledge framework (Paul & Criado, 2020). The theoretical framework for the study is provided by the literature review.

RESULTS AND DISCUSSION

Countries around the world have made different choices about how to meet the retirement needs of their populations. Some have chosen to finance their retirement incomes largely by contributions or taxes, in pay-as-you-go (PAYG) systems. Others have relied on mandatory private savings to fund retirement income (Barr & Diamond, 2008). The public sector approach is called the first pillar, whereas the private sector approach is called the second pillar (Chibba, 2009).

The two pillars are part of a larger five-pillar pension framework outlined by the World Bank. Broadly, the five pillars are

- a) Zero pillar – Non-contributory schemes designed to ensure pensioners receive some absolute, minimum standard of living.
- b) First pillar – Public mandatory earnings-based schemes designed to replace some portion of pre-retirement income. They are typically financed on a PAYG basis.
- c) Second pillar – Private mandatory savings-based schemes designed to achieve some target standard of living in retirement. They could be partially or fully funded, defined contribution (DC) or defined benefit (DB) plans, offered directly to workers (personal) or via employers (occupational).
- d) Third pillar – Private voluntary savings-based schemes designed to provide discretionary and flexible income replacement options. As with second pillar schemes, there are a wide variety of design options observed across countries.
- e) Fourth pillar – Non-financial schemes designed to provide informal support or other social programs such as healthcare and housing.

Figure 1 categorizes mandatory pension systems according to pension pillars. Most countries – approximately 77 percent of countries – rely on mandatory public pension systems or Pillar I to fund retirement incomes. They range from emerging countries such as Nepal and Vietnam, to large economies like China and India, to advanced countries such as France, Germany, Canada, and the United States. Six percent of countries, including Australia, Iceland, and Chile, rely primarily on mandatory private pension savings or Pillar II. In 18 percent of countries, such as Croatia, the Netherlands, and Mexico, both public and private mandatory pension systems co-exist side-by-side.

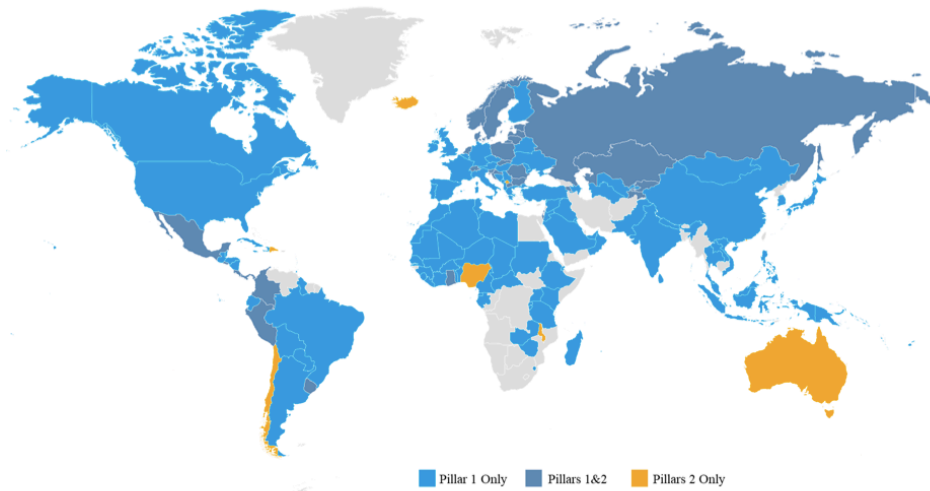


Figure 1. Categorization of Pension Systems by Country

Figure 2 does not show Pillar III pension systems where they are widely adopted in countries, for example 401(k) pension plans in the United States. Source: World Bank International Patterns of Pension Provision II (2012). Comparing these diverse pension systems requires an objective benchmark for assessing performance. The World Bank’s handbook on outcomes-based assessment for private pensions provides such a benchmark for evaluating pension systems (Price, Ashcroft, et al., 2016). The framework defines five desirable outcomes of a pension system: sustainability, adequacy, coverage, security, and efficiency (Price, Rawlins, et al., 2016).

