

# Pension Funds and Financial Repression

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## Abstract

Pension funds in some economies are used as a captive audience to channel capital at below market rates to government. This policy is only one tool in the financial repression toolkit, but it is receiving increased attention as governments around the world struggle to increase fiscal space and reduce their sovereign debt burden as they rebuild their economies after the pandemic. First, this paper provides an analysis of financial repression using pension funds from a historical perspective. It then assesses the welfare and distributional implications of this policy and distills lessons learned from a variety of advanced and emerging economies. The wide range of possible interventions and idiosyncratic country conditions make a general set of policy recommendations elusive, but the paper suggests four high-level principles that can help policymakers assess the costs and benefits of implementing policies that employ pension funds as a captive audience for financial repression.

Key words: financial repression, pension, aging, fiscal policy, covid recovery, financial regulation

JEL Codes: G110, G230, G280, F380

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## Introduction

1. **Financial repression occurs when governments channel funds to themselves at below market rates by various means – including from institutional investors such as pension funds.** Financial Repression is both an old and a new topic, made ever more relevant in 2020 by the striking amount of new debt taken on by governments to support their economies in the wake of the COVID-19 crisis.<sup>2</sup> Policies involved can include capital controls, caps, and preferential tax treatment. One form of financial repression is accessing funds from “captive audiences:” pension funds, banks and insurance companies which are compelled in some fashion to channel funds towards government at low interest rates.
2. **The tools for implementing financial repression today are somewhat different than they were in the twentieth century – and may involve more channeling of institutional funds.** There is a rich set of literature reviewing the history of financial repression, as it worked in the wake of the Second World War and more recently in the years following the global financial crisis. Most specifically, it is likely that the captive audience version of financial repression will play a larger role than previously.
3. **Pension funds are an increasingly attractive target for financial repression.** Whilst other methods of repression (such as capital controls) are no longer as widely practiced and accessing funds from the banking sector entails adverse short-term consequences, using longer-term capital such as pension funds has become more of an option. They have grown in size as populations worldwide have aged and their assets have consequently grown. This does in turn, however, mean that the demographic consequences will be more widespread.
4. **Financial repression using pension funds entails complicated tradeoffs that need careful consideration of country-specific circumstances.** Policymakers need to take into account a plethora of factors including financial depth and size of the economy, income level, demographic factors and the maturity profile of pension obligations, as well as the structure and governance of the pension system. Governments that face serious budgetary challenges due to the COVID-19 crisis must carefully assess the general welfare and distributional implications of any financial repression tool and weigh them against alternatives, such as higher taxation, austerity, or higher sovereign debt. More research is

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<sup>2</sup> See Financial Times 15<sup>th</sup> March 2021 ‘Feeble Growth and Chunky Debt Piles Hold Back Emerging Economies’ <https://www.ft.com/content/b9164299-5a57-4548-9204-370316f47814>

needed to develop a model that allows economists to estimate the relative impact of each of the above policy measures.

5. **While this paper cannot define the scope conditions under which financial repression using pension funds would be recommendable, it distills existing country experiences into four high-level principles.** These principles concern the source and destination of funds, the timeframe of financial repression, and governance, respectively. Again, an authoritative assessment of whether and when to use the financial repression toolkit for pension funds is impossible without further research and without taking into account idiosyncratic country conditions. In the absence of such an assessment, the paper outlines the four following high-level principles for the use of pension funds as a captive audience:

6. **First, accessing sources of public pension savings is less harmful than private ones.** In the wake of the Global Financial Crisis, several European countries used public pension *reserve* funds to address severe financial and macroeconomic difficulties. With defined benefit (DB) pension funds, impacts are borne by the plan sponsor, with regulatory forbearance (e.g. extending time for funding recovery plans), allowing them to be smoothed over a longer time period. The challenge is that, if investment returns become too low over an extended period, the cost for sponsors to support the scheme becomes unaffordable, which risks the closing down of schemes altogether and /or shifting to defined contribution (DC) arrangements. The most direct impact is on DC schemes, where individuals directly bear the impact of lower returns through lower retirement incomes. In effect, the latter policy amounts to a heavy “stealth” tax on those impacted.

7. **Second, temporary financial repression measures are less harmful than permanent ones.** Governments accessing pension funds to manage emergency situations (such as a global pandemic) are less likely to harm citizen welfare than those who use financial repression to finance on-going budget deficits. A clear time horizon and exit strategy of financial repression can curb distortions in the financial market and help reassure pension beneficiaries that their interest will be honored.

8. **Third, funds extracted via financial repression should be used specifically to support inclusive economic growth and sustainable development.** Some governments have managed to deploy access to lower cost capital from domestic pension savings to meet these goals – which this paper argues can be the most beneficial form of financial repression, *if* (and it is a big if) done well. The current drive by

pension funds to introduce ‘environmental, social and governance’ (ESG) factors into their investment strategies can be an opportunity to ‘leverage’ rather than ‘repress’ these precious sources of long-term, domestic capital. Channeling funds to development projects through dedicated financial instruments such as labeled, green or sustainable bonds which link the cost of capital to development results may also be a way to secure a long-term benefit from the policy and support the sustainable development which emerging economies will need to ‘build back better’ from the COVID-19 crisis.

9. **Fourth, good governance is essential.** Lessons from countries where pension fund assets have been successfully channeled towards long-term development suggest that funds should be subject to clear transparency and accountability rules. In these cases, capital extracted through financial repression is often managed professionally, at arms-length. Canada’s public pension funds provide a good example of institutions which have transitioned from having little independent governance and a lack of investment diversification to being global governance leaders. Their foundation built on stakeholder trust, design and management principles and results focused execution can be a lesson for pension funds and policy makers in other countries.

10. **This study is designed to inform pension funds, pension regulators and policy makers who consider leveraging pension funds to support economic development and growth.** The paper is organized as follows. Section 1 provides a literature review, including definitions of financial repression and a history of how this policy tool has been used in relation to pension funds in the post-Second World War period. A consideration of how financial repression has been applied to pension funds in emerging markets follows in Section 2. Section 3 offers concluding remarks and suggestions for how pension funds can best be leveraged in the COVID-19 recovery period.

## Section 1 – Literature review

### Definition and tool kit

11. **Financial repression encompasses a wide range of policies that have a relatively narrow purpose - namely to direct capital towards government use, often at below-market rates.** Reinhart et al (2011) state that “financial repression occurs when governments implement policies to channel to themselves

funds that in a deregulated market environment would go elsewhere” (p.22). Policies under the umbrella of financial repression include regulation and control of cross-border capital movements, interest rate caps on deposits and credit, and taxation of financial transactions with a lower tax rate for public debt instruments. More indirect regulatory measures that also serve financial repression purposes include high reserve requirement ratios for banks, open market operations by the central bank with the aim to keep the interest rate on public debt low, and prudential regulation for pension funds, banks and insurance companies with preferential treatment of public debt.

12. **Another major tool of financial repression is directed lending to the government by captive domestic audiences such as domestic banks and pension funds.** This can be driven by either (partial) state ownership, regulation, or moral suasion (Reinhart et al 2011, Norkina & Pekarski 2014). This paper focuses on the latter two tools, namely policies that incentivize domestic financial intermediaries to buy government debt. Although both banks and insurance companies will be mentioned as part of this topic, the paper will focus primarily on pension funds in this capacity.

**Box 1: The Financial Repression Toolkit**

**Monetary policy:**

- open market operations with the aim to keep interest rate on public debt low

**Fiscal policy:**

- financial transaction tax with preferential treatment of public debt instruments

**Regulation:**

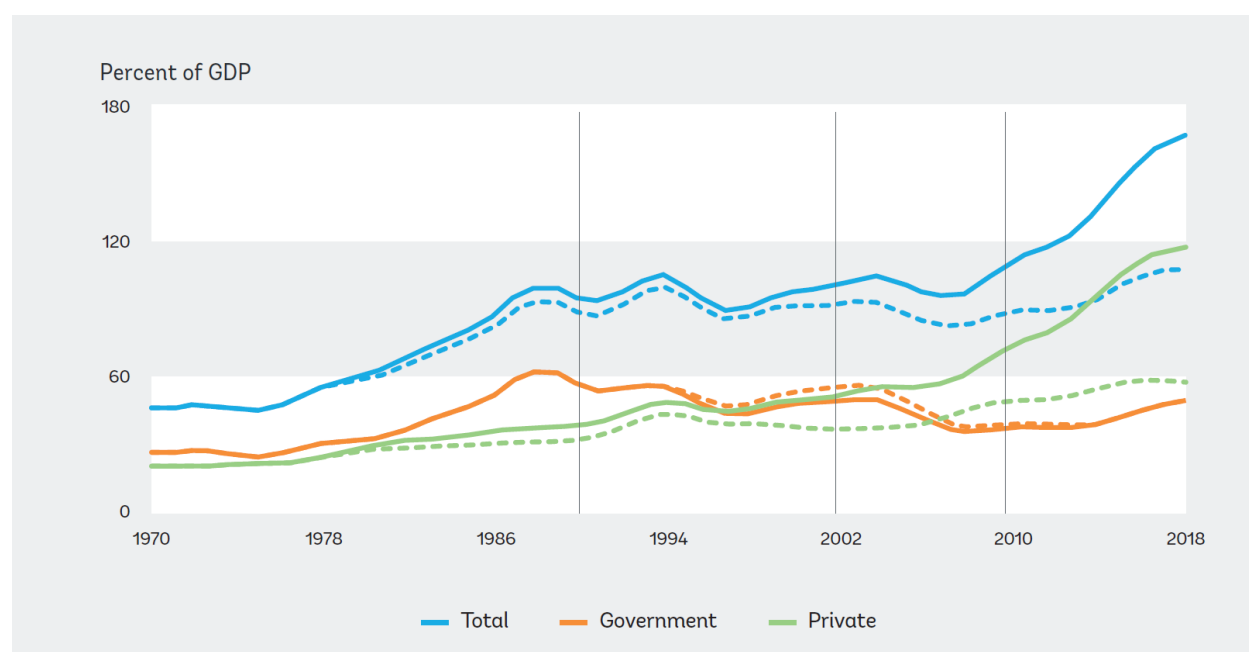
- controls on cross-border capital movement
- interest rate caps
- reserve requirement ratios for bank deposits
- macroprudential regulation with preferential treatment of public debt
- other regulatory requirements for captive audiences to hold public debt

