

# Kickstarting a Pension System Through International Aid

Jeremy Coller

Dr David Pinkus

March 2024

Coller  
Pensions  
Institute

---

# Kickstarting a Pension System Through International Aid

## Executive Summary

In this paper, we present a novel idea to address issues faced by pension systems in developing and emerging economies: direct funding of pensions through international aid. In our system, aid from domestic and international donors would be used to finance matching contributions, thereby increasing the capital saved for retirement and simultaneously incentivising individuals to save. Furthermore, aid would directly arrive in a worker's retirement savings account without passing through government budgets, allowing for strong transparency and the ability to "follow the money" by both donors and recipients. We believe that this idea addresses some of the key shortcomings of past pension policies, as well as protects pension savings from changing government priorities.

The benefits for workers, donors and the local economy could be substantial. Workers would receive international aid directly in their retirement accounts, thereby increasing their economic security in old age. Donors will be able to transparently follow the impact of their contributions. Over time, the pool of retirement savings can help the local economy and capital markets to develop, becoming an important tool for local, long-term capital. Such a pension system can therefore support sustainable development, ultimately promoting the economic independence of the receiving country and of its citizens.

## I. Introduction

The developing world is facing a crucial juncture in terms of demographics and pension policy. According to the United Nations Populations Fund (UNPFA), one-fifth of the population in developing countries will be 60 or older by 2050 (UNPFA 2012). This will represent 80% of people in this age group globally. Therefore, developing countries need to strengthen existing pension systems, and set up new systems where there are none. The ILO (2021) estimates that in 2020 only 27% of people in Africa above the statutory retirement age received a pension, while 24% did so in Arab States and 39% in Southern Asia.

Ultimately, trends towards lower fertility and longer life expectancy raise the question of how to care for a growing share of the elderly among populations in developing countries. Citizens and governments alike are acknowledging the need for change, as illustrated by the creation of pension schemes in several developing markets over the last decades, often with an important funded component.<sup>1</sup> This is in line with a global trend towards more funded pensions (OECD 2016).

Governments often look to the Chilean experience when discussing pension reform. Chile was the first country to move from a traditional Pay-As-You-Go (PAYG) pension to a mandatory fully funded system based on individual accounts. The government did so in 1981 under military dictatorship, a fact that is still controversial in Chile today. As the system matured, its limitations emerged. The most important issue is that retirement income levels fall short of what was initially promised to the population, and these levels are also low in international comparison (Evans and Pienknagura 2021). Two explanations behind this shortfall are low contribution rates and irregular contribution patterns, meaning that workers do not regularly contribute to the system as they transition in and out of formal employment (Barr and Diamond 2016; Evans and Pienknagura 2021). These challenges are a common theme in developing countries.

It is important to fix these issues because the stakes are high. When pension systems fall short of what they promised, the population loses trust in the system, potentially leading to wider political unrest. In Chile, pensions have been an important source of social unrest over the last two decades, with dissatisfied citizens taking mass protests to the streets repeatedly throughout the 20th century. Last year, former Malaysian Prime, Minister Anwar Ibrahim, said savings for over 80% of private sector employees would not suffice to keep retirees above the poverty line, and only 15% of working-age Indonesians have ever contributed to mandatory pension schemes.<sup>2</sup> Ranked as one of the "poorest" pensioners in the world by the Allianz Pension Report in 2023 (Allianz, 2023), South Africans are now living through an overhaul of the national pension plan and Lebanese demonstrations in March of 2023 were partly motivated by the bad state of pension funds following currency devaluation.

1 Funded pensions are pension systems in which workers save for retirement during their career. Pension benefits are then paid out of accumulate contributions and investment returns. On the other hand, Pay-As-You-Go (PAYG) pension systems use current contributions to finance the pensions of the currently retired generation.