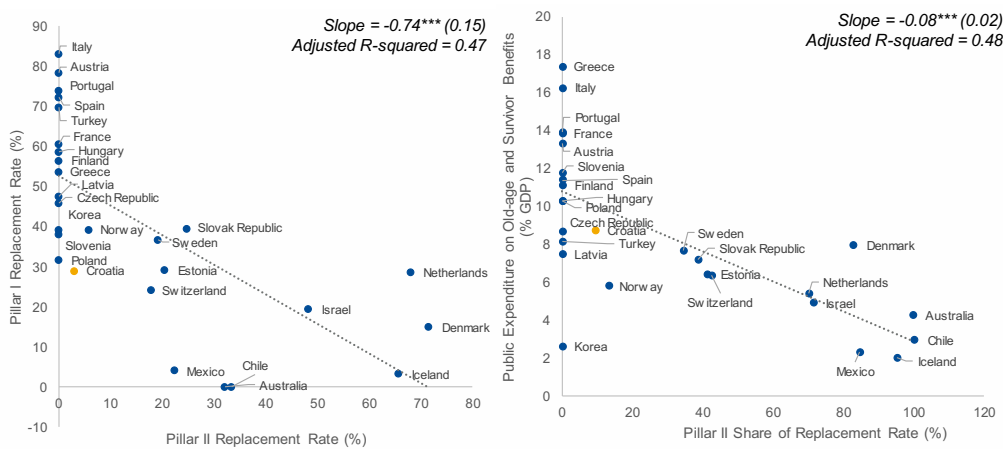
- a) Sustainability – A pension system must be able to meet its financing obligations without imposing undue burden on the government, employers, or workers. This tends to be a challenge for countries with rapidly ageing and shrinking populations given their impact on the fiscal sustainability of tax- or contribution-based pension systems.
- b) Adequacy – Pension benefits should protect the population from a severe drop in living standards at retirement.
- c) Coverage – A successful pension system maximizes the proportion of retirees receiving financial support at retirement.
- d) Security – Pension systems should minimize the risk of losing or misappropriating funds before benefits are delivered. This could happen, for example, due to poor returns to investment or expropriation by governments or employers.
- e) Efficiency – This outcome relates not just to optimal investment strategies and cost structures, but also to the deepening of domestic capital markets and the minimization of labor market distortions.

A. Stylized facts and modeling

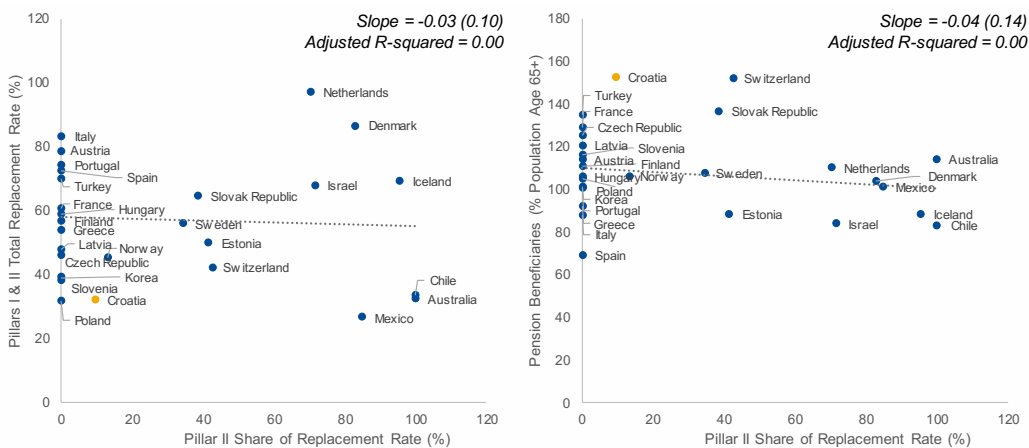
This section presents some stylized facts and the results of the modeling exercise. With the discussion of the previous section in mind, it seems that countries reliant on Pillar II pensions tend to have more sustainable, secure, and efficient pension systems without compromising on adequacy and coverage. Figure 2 compares pension systems according to each of these outcomes-based indicators. Panel A shows negative relationship between replacement rates from the first and second pillar and lower public pension expenditure as a

share of Gross Domestic Product (GDP) for countries more reliant on Pillar II. The figures suggest that Pillar II pensions reduce the need for Pillar I pensions, which in turn lowers the fiscal burden on governments to fund pensions. Panel B shows total mandatory replacement rate and the number of pension beneficiaries as a share of a country's population aged 65 and above plotted against a country's reliance on Pillar II. The horizontal trend line suggest that adequacy and coverage do not vary systematically by funding source. Panel C shows that pension system that rely more on Pillar II tend to have more assets backing pension claims, as measured by the value of total pension assets as a share of GDP. Furthermore, the size of a country's pension assets is positively correlated with its investment returns.