**Direct intervention:**

- directed lending to government by (partially) state-owned financial intermediaries
- moral suasion of captive audiences

13. **There is an urgent need to address the various forms of financial repression given the dramatic expansion in global government debt during the COVID-19 pandemic.** The foundation for this dramatic increase in debt, though stemming from multiple factors, was accelerated as a result of the Global Financial Crisis in which the US Federal Reserve's Quantitative Easing programs and the European Central Bank's subsequent commitments to expand their balance sheet led to record-low interest rates and much-increased levels of public debt. Levels of debt in emerging markets also increased significantly, with access to new sources of financing (including international, Eurobond, markets and China). Given the further expansions triggered by the current COVID-19 crisis, there will inevitably be tremendous pressure to design new and improved solutions to address this debt overhang (Draghi 2020).

**Figure 1: 4 Waves of Debt in Emerging Markets and Developing Economies (EMDEs)**



Source: (Kose et al 2020). Aggregates calculated using current U.S. dollar GDP weight and shown as a 3-year moving average. Gray vertical lines represent start of debt waves in 1970, 1990, 2002, and 2010. Dashed lines refer to EMDEs excluding China.

14. **Financial repression in all forms will likely be increasingly used in the next few years – and pension funds as “captive audiences” may be an increasingly popular target.** Enrolling captive audiences has always been an instrument in the financial repression toolkit but it is likely to become

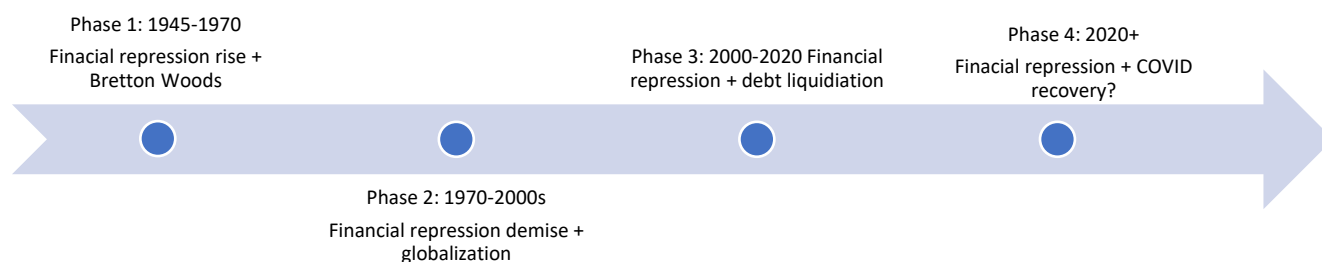
more prevalent going forward given decreased effectiveness for other options. Capital mobility and financial globalization have caused other instruments within the toolkit to lose much of their effectiveness. Meanwhile, the capital held by banks, pension funds and insurance companies has continued to grow in significance.

**15. One reason the capital of pension funds has grown in particular is demographic ageing in recent years – which means that using pension funds as a tool in financial repression could have widespread impacts.** This factor is a significant point of difference between the situation today and the situation immediately after the Second World War. At that time, pension funds certainly existed and were regulated in such a way that they could contribute to the aims of financial repression. However, they were significantly smaller in size and the demographics of global population were such that there was not a significant cohort of older workers and retirees yet dependent upon their asset pools. Today's situation is quite different in the developed markets, and rapidly becoming different in the emerging markets as well, with unprecedented rates of population aging underway in many locations throughout the world. Therefore, using pension funds as a significant tool of financial repression efforts has the potential to impact the already-endangered retirement prospects for many millions more than 70 years ago. Thus, it is critical that this topic be dealt with specifically and with appropriate caution.

**16. Pension funds are different from banks and therefore the specific impact on financial repression on these financial institutions needs to be considered.** Pension funds, with their clear focus on the long-term, are sometimes an attractive “target” for policymakers looking for a captive audience, but anxious to avoid negative impacts of fostering lower returns on banks that could play out in the very near term. As is often the case with pension funds, the impacts to them can often be delayed. As already stated, there may be relatively benign ways in which pension funds can contribute to national development while delivering retirement security. However, the many negative impacts of financial repression, however well-hidden at first, must be carefully avoided. The remainder of this chapter provides a brief overview over the theory and practice of financial repression from WWII to today, with a particular focus on pension funds as captive audiences.

17. **Theoretical and policy perspectives on financial repression have shifted in conjunction with more general paradigm shifts in the economics profession.** We can identify three post-war phases: (1) the rise of financial repression in line with a general endorsement of state interventionism; (2) its demise in the context of a shift to laissez-faire economic policies and financial globalization; and (3) a return in recent years as policymakers concerned with the public debt burden seek to find a new middle ground between state and market. This paper will comment on the particular state of pension funds and the impact of financial repression on them in each phase.

**Figure 2: Historical Use of Financial Repression as a Policy Tool**



Source: Authors

*Phase 1: The rise of financial repression under Bretton Woods, 1945-1970s*

18. **Advanced economies emerged from the Second World War with a significant public debt burden.** Policymakers deployed the full toolkit of financial repression, instituting interest rate caps, directed lending requirements, and other regulatory measures to lower government debt payment obligations over time. Such interventionist measures squared well with a global financial system that was segmented along national borders and subject to heavy regulation under the Bretton Woods system of monetary management. Some central banks such as the Bank of England had a debt management mandate at the time, allowing such institutions to combine monetary and prudential regulatory policy with financial repression to reduce sovereign debt servicing costs (Reis 2020).



19. **Policymakers applied the financial repression toolkit effectively.** Research by Reinhart and Sbrancia (2015) show that real interest rates in advanced economies were negative half of the time between 1945 and 1980. The authors estimate the “financial repression tax” to be equivalent to 10-50% of annual government revenues and 1-5% of GDP on average in the twelve countries studied. Low yields on government bonds together with inflation helped push the real interest rate on government debt into negative territory, reducing both annual debt servicing costs and debt levels over time. Estimates of this “liquidation effect” amount to an annual average of 3-4% of GDP for the UK and the US (Reinhart et al 2011, Fulcher et al 2014). Low or negative interest rates were arguably more important than primary budget surpluses in reducing the sovereign debt burden in the postwar years, a lesson policymakers were drawn to again half a century later, in the wake of the global financial crisis (Crafts 2016).

20. **Pension funds were captive audiences of this early version of financial repression – but their size and significance were much smaller.** At that time, pension funds, where they existed, were highly regulated and almost entirely defined benefit in design (Burr 1995, Aberdeen Standard 2018). As Rogoff (2020) notes, they were extremely small in proportion to more explicit government obligations. Concurrently, demographic trends were quite accommodating, with relatively few pensioners for funds to support while large cohorts of new entrants to the work force provided much support to emerging schemes. From the outset, pension funds held considerable amounts of domestic public debt. The Social Security trust fund in the United States for example has always invested non-marketable securities of the United States government with an interest rate based on an average of the prevailing rates for outstanding marketable securities (Bloom & Freeman 1992). In OECD countries, government debt represents 30% of funded pension assets in 2018, down from over 45% in 2001 (OECD Global Pension Statistics).

*Phase 2: Demise in times of financial globalization, 1970s-2000s.*

21. **Enthusiasm for financial repression waned among policymakers from the 1970s onward, as financial interventionist policies did not consistently translate into economic growth.** In an environment of high inflation, debt crises in Africa and Latin America as well as deregulation of cross-border capital movements, laissez-faire policies replaced financial repression both in advanced and emerging market economies. The term “financial repression” enters the vocabulary of policymakers with a pejorative connotation in the work of McKinnon (1973) and Shaw (1973). The economists argue

that negative real interest rates and a tightly constrained financial system discourage savings and thus deprive the economy of the capital needed to fuel investment and growth. Moreover, directed credit and other interventionist policies lead to a misallocation of resources, benefitting large and state-owned firms and other vested interest groups while depriving profitable newcomers of access to finance and thus strangling the process of creative destruction that fuels economic growth (Rajan & Zingales 2003, de la Torre et al 2017). Cross-country regressions using data from developing countries indeed provide empirical support for the McKinnon-Shaw hypothesis, showing a negative correlation between financial repression (understood as negative real interest rates) and subsequent GDP growth (Agarwala 1983, Gelb 1988, Giovannini & de Melo 1993, Adeleye et al 2017).