2 See these news articles for [Malaysia](#) and [Indonesia](#).

## II. The Idea

The key idea presented in this paper combines funded pension systems with an important innovation: international aid. We propose financing matching contributions directly through international aid from domestic and foreign donors. Matching contributions are a tool widely utilized in pension policy worldwide. When the worker saves part of their salary in their pension account, another entity also contributes to the account. Therefore, the amount deposited in the worker's account exceeds their contribution. The matching entities are generally employers or the government, or both.

In many developed economies, an employee is mandated to contribute part of their salary each month to the pension system. The employer additionally contributes a fraction of the salary, and in some cases also the government. In developing countries however, matching by employers or the government is often challenging for three reasons: i) a large part of the workforce typically works in the informal sector, meaning that there is no declared working agreement, and thus no employer; ii) the government might not be willing or able to take on the financial burden, iii) the population does not want to entrust public institutions with their savings.

The issue of incomplete contribution patterns, meaning that workers do not consistently contribute to the system each month, is particularly important in developing and emerging economies because of the pervasiveness of informal work, defined as undeclared employment arrangements. In such employment setups, no contributions to mandatory pension systems are collected, since the working relationship is not formally declared. Therefore, workers remain outside of the system and are left completely to themselves when it comes to saving for retirement.

Several developing countries have recently created flexible voluntary pension schemes targeted at informal workers to address the exclusion of such workers from any mandatory pension scheme. An example of this is the Ejo Heza scheme in Rwanda, where the government matches contributions as well as life and funeral insurance benefits for a limited period, conditional on an individual meeting minimum annual contribution levels. The minimum threshold to qualify is lower, and the matched amount is higher, for low-income households (Güven and Jain 2023). Other examples include programmes in Colombia, Nigeria and India's PM-SYM programme (OECD 2020).

Following these efforts, the basic structure of the pension systems that we have in mind for developing the idea of financing matching contributions through international aid is a defined-contribution voluntary pension scheme with individual accounts. In our system, matching contributions would be directly financed by international aid from foreign and domestic donors. Therefore, the scheme does not rely on contributions from employers or the government and minimises the involvement of the public sector. Such a scheme would allow international aid to directly strengthen a pension system in its early years.

Contributions from workers and matching contributions from donors will be collected and invested by an independent institution, which for the purpose of this paper we call a "pension fund". This institution must have a transparent governance and accounting framework to the highest international standards to build trust.

Figure 1 illustrates the benefits of supporting old-age saving directly with international aid. We group the beneficiaries of a system combining funded pensions and international aid into three different categories: i) benefits for citizens; ii) benefits for donors; and iii) benefits for the economy.

The citizens contribute to a pension fund. Their savings are topped up using aid from international and domestic donors. Additional benefits such as insurance coverage can also be offered to incentivise people to save.