Panel A



Panel B



Panel C

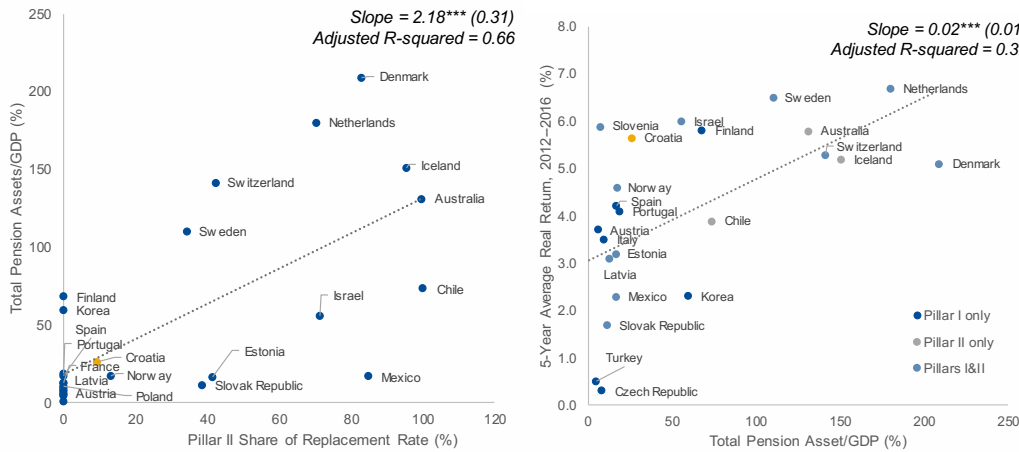


Figure 3. Pension system outcomes across 26 OECD countries (excluding countries with substantial Pillar III pension systems). Values in parenthesis represents standard errors, significance: *1%, **5%, *10%. Source: OECD *Pensions at a Glance 2017*, author’s calculations**

However, there is no indication that countries with more successful pension systems rely more heavily on Pillar II pension systems. Table 1 compares the outcomes of pension systems across countries with Pillar II pensions. Each outcome is proxied by a measurable pension indicator. For example, sustainability is proxied by public pension expenditure as a share of GDP, where a country with lower public expenditure to GDP scores higher for sustainability. Adequacy is proxied by the total mandatory replacement rate, coverage by the number of pension beneficiaries as a share of old- age population, efficiency by the five-year average real return on total pension assets, and security as the size of total pension assets as a share of GDP. A country is individually ranked on each measure, and an overall equally weighted aggregate score is constructed from these ranks. From the scores of each country, it is not obvious that countries that do the best tend to have higher Pillar II replacement rates. For example, Sweden and Iceland have identical scores but Sweden relies less on Pillar II to fund pension benefits. The Netherlands comes up top as having the best pension system among comparable countries. The country has also been proposed as having the best pension system by the Melbourne Mercer Global Pension Index in 2018.

**Table 1
 Comparison of pension system outcomes across 12 OECD countries and Croatia. Average score is constructed as equally-weighted average of the inverse-rank for each outcome**

Country	Sustainability	Adequacy	Coverage	Efficiency	Security	Pillar II Replacement Rate (%)
	Public Pension Expenditure/GDP (%)	Total Mandatory Replacement Rate (%)	Pension Beneficiaries/Population Age 65+ (%)	5-year Average Real Return, 2012-2016 (%)	Total Pension Asset/GDP (%)	
Netherlands	5.4	96.9	109.7	6.7	180.3	68
Sweden	7.7	55.8	185.6	6.5	110.1	19
Iceland	2.0	69.0	72.4	5.2	150.7	66
Australia	4.3	32.2	114.2	5.8	131.2	32
Israel	4.9	67.8	83.7	6.0	55.7	48
Denmark	8.0	86.4	104.2	5.1	209.0	72

Country	Sustainability	Adequacy	Coverage	Efficiency	Security	Average Score (out of 10)	Pillar II Replacement Rate (%)
	Public Pension Expenditure/GDP (%)	Total Mandatory Replacement Rate (%)	Pension Beneficiaries/Population Age 65+ (%)	5-year Average Real Return, 2012-2016 (%)	Total Pension Asset/GDP (%)		
Switzerland	6.4	42.1	103.6	5.3	141.6	5.2	18
Croatia	6.9	32.0	152.6	5.7	26.0	4.9	3
Norway	5.8	45.1	111.4	4.6	17.1	4.6	6
Estonia	6.4	49.7	137.7	3.2	16.4	4.3	21
Chile	3.0	33.5	83.0	3.9	73.2	4.3	34
Slovak Republic	7.2	64.3	133.8	1.7	11.2	3.7	25
Mexico	2.3	26.4	101.0	2.3	16.8	3.4	22

Source: OECD *Pensions at a Glance 2017*, OECD, OECD *Pension Markets in Focus 2017*, author's calculations.