**22. Periods of high inflation in emerging market economies further eroded faith in the benefits of financial repression.** While inflationary monetary policy is not intrinsically linked to the toolkit of financial repression, both can be and have been used as complementary means to grant greater fiscal space to the government (Giovannini & de Melo 1993). But some governments seeking to inflate away fiscal deficits in the 1970s and 1980s found themselves trapped in hyperinflationary periods that eroded not only citizens' savings but also faith in the national currency. Cross-sectional empirical studies of EMDE show a significant negative effect of inflation on subsequent economic growth, adding further doubt regarding the benefits of financial repression (Roubini & Sala-i-Martin 1992).

**23. Real interest rates in deeply negative territory incentivize savers to seek alternatives outside the country, legally or not.** In Argentina and Venezuela for example, where negative real rates have been common, the domestic debt market all but disappeared. Citizens and firms were so aware of the disadvantages of buying government debt and devoid of profitable alternatives that many resorted to capital flight, undermining the revenue generated from the financial repression tax (Reinhart & Sbrancia 2015, Reinhart & Santos 2016). With the disintegration of the Bretton Woods system and financial globalization, policymakers found it increasingly difficult to keep domestic savings inside the country and away from more lucrative cross-border investment options.

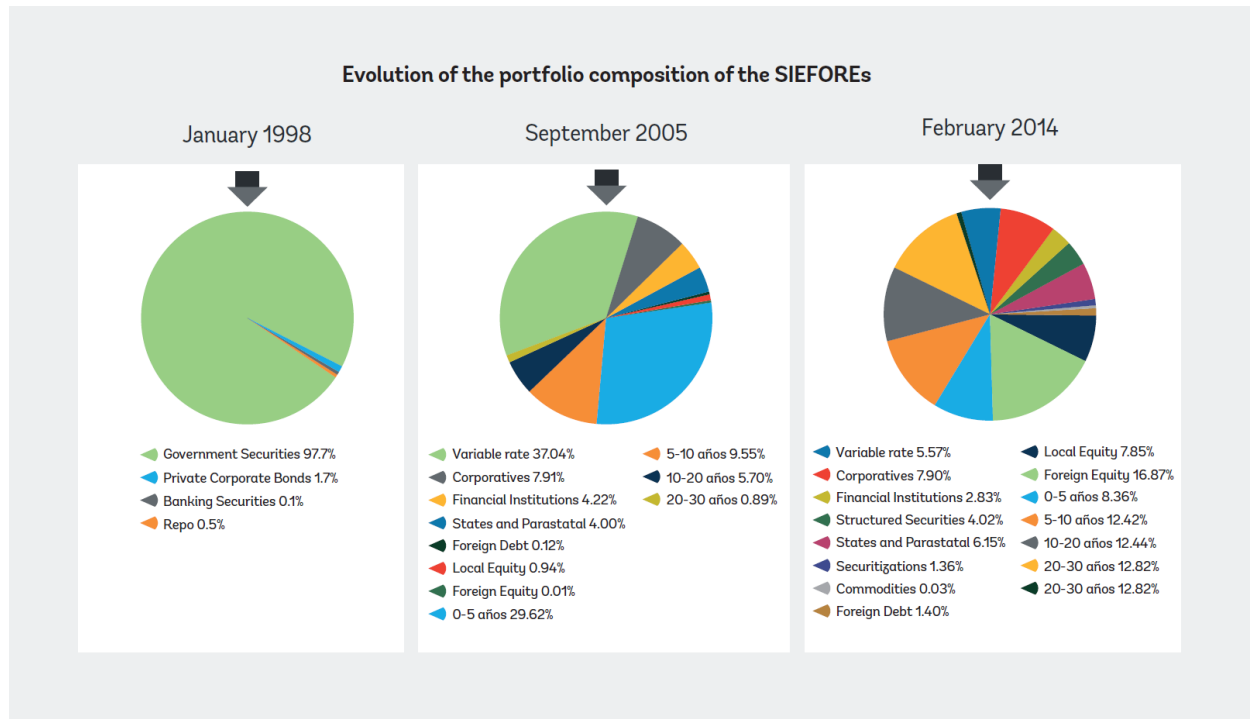
**24. The 1970s and 80s could be regarded as the “heyday” of pensions – yet the seeds of change were accumulating.** Funded DB pensions became a more common feature in OECD developed economies, offered by both the state and in some cases private employers. Yet even as these pension

programs became widely available, they were subject to new challenges due to demographic ageing and changes in the legal and accounting frameworks.

**25. In the 1980s and 90s, pension fund reform gained momentum, both in the developed markets but also in many emerging markets where privatization and a move to defined contribution (DC) forms was the order of the day.** The best examples of this latter phenomenon were to be found in Latin America and later in Eastern Europe. Chile moved from a failing pay-as-you-go arrangement to a new privatized DC system in 1981. Other countries in Latin America followed this trend in subsequent years. A similar wave of DC systems were created in Eastern Europe in the 1990s. Importantly, unlike in many developed markets where a defined benefit / pay-as-you-go foundation continued to exist, these markets chose to establish privately managed DC funds as the center pillar of their pension systems.

**26. These new and emerging DC systems typically had tight investment restrictions, at least at first, especially in EMDE.** Non-domestic investment was often prohibited for new systems in EMDE and equity allocations were limited – making them in practice a ‘captive audience’. Typically, though, as these new DC systems matured there was an increasing ability in many of them to invest internationally. This ability was most helpful in allowing these funds to include much more diversified equity allocations as a complement to their existing portfolio assets, thus delivering improved prospects for return while not unduly increasing risk. An interesting example is provided by Mexico, where the pension investment regulations steadily liberalized over the course of the two decades beginning in the 1990s and as a result, their pension system held an increasingly diverse set of investments as shown in Figure 2 (Consar 2014, p. 12). Although Mexico did achieve early progress in asset diversification, their progress stalled in the mid-2010’s while some of the other Latin American systems continued to make further headway in this area.

**Figure 3: Evolution of Mexican Pension Fund Portfolios**



Source: CONSAR

**27. Financial Repression was seen in a new light following the Asian example.** Post-war Japan and the East Asian Tigers that followed in its wake applied development strategies that incorporated parts of the financial repression toolkit (Yulek 1997, Baxendale 2007). Their success cast doubt on the McKinnon-Shaw hypothesis that financial repression reduces the savings rate and subsequent economic growth. Stiglitz (1994) argues that at early stages of economic development, financial markets are not able to channel savings effectively into investment and that state intervention in the form of repressive financial policies can promote economic growth by improving allocative efficiency. Stiglitz spoke specifically about Asian governments taking an active role in “creating financial institutions”, alluding to Provident Fund institutions.

**28. Many retirement systems in Asia began to accumulate substantial assets during this time period as well, under their “Provident Fund” DC approach.** Provident funds serve multiple purposes. They are designed to enhance retirement security and as savings vehicles for housing or medical expenses as well as serving national development objectives (Jackson & Inglis 2020). The funds pay an administratively determined dividend rate, rather than (and usually below) a market return. These funds were relatively

successful in the past in meeting these various needs. But rapid demographic ageing induced some to diversify away from domestic government debt to better assure future retirement security.

**29. China's impressive growth record is also intrinsically linked with ubiquitous financial repression.**

Real interest rates for bank deposits were negative in the 2000s, and interest rate caps were only removed in the 2010s while most major financial intermediaries in China remain state-owned and subject to moral suasion by the authorities (Lardy 2013, Borst & Lardy 2015, Bowles & White 2019, McKinnon & Schnabl 2014). Meanwhile, Cui (2019) finds no significant effect of financial repression in China on the savings rate between 1978 and 2017. Aizenman et al (2019) shed light on the disputed correlation between the two by distinguishing between substitution and income effects. Substitution occurs when low or negative real interest rates discourages economic agents from postponing consumption in order to save, in line with the McKinnon-Shaw hypothesis. Under the income effect however, households compensate for low real interest rates by saving even more to reach a targeted savings goal. The income effect is expected to be prevalent in EMDE where an absent or patchy social safety net motivates precautionary savings behavior.