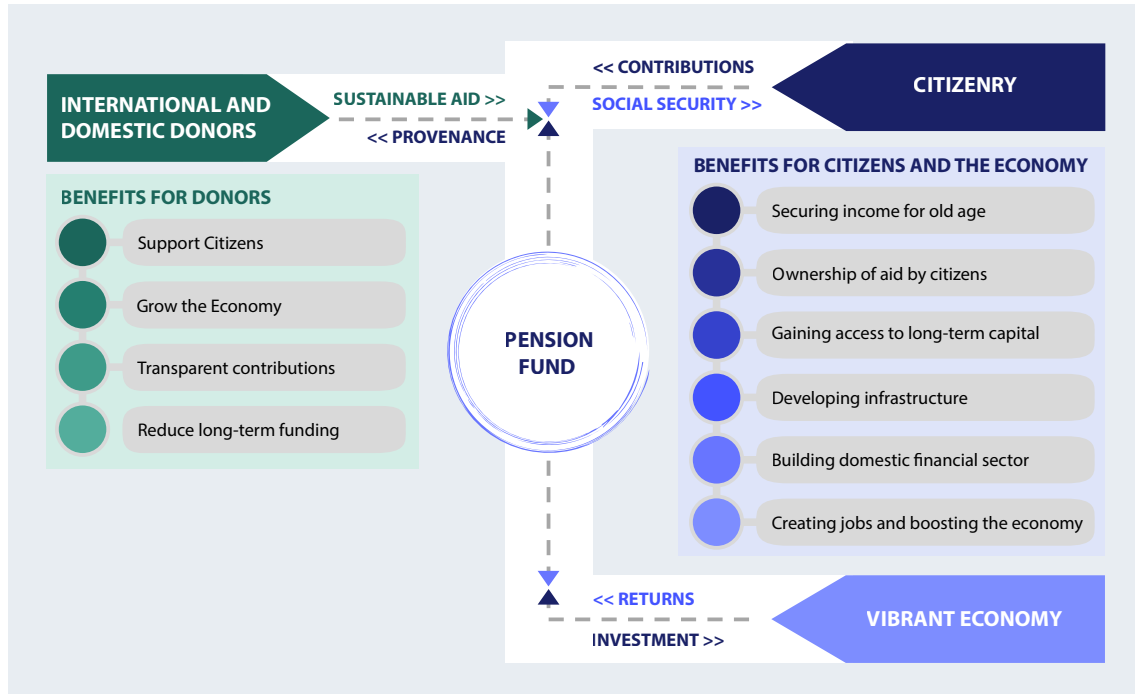
In return for contributions, the citizens receive social security. Furthermore, the population will also benefit indirectly from the funded pension scheme through increased economic vibrancy. A successful funded pension scheme can underpin a sustainable model of economic development where the domestic population effectively controls an important part of assets. The pension savings, managed in a pooled vehicle, will in time become an important source of investment and long-term capital for the domestic economy.<sup>3</sup>

---

<sup>3</sup> We are not suggesting that the pension fund invests only in the domestic economy. However, given that these savings will grow over time, even a fraction invested in the domestic market can have an impact.

The benefits for donors include the direct support of citizens by putting money in their (future) pockets without the intermediary of a government. The flow of aid will be transparent, ensuring provenance for the donating parties. They will be able to trace usage of all funds. Lastly, the direct support of long-term savings in the economy will reduce the reliance of people on international aid in the long term, providing a catalyst for sustainable economic development.

**Figure 1: Kick-starting a pension system with sustainable aid**



Source: Collier Pensions Institute.

### III. Benefits

We now discuss each of these benefit groups in more detail.

#### Group 1: benefits for citizens

The first, and most obvious benefit for citizens, is a structured and systematic way to save for income in old age. Ensuring that the population has adequate income in retirement is a clear benefit for citizens and should be the primary objective of the pension system and the pension fund. International aid flows would directly benefit citizens by incentivizing them to save for old age and by shoring up their savings.

Citizens will also directly own the aid payments. The individual account helps to protect individual ownership rights of the asset in said accounts (German Council of Economic Advisors 2023). Therefore, the workers will also have ownership of the aid capital matching their contributions. This tangible and direct benefit can help the system to gain acceptance and popularity. Transparent accounting and reporting will allow individuals to understand and monitor performance, keep track of their total pension savings, and verify that contributions and aid support payments are actually deposited in the account.

#### Group 2: benefits for donors

A scheme directly channelling international aid payments to citizens has several benefits for donors. First, the transfer of aid to a pension fund directly, and not through the government budget, results in increased transparency and the ability to follow the money, mitigating concerns about corruption or expropriation by governments. Similar to workers, the donors will be able to directly follow the use of their aid payments and “follow the money,” tracing it to specific individuals.

Secondly, such a scheme can be designed without relying on the public management of savings or tax incentives, therefore minimalizing the scheme's dependence on government actions and finances. The pension fund could be set up as an entirely private institution. This would protect pension savings from political interference both in the short-term and in successive political cycles. For example, the government would not be able to access the pension savings of individuals to finance other policies or to alleviate income crunches. In the past, governments have resorted to instrumentalising pension savings in times of financial distress, for example, several governments in Latin America during the Covid-19 pandemic.