A fiscally sustainable solution to the pension adequacy problem will most likely involve ambitious labor market reforms to increase labor participation rates (Clements et al., 2014). For example, it has been argued that increasing labor force participation rates is the most effective policy intervention for alleviating demographic pressures in Central and Eastern European countries (Bloom et al., 2003; Jaumotte, 2004). In turn, this would allow Pillar II contribution rates to be increased without raising Pillar I pension deficits. In fact, the 2019 IMF report considers two labor market reform packages that accompany an increase in the overall pension replacement rates to 40 percent:

- 1) A relatively moderate reform scenario assumes moderately paced increases in the labor force participation rates of young women (age 25-45) to the highest EU levels, an increase in the participation rate of older workers (age 55+) from 59.5 to 82 percent for men and from 52.5 to 64.8 percent for women by 2050, and retirement age increases in line with life expectancy but not higher than 67.
- 2) An ambitious reform scenario assumes rapid increases in the labor force participation rates of young women to the highest EU levels, an increase in the participation rate of older workers to 86.1 percent for men and 78.1 percent for women by 2050 and raising the retirement age above 70 by 2050.

Figure 14. Impact of Reforms on Pension Costs

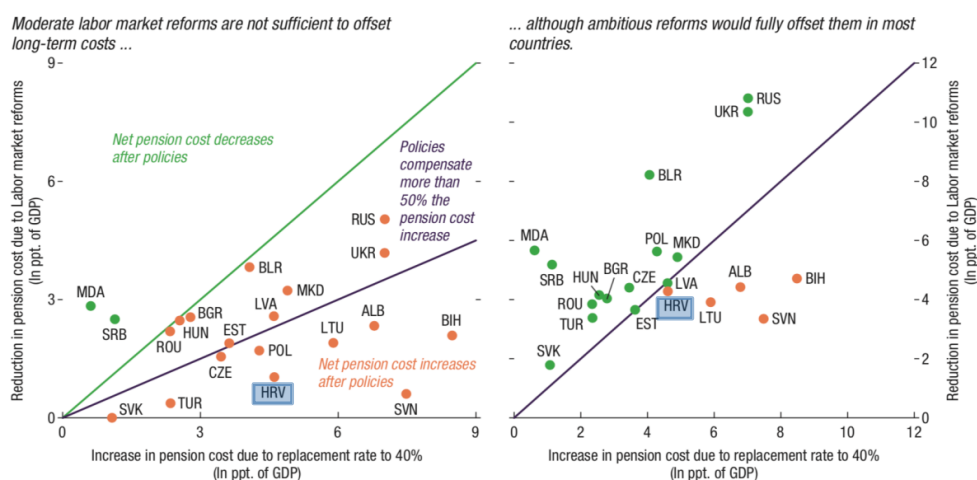


Figure 3. Impact of reforms on pension costs

Source: IMF Demographic Headwinds in Central and Eastern Europe 2019.

Figure 3 compares the fiscal cost savings from the labor market reform scenarios with the fiscal cost increase from raising pension replacement rates. For example, raising pension replacement rate to 40 percent is estimated to increase fiscal costs of pensions in Croatia by 4.5 percent of GDP.

B. Policy implications

There are important steps that need to be taken for a successful pension reform. First, moderate labor market reforms would help offset a quarter of the projected increases in pension costs. Ambitious labor market reforms, on the other hand, will offset almost all the projected increase in pension outlays (Batog et al., 2019). Second, additional fiscal space would also need to be preserved for measures to increase labor market participation rates. For example, providing tax incentives for hiring older workers could lower labor costs for firms and boost job creation, but would lead to revenue losses (Pagés, 2017). Increased participation of older workers could also generate additional demand for health care services. Finally, active labor market policies such as training, job creation programs, or extended childcare services to increase female labor force participation would also have budgetary effects.

Countries could consider measures undertaken to encourage participation rates.

1) Fostering older workers' participation

Provide stronger incentives for employing older workers, as done in Romania, and delaying retirement, as implemented in Russia. Policies that link retirement ages to life expectancies and reduce early retirement benefits can also boost participation rates among older workers.

2) Improving female labor participation

Expand childcare services, as done in Hungary, and promote flexible and temporary employment, as done in Turkey. To this end, authorities should also consider undertaking active labor market policies to provide career guidance and support re-entry in the labor force for women with extended employment gaps due to childcare priorities.

CONCLUSION

Having a financially secure retirement age brings a peace of mind for labor forces. Countries around the world have made different choices about how to meet the retirement needs of their populations. Most countries – approximately 77 percent of countries – rely on mandatory public pension systems or Pillar I. However, it seems that countries reliant on Pillar II pensions tend to have more sustainable, secure, and efficient pension systems without compromising on adequacy and coverage. A fiscally sustainable solution to the pension adequacy problem will most likely involve ambitious labor market reforms to increase labor participation rates. There are important steps that need to be taken for a successful pension reform. Firstly, moderate labor market reforms would help offset a quarter of the projected increases in pension costs. Secondly, additional fiscal space would also need to be preserved for measures to increase labor market participation rates. Finally, active labor market policies such as training, job creation programs, or extended childcare services to increase female labor force participation would also have budgetary effects.

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