*Phase 3: Return as a debt liquidation tool and the rising role of captives, 2000s – now*

**30. Faced with sharply rising fiscal deficits in the wake of the global financial crisis, some policymakers in advanced economies started reconsidering the benefits of financial repression.** The 2007-9 crisis prompted governments around the world to stimulate aggregate demand with massive fiscal expansion, driving up sovereign debt levels (Reinhart & Rogoff 2009, Eichengreen et al 2019). In subsequent years, as economic recovery got underway, economists engaged in a debate about alternatives to austerity, unconventional economic policymaking and debt sustainability. Reinhart & Sbrancia (2015) remind their readers that debt liquidation through economic growth alone amounts to wishful thinking. The authors argue that “It apparently has been collectively forgotten that the widespread system of FR [financial repression] that prevailed worldwide from 1945 to the early 1980s played an instrumental role in reducing or liquidating the massive stocks of debt accumulated during WWII in many of the advanced countries, United States inclusive.” (Reinhart & Sbrancia 2015: 294f). Along with other economists, Reinhart looks at financial repression methods that EMDE have embraced

after financial crises, wondering whether advanced economies should consider them, too (Escolano et al 2011, Reinhart & Rogoff 2014, Mauro & Zhou 2019).

**Box 2: Banks as flawed captive audiences during the Eurocrisis**

**European banks have increased their domestic debt holdings significantly between 2007 and 2013.** Altavilla et al (2016) use data from the European Central Bank to show that domestic sovereign exposure in the eurozone periphery increased to a median of 7% for all domestic banks, and 12% for government-controlled ones, compared to a stable 1% for foreign-headquartered banks. While carry trade behavior of peripheral banks played a role (Acharya & Steffen 2015), another plausible explanation for the uneven debt accumulation among banks is that politicians in distressed countries may have used both direct influence through (partial) public ownership and moral suasion to make banks load up on domestic government debt (Ongena et al 2016, Becker & Ivashina 2018, De Marco & Macchiavelli 2016, Horvath et al 2015).

**Using domestic banks as a captive audience can crowd out lending to the private sector and encumber economic recovery.** Banks in the eurozone emerged from the GFC under-capitalized and unable to expand lending. Moreover, banks with higher holdings of Eurozone periphery domestic sovereign debt contracted their lending operations to the real economy more than others (Becker & Ivashina 2018, Crosignani et al 2015, Bottero et al 2020, Popov & van Horen 2015). Increases in domestic sovereign debt exposure by eurozone banks are associated with a 11bn euro reduction in loans in 2007-15 (Altavilla et al 2016). European firms affiliated with highly sovereign-exposed banks have experienced lower capital expenditures, sales and employment growth than others (Acharya & Steffen 2015, Acharya et al 2018). Financial repression thus arguably exacerbated the European debt crisis by reducing loan supply when it was most needed by the private sector.

31. **In sum, after decades of eschewing financial repression as a development strategy, policymakers are reconsidering the utility of the toolkit for sovereign debt sustainability, and their newfound approach includes a focus on the potential role of captive audiences.** The reappraisal of financial repression as a useful policy tool occurs in an economic environment that is fundamentally different from the post-war years: there are no calls for a return to the Bretton Woods system of fixed exchange rates, widespread capital controls, and ubiquitous state intervention in financial markets. Instead, policymakers have incorporated the lessons learned from excessive use of financial repression in economies that experienced hyperinflationary periods, capital flight, and sluggish growth, as well as the benefits of selective financial repression in high-performing East Asian emerging market economies.

As we have seen in our recap of practices to-date, there are possible opportunities to leverage captives that may be appropriate, but there are also many ways to do this that would be harmful.

#### Pension funds as captive audiences

**32. As long-term institutional investors tied to one particular country, pension funds have served as a captive audience for domestic government debt for a long time.** While regulatory requirements for pension funds differ across jurisdictions, many favor domestic debt in general and public debt in particular. A recent survey of 36 OECD and 44 non-OECD countries reveals that only 9 jurisdictions have no quantitative regulations on pension fund investments. Some pension funds are barred from investing abroad, many are subject to equity investment caps, but regulatory ceilings on investment in domestic government debt are almost nonexistent (OECD 2019). In a few jurisdictions (e.g. Pakistan, Seychelles, Zambia, Zimbabwe), pension funds still face minimum requirements for investment in domestic public debt even though the OECD Core Principles of Private Pension Regulation advise against prescribing minimum investment holdings: *“The legal provisions should not prescribe a minimum level of investment (floors) for any given category of investment, except on an exceptional and temporary basis and for compelling prudential reasons.”* (OECD 2016, 4.13).

**33. Recent regulatory changes in Europe effectively target insurance and pension funds as captive audiences.** The Solvency II directive that regulates the insurance sector includes favorable treatment for government bond holdings through a ‘zero capital charge’ for high-rated debt (Wang 2013). For pension funds, a similar requirement was envisioned as part of the IORP II directive revision, but after much criticism was softened. Ireland did move forward with a 2016 update to its occupational pension minimum pension funding standard that included favorable treatment for EU sovereigns in its calculation formula for a “risk reserve.” That favorable treatment was later broadened to include other asset classes.

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### **B O X 3 . Defined Benefit (DB) vs. Defined Contribution (DC) – who bears the stealth tax?**

In this simple table, attributes of both DB and DC pension funds are shown to help illustrate the issues faced by each when “taxed” with financial repression tactics directed toward occupational funds

Attribute	DB	DC
Bearer of Risk	Employer, Other Sponsor	Individual
Funding Source	Employer + Individual (possibly)	Individual + Employer (possibly)
Impact of lower returns	More Employer contributions*	Lower pension payouts

\* with likely follow-on impact to employees in the form of plan terminations and/or lower wages / or shift to DC schemes.

**34. Prudential regulation (i.e. pension funding rules) also favors domestic government debt as a risk-free investment category.** In the United Kingdom for example, the Pensions Act of 1995 introduced a “minimum funding requirement” to curb the risk exposure of pension funds. In effect, this meant spurring demand for gilts (treasury bonds) as these are less volatile instruments in the short term, allowing DB plan sponsors to more accurately plan their pension contributions (Mohan & Zhang 2014). Other countries have similarly created strong incentives for the holding of government debt instruments, such as the Netherlands, where risk-based funding rules penalized holdings of ‘risky’ assets and incentivized full funding of schemes at all times (again pushing plan sponsors way from higher return but more volatile assets such as equities), through ‘matching’ assets and liabilities (Stewart 2007).



Long-dated government bonds typically are the best instrument given this particular goal<sup>3</sup> (Pugh 2006, Bonoli 2003).

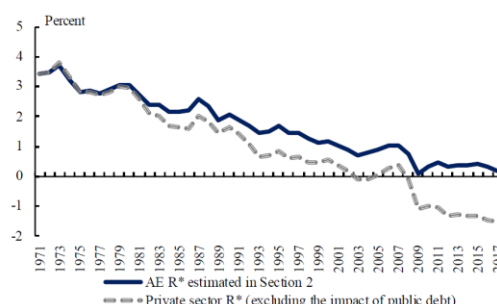
#### Box 4: Low real interest rates without financial repression

**The unintended consequences of recent monetary and prudential policy may have already contributed to a decline in real interest rates over the past decade.** Research by the Bank of England shows that the risk-free real interest rate has dropped from an estimated 2% during the global financial crisis into negative territory today. Simultaneously, the nominal yields of sovereign debt have dropped significantly, easing public financing costs at least in G7 countries (Bean 2016). In four key jurisdictions (Sweden, Denmark, Switzerland and the Euro area) nominal rates have actually been set below zero. The author (Bean) attributes the decline in interest rates to a combination of quantitative easing, prudential regulatory reform, and a post-crisis reassessment of tail risk among investors that precipitated a flight to safety, that is to advanced economy sovereign debt securities. In other words, rich country governments are already enjoying the fiscal benefits of low or negative interest rates without having explicitly deployed the financial repression toolkit for that purpose.

*Figure 4: “World” 10-year risk-free real interest rate / Figure 5: Advanced economies equilibrium neutral real interest rate  $R^*$  adjusted for the impact of government debt*