For developing countries currently receiving international aid, this scheme does not necessarily require any additional aid beyond what donors are currently providing. Actually, this scheme represents a "win-win" by using existing contributions from donors more effectively and transparently for the direct benefit of those receiving the aid. By benefiting citizens directly – i.e. helping them build savings to prevent old-age income poverty, it helps donors maximise the impact of their contributions.

Lastly, it is important to note we are not advocating for a complete reallocation of existing donations to pensions; we are aware donors have plenty of aims and the needs for international aid go far beyond pensions, but by rechannelling part of their contribution to directly fund the pensions of citizens, incentivising people to save and building a financial sector, donors can ensure a direct impact on the livelihoods of vulnerable populations.

### **Group 3: benefits for the economy**

The pension concept discussed in this paper can not only benefit citizens and workers but also foster the development of the economy at large. By pooling the savings of a large number of individuals, the funded pension scheme can become an important part of the domestic financial system. It can provide a natural source of capital required for long-term projects such as infrastructure, support the development of local capital markets, and spur job creation and economic growth. Overall, a funded pension system can spur local economic development.

In theory, funded pensions can promote economic growth through three channels. First, the creation of pension funds can deepen domestic capital markets (Barr and Diamond 2008). Second, they can improve the efficiency of capital allocation (Börsch-Supan, Köke, and Winter 2005; Wurgler 2000). Third, pension funds have been identified to have a longer investment horizon than other investors (Lakonishok, Shleifer, and Vishny 1992), therefore providing a source for long-term capital. The empirical literature about funded pensions and economic growth overall finds a positive relationship but is not unanimous in its conclusions. This highlights that funded pensions can foster economic growth, but not necessarily in each country to the same degree.<sup>4</sup> Therefore, it is important to consider country-specific factors when designing the system, and importantly, setting expectations.

## **IV. Operational Considerations**

Creating a scheme as outlined in this report will not be an easy task. We now briefly address some operational issues to be considered when setting up such a scheme. First, an independent and transparent institution to manage the pension scheme, collect contributions from workers and donors, and disburse retirement income needs to be created. This institution should operate independently of the government. If a mandatory pension scheme already exists for all or parts of the population, its managing institution could be considered for this purpose. Furthermore, the institution could be a private entity.

Second, a voluntary pension savings product needs to be created. To determine important parameters, such as the worker's contribution rate, the matching rate, and the retirement age, an actuarial study taking into account the target population needs to be carried out. Furthermore, the desirability of other benefits in addition to matching contributions, for example, insurance benefits, should be evaluated. Ultimately, aid needs to be targeted to those most in need. This group needs to be identified. Where possible, existing infrastructure, such as a national identity and employment registers should be leveraged to determine the eligibility of participants. Another possibility is to use existing socio-economic classification systems where they exist, such as the "Ubudehe" categories used to identify beneficiaries of social safety nets by the Ejo Heza pension scheme in Rwanda (Guyen and Jain 2023).

---

4 For an overview see Thomas & Spataro (2016), Bijlsma et al. (2018), Altiparmakov & Nedeljkovic (2018).

Access to the savings account needs to be underpinned by a secure identification system. This system should as far as possible be integrated with existing digital identification infrastructure in the country. Where no digital infrastructure is in place, a verification scheme using national identification documents must be established. Identification is also important to avoid fraud and identify the citizens most in need of aid. Similarly, contributions must be facilitated by a secured and accessible payment system. Biometrics, blockchain or mobile payment methods would be relevant options to secure access to and transfer of funds, where available.

Third, a large-scale information campaign among the target population needs to be undertaken. To foster participation, local societal infrastructure, for example, employer and employee unions should be leveraged to the extent possible.

None of these steps are straightforward. We are currently writing a report elaborating the operational stage.

## V. **Conclusion: A new way to address shortcomings of past pension policy**

We believe financing matching contributions with international aid can help address two of the main pitfalls that funded pension systems have faced in developing and emerging economies: low contribution rates and irregular contribution patterns. We develop this argument by drawing comparisons to the Chilean experience.

In many developing countries with struggling funded pension systems, contribution rates are too low to ensure adequate retirement income. In Chile, for example, the worker's contribution was set at 10% of covered wages initially to encourage participation. This rate has not been increased since (Evans and Pienknagura 2021) and is low in international comparisons. In 2022, Chile's effective contribution rate ranked 28th among 35 OECD countries included in the comparison (OECD 2023). The employer is not required to contribute beyond a payment for the management of investment fees. The low contribution rate is one of the drivers behind the system not delivering the promised adequate levels of retirement income.

Modest worker contribution rates could be acceptable when complemented by contributions from employers or the government. In many developed countries, defined contribution systems complement a guaranteed minimum pension level to avoid severe poverty in old age for citizens that have not contributed sufficiently to the pension system. Such a social safety net, however, does not exist in many developing countries. The matching contributions from international donors can help reduce the risk of old age poverty in such situations.

Without co-contributors, it is unlikely that workers will save enough on their own. This issue is intensified in the early years of the pension system. Specifically, as was the case in Chile, the working generations when such systems were created started contributing relatively late in their careers and at a low rate, resulting in an insufficient pool of savings upon retirement. At the time, the government also created a transition scheme, but it was insufficient. Our system would shore up the balances of individual savings accounts with international aid. This will be valuable across the life of the system, but the added capital will be especially important in the decades following the system's inception.

A second issue that has plagued funded pension systems in developing economies is irregular contribution patterns. This is the case in Chile, but also in countries with more recent pension systems such as Rwanda (Guyen and Jain 2023). The prevalence of informal work in many developing countries is one factor explaining irregular contribution patterns. In Chile, for example, frequent transitions between formal and informal work are one of the reasons behind low contribution density (Evans and Pienknagura 2021). In 2022, informal employment represented more than 27% of total employment in Chile (ILO 2023).

Although recent experiences such as in Rwanda show that matching contributions do not guarantee regular contribution patterns, such policies do help. By increasing the amount that is effectively saved in the worker's account when they contribute, matching contributions incentivise people to contribute to the system. If they do not, they miss out on the "free" matched amount.

To conclude, in this paper, we present a novel idea to finance pensions in developing and emerging economies: matching contributions through international aid. We believe that such a mechanism would address some of the key limitations that pension systems have experienced in this group of countries.

International aid payments would be directly used to fund individual pension pots and incentivise saving. Over time, this growing pool of capital will help the development of the domestic economy and promote economic growth. Crucially, this scheme builds a pot of savings that is owned by the population, and directly supported by international aid. The long-term goal is for the pension system and the wider economy to become independent without relying on international aid.

The Collier Pensions Institute is currently developing this idea further by working on a pilot scheme to fund pensions through international aid.