Source: Bean (2016), p. 508



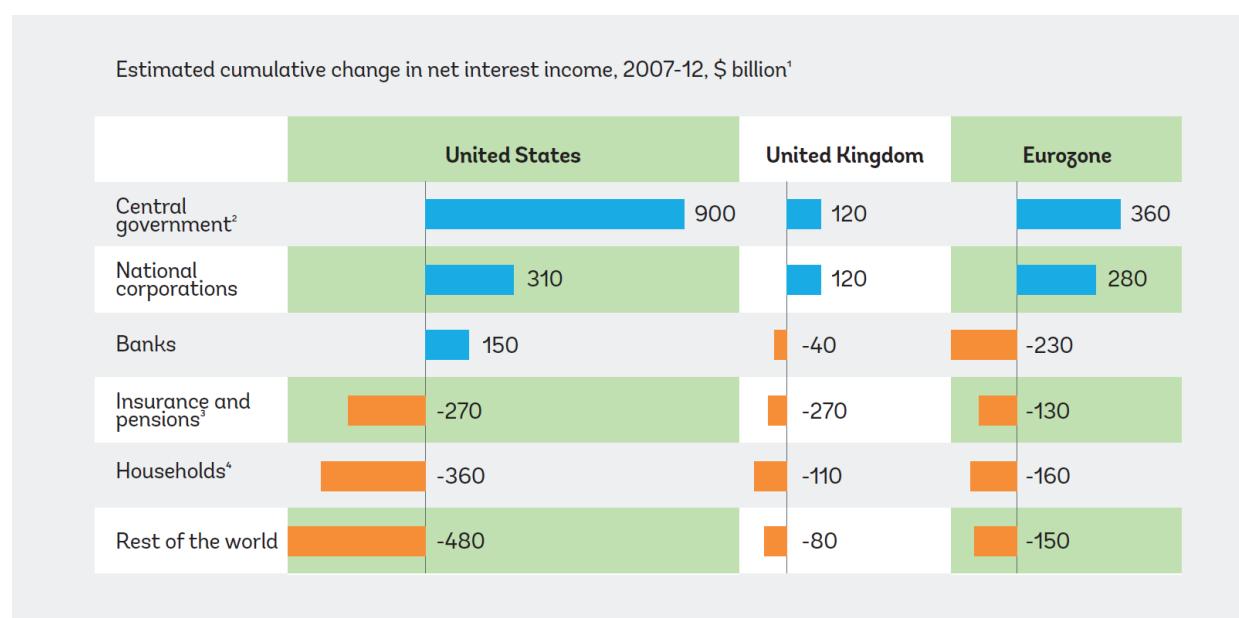
Source: Rachel & Summers (2019), p. 23

**Sovereign debt accumulation may have prevented real interest rates from falling even further.** In a recent paper, Rachel & Summers (2019) seek to assess the influence of government policies on the real interest rate in advanced economies, along with demographic and technological shifts in a dynamic general equilibrium model. The authors estimate that government spending on old-age healthcare and social security have acted as a counterforce to Secular Stagnation (a hypothesis indicating that demographic aging has caused an ongoing drop in rates) because it has transferred capital to (poorer) economic agents with a higher marginal propensity to consume, reducing savings and thus driving up the equilibrium interest rate. Government debt accumulation has also pushed up the real interest rate by increasing the supply of safe assets which agents can use to insure themselves against shocks. Overall, the upward pressure on the real interest rate caused by rising government debt may account for around 1.5 percentage points (Rachel & Summers 2019).

<sup>3</sup> True inflation-linked securities may be an even better asset for pension funds than simple long-dated nominal bonds as discussed in multiple World Bank papers (Vittas, Rudolph & Pollner 2010 is one). They can provide inflation protection in addition to long-term income. Additionally, in the context of prospective “financial repression” they could serve as insurance for pensioners. However, they are quite rare and can be expensive.

**35. Quantitative easing and accommodative monetary policy have had net interest effects akin to a financial repression tax.** While unconventional monetary policy was not adopted for financial repression purposes, it has lowered real interest rates. As a consequence, governments are facing lower funding costs, but holders of government debt securities such as pension funds have experienced a reduction in net interest income (Boubaker et al 2018). A study by the McKinsey Global Institute in 2013 tries to quantify what could be called a financial repression tax. The authors estimate that QE helped the UK, US and EU save \$1.6bn in reduced debt servicing cost and increased profits remitted from central banks. While the net effect for the banking sector varies by jurisdiction, insurance and pension funds across the board saw a reduction in net interest income amounting to around \$430bn in the same period (Dobbs et al 2013) – see Figure 5. DC funds are estimated to have faced greater losses than DB funds, which is disturbing given that this “tax” falls even more directly on individuals. Life insurance companies are also among the net losers of this change in net interest income, along with households (i.e. non-retirement account savers).

**Figure 6: Changes in net interest income due to QE, 3 jurisdictions**



<sup>1</sup> At constant 2012 exchange rates. <sup>2</sup> Excludes added central-bank profits. <sup>3</sup> Includes only defined-benefit pension plans and guaranteed-rate life-insurance policies. <sup>4</sup> Includes nonprofits, defined-contribution pension plans, and variable-rate life-insurance policies.

Source: Dobbs et al (2013)

**36. The ‘back-door’ push on captives to hold government debt and very low interest rates have had an adverse impact on pension funds.** In a 2015 survey of 184 European pension scheme managers, 65%

of respondents call quantitative easing an “opaque tax” that has a negative influence on their funding ratio. As a result of regulatory measures tying DB funded ratios to recent market interest rates, the deficit of private sector funds as a percentage of their total liabilities rose from 27% in 2009 to 40% in 2014. Given this dynamic and increased pressure, a third of respondents shifted from DB to DC, and many (26%) report reducing retirement benefits for their clients (Rajan 2015, Retirement Planner 2015). Moreover, pension funds were forced to increase exposure to higher yielding but riskier assets in order to close funding gaps. At least for DC funds, individual pension contributors bear the resulting higher portfolio risk.

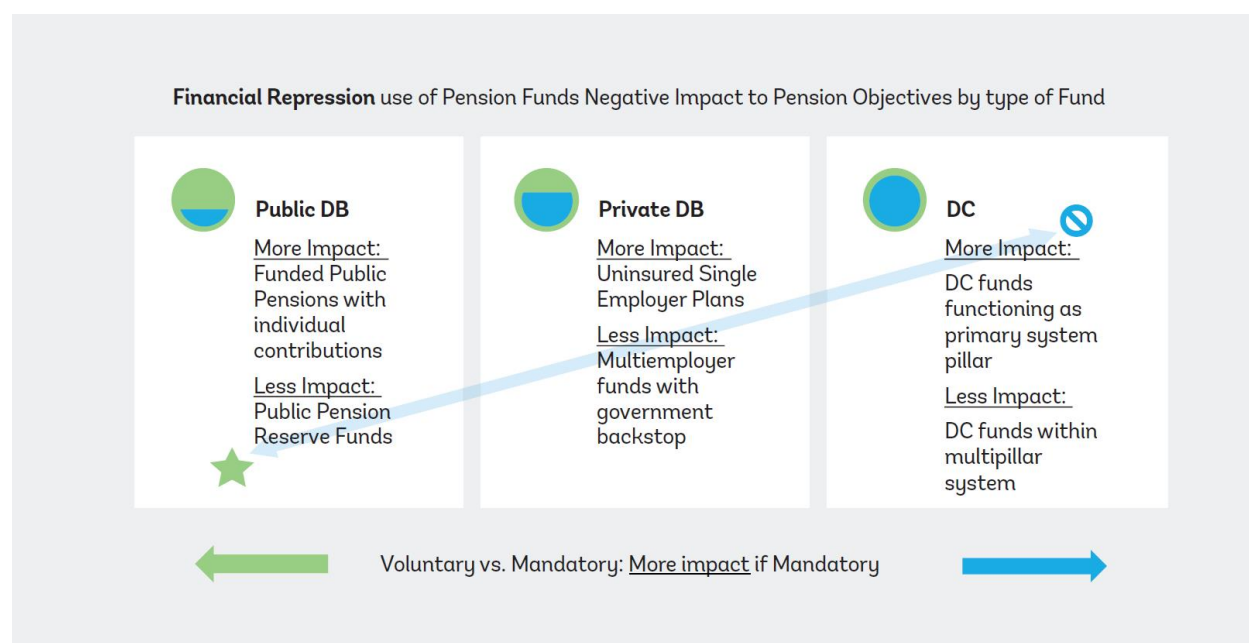
**37. Advanced economies have also resorted to direct usage of the financial repression toolkit in impacting pension funds.** Public pension reserve funds were called upon in 2010 in both France and Ireland to bear a portion of the crisis burden. In France, the government liquidated the *Fonds de Preserve Pour Les Retraites* in 2010 and redirected its funds to a government agency tasked with “social debt amortization” until 2024. Meanwhile, the fund in Ireland was asked to contribute up to €17.5bn to recapitalize the country’s banks (Reinhart et al 2011). Spain’s pension reserve fund increased its allocation in domestic government bonds from 50% of its portfolio in 2007 to 90% in 2012 and 97.5% in 2013 (Reinhart & Sbrancia 2015). Each instance involves a pension *reserve* fund, perhaps the pension-related entity most appropriate for targeting in a time of system-wide stress as the government is capable of meeting future pension obligations with alternative means.

**38. Taken together, these different financial repression tools have been used on extensively on pension systems in the past decades.** A recent World Bank study reports that interest rate caps are in place in 63 of 108 countries surveyed. This common tool of financial repression is prevalent both in EMDE and advanced economies, and across all world regions. The economic repercussions of COVID-19 have induced a number of countries, from Finland to Sri Lanka, to impose new interest rate caps (Calice, Kalan, & Masetti 2020). Pension funds are subject to financial repression in a similar share of economies. Funding regulations favoring government debt impact pension funds that comprise over half of global pension assets under management. More interventionist forms of financial repression, such as prescribed assets for pension funds or nationalization, however, now only exist in a small number of EMDE.

**39. It is hard to draw any positive lessons from instances in other regions of compelling captives to assist.** Another major example, but one harder to read, would be the pension fund reversals seen in Eastern Europe and earlier in Latin America. In some cases, pension contributions directed towards individual DC accounts set up in the 1990s were redirected towards national social security payments, often as a way to mitigate growing government indebtedness (Schwarz and Arimas 2014, Price and Rudolph 2013). In some systems, such as in Poland and Hungary (and earlier in Argentina), there was outright nationalization of what had previously been individual DC pension accounts. This amounted to a more direct “stealth tax” on the individuals concerned while demographic change and rising pension costs remain challenges.