## References

- Altiparmakov, Nikola, and Milan Nedeljkovic. 2018. 'Does Pension Privatization Increase Economic Growth? Evidence from Latin America and Eastern Europe'. *Journal of Pension Economics and Finance* 17 (1): 46–84. <https://doi.org/10.1017/S1474747216000160>.
- Barr, Nicholas, and Peter Diamond. 2008. *Reforming Pensions*. Edited by Nicholas Barr and Peter Diamond. Oxford University Press New York. <https://doi.org/10.1093/acprof:oso/9780195311303.001.0001>.
- . 2016. 'Reforming Pensions in Chile'. *Polityka Społeczna* 1: 4–8.
- Bijlsma, Michiel, Johannes Bonekamp, Casper van Ewijk, and Ferry Haaijen. 2018. 'Funded Pensions and Economic Growth'. *De Economist* 166 (3): 337–62. <https://doi.org/10.1007/s10645-018-9325-z>.
- Börsch-Supan, Axel H., Jens F. Köke, and Joachim K. Winter. 2005. 'Pension Reform, Savings Behavior, and Capital Market Performance'. *Journal of Pension Economics and Finance* 4 (1): 87–107. <https://doi.org/10.1017/S1474747205001915>.
- Evans, Christopher, and Samuel Pienknagura. 2021. 'Assessing Chile's Pension System Challenges and Reform Options'. 2021/232. IMF Working Papers. Washington, D.C.: International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2021/09/09/Assessing-Chile-s-Pension-System-Challenges-and-Reform-Options-465415>.
- German Council of Economic Advisors. 2023. 'Annual Report – Chapter 5 – Population Ageing Surge and Pension Reforms'. Annual Report.
- Guyen, Melis U., and Himanshi Jain. 2023. 'The Promise of Ejo Heza : A Brighter Future for All Rwandans'. World Bank, Washington, DC. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099033123085039385/p1765760e814d806d09ad90af5463223bde>.
- ILO. 2021. 'World Social Protection Report 2020-2022'. Geneva: International Labour Organization. [https://www.ilo.org/wcmsp5/groups/public/@ed\\_protect/@soc\\_sec/documents/publication/wcms\\_817572.pdf](https://www.ilo.org/wcmsp5/groups/public/@ed_protect/@soc_sec/documents/publication/wcms_817572.pdf).
- . 2023. 'ILO Modelled Estimates Database (ILOSTAT)'. Database. <https://ilostat.ilo.org/data/>.
- Lakonishok, Josef, Andrei Shleifer, and Robert W Vishny. 1992. 'The Impact of Institutional Trading on Stock Prices'. *Journal of Financial Economics* 32 (1): 23–43. [https://doi.org/10.1016/0304-405X\(92\)90023-Q](https://doi.org/10.1016/0304-405X(92)90023-Q).
- OECD. 2016. *OECD Pensions Outlook 2016*. OECD Pensions Outlook. OECD. [https://doi.org/10.1787/pens\\_outlook-2016-en](https://doi.org/10.1787/pens_outlook-2016-en).
- . 2020. *OECD Pensions Outlook 2020*. OECD Pensions Outlook. OECD. <https://doi.org/10.1787/67ede41b-en>.
- . 2023. *Pensions at a Glance 2023: OECD and G20 Indicators*. OECD Pensions at a Glance. OECD. <https://doi.org/10.1787/678055dd-en>.
- Thomas, Ashok, and Luca Spataro. 2016. 'The Effects of Pension Funds on Market Performance: A Review'. *Journal of Economic Surveys* 30 (1): 1–33. <https://doi.org/10.1111/joes.12085>.
- UNPFA. 2012. 'Population Ageing and Development 2012'.
- Wurgler, Jeffrey. 2000. 'Financial Markets and the Allocation of Capital'. *Journal of Financial Economics* 58 (1–2): 187–214. [https://doi.org/10.1016/S0304-405X\(00\)00070-2](https://doi.org/10.1016/S0304-405X(00)00070-2).



## About the authors

### Jeremy Coller

Jeremy Coller is Chief Investment Officer and Managing Partner of Coller Capital, a leading secondary private equity business, which he founded in 1990.

In 2015 Jeremy founded FAIRR (Farm Animal Investment Risk and Return), which is focused on ESG risks and opportunities in the global food sector. Today, FAIRR is the fastest-growing investor network of over 400 investors with over \$70 trillion in assets under management. Before founding Coller Capital, Jeremy worked for ICI Pension Fund.

He holds an MA in Philosophy from Sussex University and a BSc (Hons) in Management Sciences from the University of Manchester, UMIST.

### Dr David Pinkus

Dr David Pinkus is an Affiliate Fellow at Bruegel, an economic policy think tank. He is also a Senior Advisor at the Coller Pensions Institute, an initiative of the Jeremy Coller Foundation.

His research focuses on the macroeconomic effects of pension systems and future challenges to social security systems. From 2014 to 2016, he worked as a consultant at the OECD, researching policies to enable institutional investors to finance infrastructure.

He holds a Ph.d in Economics from Copenhagen Business School and is affiliated with its Pension Research Centre (PeRCent). David also holds an MSc cum laude in Economics from Bocconi University and a BSc in Economics from Ludwig-Maximilians-University in Munich.

*All views and opinions expressed in this paper are those of the authors alone.*

Coller  
Pensions  
Institute

---