**40. The lesson for advanced economies should be to avoid using pension funds as captives, especially in the face of the large demographic challenges in those countries.** In general, these countries have developed markets and government backstop mechanisms that should take the lead in almost all scenarios. Further, most pension funds in these countries are migrating toward a DC structure that then imposes any new cost on individuals. However, in very limited circumstances, when absolutely necessary in the face of a significant crisis, a “least impactful” approach could involve leveraging the resources of entities such as public pension reserve funds.

**Figure 7: Impact of Financial Repression on Different Pension Systems**



Source: Authors

## Section 2- Policy application in EMDE

**41. Depth and maturity of a financial system matters in evaluating financial repression, but good governance is critical.** While many governments have liberalized their financial sector over the last decades, various instruments of financial repression instruments, including pension funds as captives, are still operational in many EMDE (Gupta 2008). This section briefly showcases experiences with pension funds as captive audiences in seven EMDE. It compares and contrasts the investment approach of the Malaysian provident fund to the Indonesian systems as a possible model to use in other situations. El Salvador's experience in two decades of pension reform highlights some potential challenges with using financial repression for strained government finances. Ethiopia is a case where the direction of social security funds' assets is one only one of the financial repression tools used. South Africa and Namibia have had noteworthy policy experiences with asset prescription, corporate governance of funds, and institutional change to channel pension fund savings into the domestic economy. Ghana and Kenya have implemented temporary financial repression measures to address fiscal needs while facing the global pandemic. A common theme across these varied examples is that good governance is a key condition for financial repression policies to honor pension commitments and support sustainable development.

### Asian Provident Funds

**42. Many Asian provident funds are effectively captive audiences.** There are significantly sized provident funds in India, Indonesia, Malaysia, Singapore, and other Asian economies. They are designed not only to provide old-age financial support, but also to channel pension savings into investment for housing or medical expenses. As the largest sources of domestic, long-term capital, they can also be important sources of funding for national development projects. Such goals can be in tension with the goal of common pension funds, namely, to maximize risk-adjusted returns for contributors (Nanda 2018). Because provident funds channel savings from individual DC accounts, policymakers need to exercise particular caution when seeking to leverage such pools for other objectives. In balancing a fiduciary duty to individual members with a larger goal of general economic prosperity, Asian provident funds may be either a model or cautionary tale of how pension funds around the world would fare as

captive audiences if governments resort to financial repression to help economic recovery after the Covid-19 crisis.

43. **Provident funds have registered a mixed record over the last decade, providing lower returns on average than other large pension funds or sovereign wealth funds.** A study of large provident funds in Asia reveals that the real (inflation-adjusted) rate of return paid out to members over the past decade varies widely, from 0.8% per year on average in India (EPF), to 3.7% in Malaysia (EPF) and 5% in Indonesia (JHT). This performance compares less favorably with private pension funds and sovereign wealth funds in these countries, but it has been more stable due to a policy of smoothing of returns over time (Jackson & Inglis 2020) – with the period of measurement being a relatively begin one in markets following the great financial crisis.. To a certain degree, investment by provident funds has contributed to overall growth in GDP per capita, which in turn benefits citizens’ lifetime income. This study does not attempt to quantify the relative magnitude of such direct and indirect returns to contributors of provident funds.

**Table 1: Asset Allocation Selected Asian Provident Funds 2018**

	India EPF	Indonesia JHT	Malaysia EPF
Government Debt	79%	63%	28%
Deposits	9%	9%	6%
Non-Government Debt	8%	0%	22%
Equities	4%	27%	39%
Real Estate/Infrastructure/Other	0%	1%	5%
Memo: Foreign Investment	0%	0%	27%

## Indonesia

44. **Indonesia introduced minimum percentage holdings of government bonds for domestic pension fund and insurance companies in 2015.** Voluntary pension funds are required to hold at least 30% of their assets in government bonds while portions of the mandatory system are required to hold at least 50% in these assets. Given these requirements, pension funds now hold 9% of all Indonesian government bonds, despite relative underdevelopment of the sector (Reuters 2015). The 2015 policy changed aims to stabilize the volatile government debt market, which had suffered from swings in cross-border capital flows. The unintended consequence was to redirect pension fund investment away from

the private sector and to force lower returns onto domestic investors. The minimum holding requirement, coupled with a strong tendency in Indonesia for pension funds to overly focus on short term performance, has led most funds to oversubscribe to short term government securities unmatched to their longer-term liabilities.

## Malaysia

**45. The Employee Provident Fund (EPF) in Malaysia was established in 1951 and has since grown to become the 13<sup>th</sup> largest pension fund in the world.** The EPF's mandate includes not only retirement savings, but also allocations for healthcare, education and housing. Yet its core goal remains the provision of employee pensions for the long-term. The EPF has functioned as a key entity in the development of the domestic capital market in Malaysia. It has well developed governance, with representatives on its board from employee and employer groups, along with government representatives and professionals from the business and financial arenas. Although it was initially required to invest 70% of its funds in government securities, more recently it has pursued a more diverse set of investment strategies. Over time it has developed a capable internal investment team and its portfolio includes significant overseas investments. The fund still has a centrally determined annual dividend rate, rather than paying out market returns (Ang & Aviles 2020, WB 2020c).

**46. The EPF helped Malaysia develop one of the most liquid debt capital markets in ASEAN, with a deep institutional investor base.** The Malaysia capital market overall is one of the most well-developed among its neighbors and countries of similar size. The domestic bond market's strength in particular has safeguarded stability and helped to finance high quality infrastructure and access to housing, while also contributing to Malaysia's rise to being a high-income nation (WB 2020c). Evidence suggests that its domestic capital market helped Malaysia attenuate the shocks of the Asian Financial Crisis of 1997. Similarly, today it would be expected that Malaysia will draw upon the relative strength of its capital markets as it seeks to emerge from the COVID-19 crisis. The intentional role of the EPF in helping build strong bond and capital markets in Malaysia and funding its growth more generally is likely not coincidental.

## El Salvador

**47. El Salvador reformed and privatized its pension system in 1998.** The previous unfunded pay-as-you-go public DB pension system had accumulated a growing deficit, straining the central government budget. The reforms created a 3-tiered system whereby the state continues to provide a minimum pension to workers in the formal sector, followed by individual DC accounts administered by private funds (Administradoras de Fondos de Pensiones or AFP), and voluntary additional pension savings accounts with beneficial tax treatments (Acuña 2005).

**48. The government continues to apply elements of the financial repression toolkit after privatization.** Pension funds were barred from investing abroad until 2017. Moreover, the government reserves the right to issue debt securities backed by pension savings (*Certificados de Inversion Previsional*) to pay for a pension deficit in the central budget. Pension funds are required to buy these certificates at a yield of around 3%, much lower than the 6% obtained by similar instrument in the financial market. Thus, the government holds pension funds as a captive audience to address fiscal deficits at a below-market rate (EUI 2017, WB 2016).

**49. Pension funds as a captive audience may play an important role for Salvadorian government finances in years to come.** A new round of pension reform in 2017 removes restrictions on foreign investment for pension funds. At the same time, it increases the ratio of public sector borrowing against pension savings from 45% to 50%, making an additional \$500m available for the government (Arias 2017, EUI 2017). This decision provides greater fiscal space at a time when public debt is at 70% of GDP and rising (IMF 2018). In response, ratings agency Moody's upgraded El Salvador's sovereign debt rating, stating that pension reform reduces the liquidity risk of the government and its reliance on short term bond issuance (Moody's 2018). In 2020, as the financing gap continues to rise and as the global pandemic increases the need for increased social spending while reducing tax revenue, the government might double down on financial repression to meet its fiscal needs (Fitch 2020).

## Ethiopia

**50. Captive funding from the social security funds in Ethiopia is one part of a suite of financial repression tools which have been deployed in the country -which are beginning to be addressed.** The social security funds in Ethiopia – along with several other public institutions – are mandated to invest in



government securities. As of the end of 2018, the social security funds alone held 73% of the outstanding T-bills (Chauffour and Gobezie 2019), which they are not permitted to cash out upon maturity (without approval from the Ministry of Finance). The rate on government T-bills which the social security funds receive was 1.2 percent in 2019 vs. 7 percent deposit rate and over 10 percent headline inflation. As the authorities have started to build a government bond market, reforms are also planned to diversify and strengthen investment practices of the social security funds.

## South Africa

### **51. The South African pension fund system is among the largest and most developed in the region.**

It consists of a non-contributory social security grant, the Government Employees Pension Fund (GEPF), and over 5000 voluntary pension funds, almost all of which have shifted from DB to DC since the 1990s. Assets under management by all pension funds together are roughly equivalent to 90% of GDP in 2018. Managing 40% of total pension assets, the GEPF is the largest in the country and one of the largest pension funds globally (WB 2020a).

**52. Pension funds were historically captive audiences of financial repression.** Between 1958 and 1989 under the Apartheid government (a period where access to external capital was restricted), asset prescription was the norm for domestic pension funds. Together with life insurance companies, they were required to invest 33-75% of their assets in government-guaranteed bonds. The government appointed a committee to review asset prescription, and investment rules were relaxed after the committee found they distorted markets and reduced returns to investors (Slawski 2019). In neighboring Zimbabwe, pension funds continue to be subject to a prescribed asset regime, with dire consequences following experiences of hyperinflation and dollarization (Mazviona 2013).

**53. Although the specter of asset prescription has raised its head again more recently, latest thinking would indicate instead a focus on new and better project fund structures.** Coming out of a policy conference in 2017 and more recently as part of an election manifesto in 2019, the ANC ruling party in South Africa revived the prospect of prescribed assets as a way to fund social infrastructure (Businesstech 2020). Yet a 2003 study argues that such rules constitute a principal-agent problem, calling for better corporate governance arrangements for pension fund managers (Hess & Impavido 2003.) This level of strong governance is hard to attain; the South African Public Investment Corporation

(PIC), the state-owned manager of most GEPF assets, undertook governance reform recently after irregularities prompted the resignation of its leadership. Most recently, the most likely scenario that will be pursued to help finance a R 1trillion infrastructure drive will be the development of improved listed project bonds, with a single entity (Infrastructure SA) created to help coordinate projects (Theunissen 2020). Prescribing investment by corporate pension funds would also have significantly different implications from the past as most funds have now shifted from DB to DC in structure, meaning that lower returns would not be borne by employers but in the form of lower pensions by individuals themselves.

## Namibia

**54. The Namibian economy is characterized by a high savings rate but limited domestic investment opportunities.** Namibian households and corporations save a higher share of their income than their peers in the region. Assets under management by pension funds grew from 50% to 90% of GDP between 1996 and today. At the same time, the market capitalization of listed domestic companies is relatively small, and the range of other domestic investment opportunities narrow. As a consequence, until the 1990s fund managers invested the majority of pension savings abroad (WB 2020b).

**55. Early attempts to channel pension savings to domestic investment were undermined by public mismanagement of funds and regulatory arbitrage.** The government initially attempted to direct contributions from the Government Institution Pension Fund into local development projects through a so-called Development Capital Portfolio (DCP). As a consequence of politically motivated investment, mismanagement and other governance problems, the DCP incurred significant losses, and 84% of its investments had to be written off in 2010. After regulatory reform in the 1990s, public and private pension funds were required to invest at least 35% of their assets domestically. Struggling to meet that requirement, fund managers tended to invest in foreign companies that were also listed on the domestic stock exchange. In effect, only a small share of such investments went to truly Namibian companies (WB 2020b).

**56. Domestic investment in the 2010s has increased based upon an innovative new approach led by the regulator and involving a new unlisted project structure.** The Namibia Financial Institutions Supervisory Authority (NAMFISA) helped formalize unlisted domestic companies under the umbrella of

so-called Unlisted Investment Managers (UIM). It also created special investment vehicles that serve as intermediaries between UIM and pension funds. Importantly, under Regulation 29, it prescribed a minimum investment in these new structures of at least 1.75% and no more than 3.5%. Although this approach is not in line with international best practice to avoid any minimum investment requirements, the relatively small minimum likely avoided major distortion while still requiring the creation of new capabilities on the part of the pension funds. As a consequence, fund managers can now engage in an arms-length agreement with unlisted companies under previously nonexistent transparency and corporate governance rules. Leveraging this institutional innovation, the Government Institution Pension Fund mentioned above has become the key driver of the domestic private equity market (WB 2020b). Though not financial repression in the strict sense, Namibia's experience may hold valuable lessons for other governments that seek to channel pension savings into domestic development projects in a largely informal economy.

#### Ghana and Kenya

**57. As a direct result of the COVID-19 crisis, pension funds in Ghana have been targeted by government to provide direct assistance in creating more fiscal space.** The Ministry of Finance called on pension funds and other asset managers to accept a 200-basis point reduction in yields on short term government securities (Irving 2020). Given the focus on short-term securities only (tenors of less than a year) this would likely play out as a permanent loss to the funds rather than a deferral. Government debt holdings in the 2<sup>nd</sup> and 3<sup>rd</sup> tier pension schemes in Ghana represent 67% of all assets (NPRA 2019) therefore this likely represents a significant impact to those funds. Ghana has also announced a new Coronavirus Alleviation Program (CAP) which is seeking additional funding, perhaps by partnering with pension funds to create guarantees and first-loss instruments. Given the significant amount of funds held in the private pension system in Ghana (GHS 17.3bn / \$3bn) this could be a powerful force within that program.

**58. Kenya's Post-covid-19 Economic Recovery Strategy includes a similar reduction in interest paid to pension funds.** In this instance, both pension funds and insurance companies will be asked to accept a deferral of interest paid, with the unpaid interest amortized and then added to the subsequent coupon for the remaining life of the security. In this manner all government debt instruments would be

involved, and all interest deferred for the immediate timeframe, thus providing relief to government of an estimated Kshs 73B (USD \$650 million) that would otherwise be due in the near term (Xinhua 2020).

### Section 3 -Conclusions

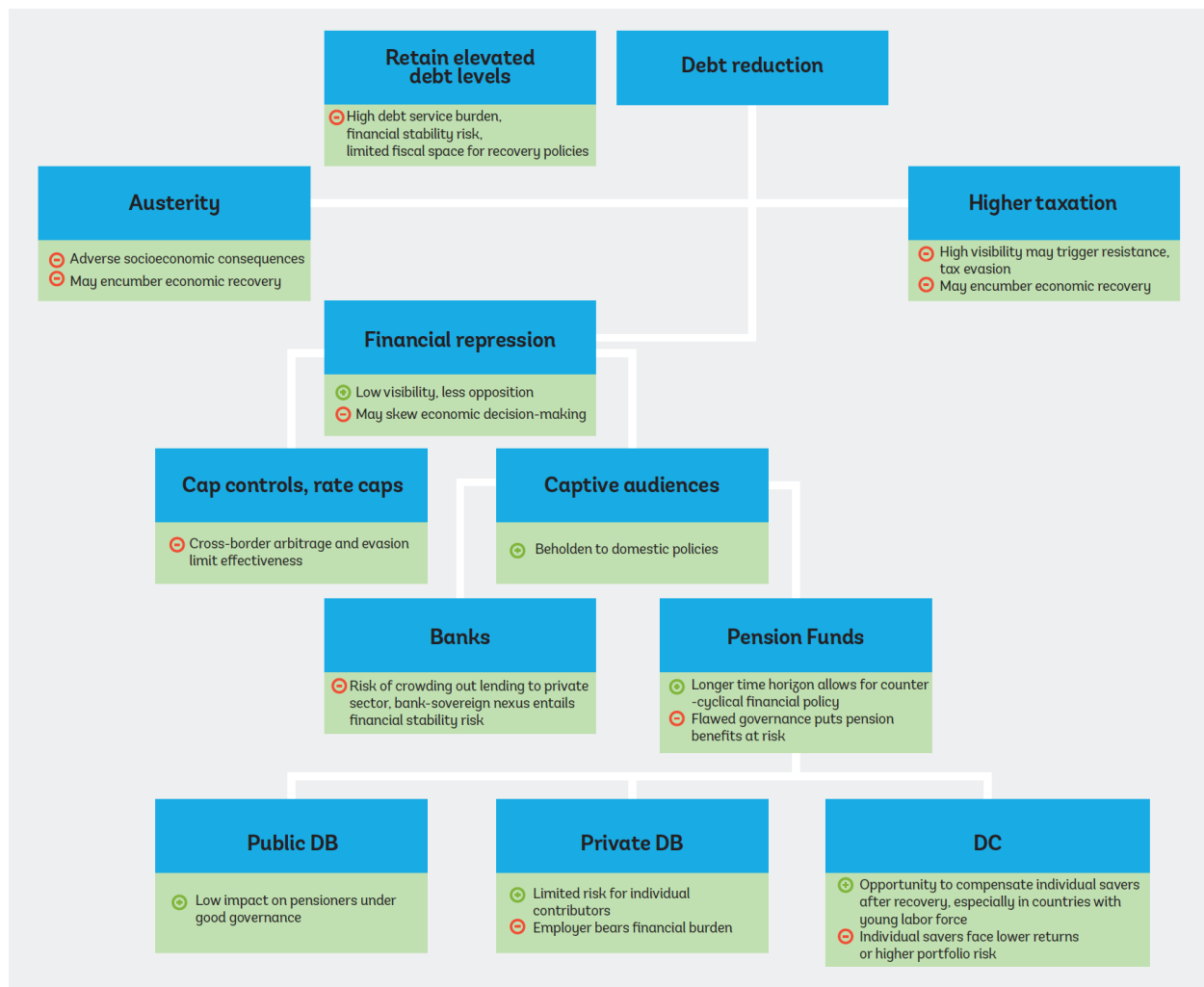
**59. Policy experience both in advanced and emerging economies has shown that financial repression represents a complex tradeoff, with costs and benefits.** Policymakers should consider both general equilibrium welfare effects and distributional consequences of financial repression (Schnabel 2015). Regarding the former, reducing the debt servicing burden can help government direct greater funds to policies that speed up economic recovery after a crisis, strengthen the social safety net, or make long-term investments that underpin sustained economic growth. At the same time, using banks as a captive audience may crowd out lending to the real sector when financing needs are greatest, exacerbating the business cycle and adding financial stability risk that may ultimately put welfare gains in jeopardy. Pension funds may have a longer time horizon than banks but using them as a captive audience also skews investment decisions, leading to a potential increase in portfolio risk. Long-term debt provides the government with a de facto insurance against macroeconomic shock. But it is unclear which economic institution is best placed to undertake maturity transformation and shoulder the corresponding risk (Missale 2012). An actual cost benefit analysis may depend significantly on the specific financial repression instrument under consideration.

**60. Financial repression through domestic captive audiences may be stealthier than taxation, but it still has distributional consequences that need consideration.** Practitioners are well aware of the political economy argument in favor of financial repression: by virtue of using rather technical and opaque means of channeling funds to the government, it is less subject to scrutiny and opposition from the public as well as special interest groups than taxes are (Reinhart et al 2011). But the distributional consequences of financial repression are as real as that of taxation. Low or negative interest rates in post-crisis advanced economies have benefited the government, indebted non-financial companies, and some banks, but produced net interest income losses for other banks, insurance companies, and pension funds. They might also imply a transfer away from older households that hold fixed income

assets to younger, more indebted parts of the population. In EMDE, using pension funds as a captive audience may be less regressive than other forms of taxation because it affects only formal sector workers. Again, each instrument of financial repression entails peculiar distributional consequences that merit attention.

**61. If pension funds are compelled to participate in some version of financial repression, harm to retirement security should be minimized.** In an era of cross-border capital mobility, interest rate caps and large-scale capital controls are expected to be less effective than under the Bretton Woods system. Policymakers today may be therefore more inclined to enroll pension funds (as well as insurance companies and banks) as captive audiences to channel funds to the government in lieu of more traditional repression methods. If this approach is taken, though, it is critical to minimize the impact on pension funds, or else the looming demographic challenge of world-wide aging and related provision of retirement income will be made that much worse. Using pension funds for financial repression is akin to a “stealth tax” and should be approached very carefully and only implemented when beneficiaries can be safeguarded while national goals are being pursued. The decision tree in Figure 7 presents the tradeoffs facing policymakers in simplified and stylized form.

**Figure 8: Stylized decision tree for policy reactions to high sovereign debt burden**

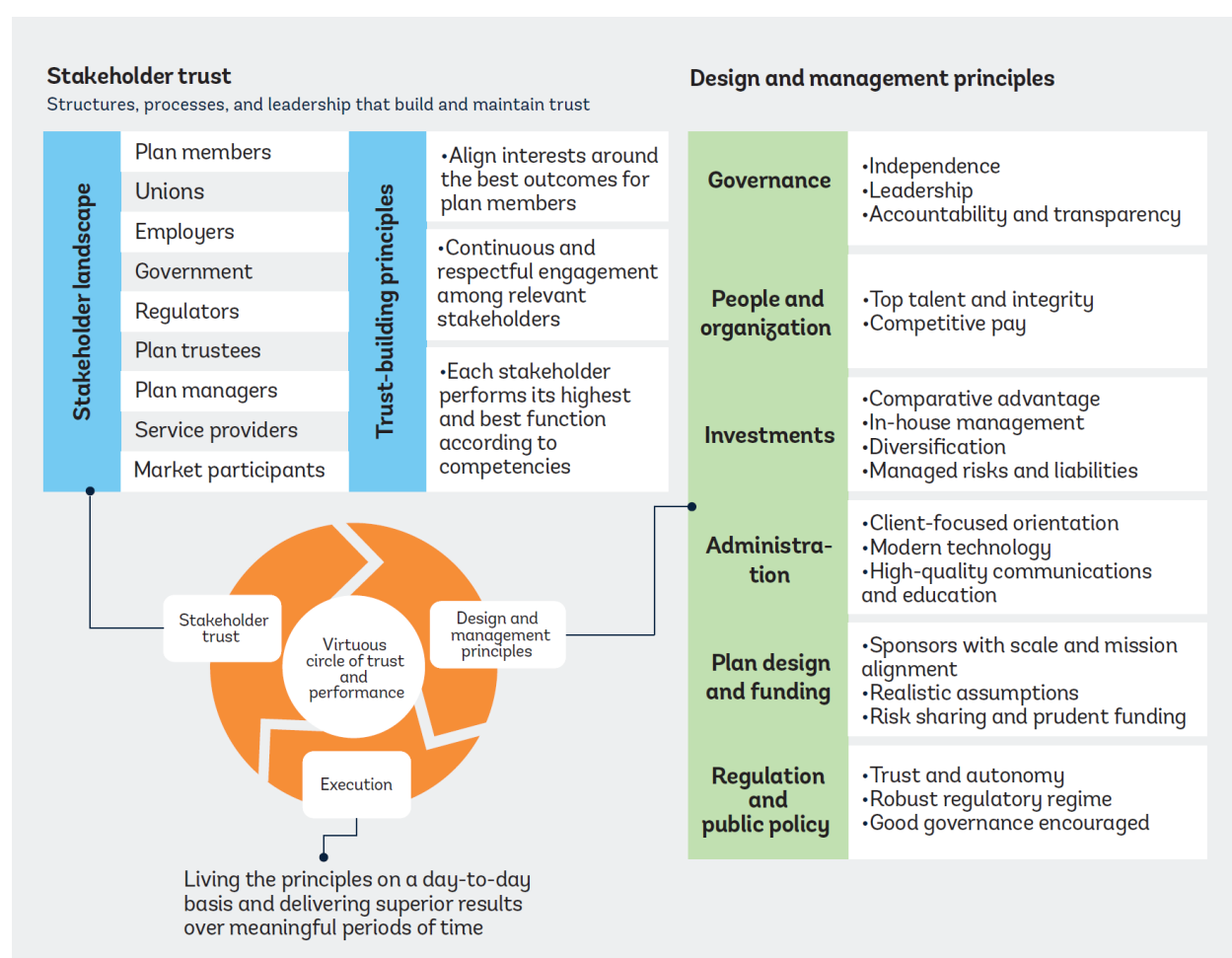


Source: Authors

**62. Given its likely inevitability, the key will be to apply financial repression to pension funds in a way which results in long-term benefits for all.** Drastic and permanent measures such as the renationalization of pension assets should be avoided. Temporary interventions with a clearly defined time limit, such as interest deferrals or temporary haircuts on government bonds held by pension funds may be less harmful to beneficiaries. Moreover, policymakers need to consider the destination of funds obtained at a discount through financial repression. Some governments have utilized domestic pension savings to support economic growth and development – which this paper argues can be the most beneficial form of financial repression, *if* (and it is a big if) done well.

63. **Lessons from countries where pension fund assets have been successfully channeled towards long-term development suggest that governance is key, including managing the capital professionally, at arms-length.** Canada's public pension funds provide a good example of institutions which have transitioned from having little independent governance and large exposure to government debt and a lack of investment diversification to being global governance leaders. Their foundation built on stakeholder trust, design and management principles and results focused execution can be a lesson for pension funds and policy makers in other countries.

**Figure 9: Canadian Pension Fund Governance Model**



Source: (Commonwealth 2017)

64. **The current drive by pension funds to introduce 'environmental, social and governance' (ESG) factors into their investment strategies can be an opportunity to 'leverage' rather than 'repress' these**

**precious sources of long-term, domestic capital.** Pension funds globally are increasingly looking to measure the impact which their investments have as well as the financial returns which they generate. Labeled bonds – such as green, sustainable or ‘SDG’ bonds – may be a more transparent way for governments to channel domestic assets such as pension funds to projects which contribute to long-term development and growth, benefiting pension fund members and citizens alike. Sovereign debt markets may also be able learn from the growing corporate market for performance-based instruments (such as sustainable linked bonds), which directly link the cost of capital to the achievement of results indicators.

65. **The main recommendation of this report is that pension funds should be allowed to pursue their primary goal of ensuring retirement security for their beneficiaries.** This may actually be consistent with them playing a strong role in national development given the right investment structures aimed at sustainable growth with appropriate return provisions. However, if circumstances (pandemic induced crisis with rapidly escalating debt loads) necessitate, pension funds can play more of a command role as captive audiences. Yet this should only be done in exceptional circumstances and for a discrete period (preferably using public funds which are government rather than privately owned) – not over an extended timeframe to pay for on-going government deficits. History shows that, at best, using pension funds for financial repression can result in citizens benefitting in economic growth and recovery in return for a cut on their savings. At worst, without good governance arrangements, this policy depletes pension savings without delivering welfare gains. Four core principles – using public rather than private savings as time-bound policy tool and applying arms-length governance and explicit use of funds for social impact investment - should be applied to have the best chance of positive results.



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