Capital Movements and Corporations Dominance in Latin America: Reduced Growth and Increased Instability

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CHAPTER: PENSION FUNDS AND DOMESTIC DEBT MARKETS IN EMERGING ECONOMIES

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The East Asian Financial Crisis forced the international policy community to take the risks of financial liberalisation in emerging economies (EE) seriously. Currency and maturity "mismatches" were seen to have introduced grave fragility to the balance sheets of banks and firms, opening the way for a currency crisis to induce a financial and economic event of regional proportions (Corsetti, Pesenti and Roubini 1999; Sharma 2003). This chapter focuses on two contemporary interrelated policy debates that emerged from these experiences: first, the need to create local currency domestic bond markets (LCBM), and second, the need for institutional investors, including private pension funds, to form the dependable, patient demand within them.

Consensus regarding the benefits of local currency bond markets and patient investors has only grown stronger in the light of the Global Financial Crisis. There has been a coordinated policy drive by the transnational and regional economic and financial organisations (G20 Finance Ministers and Central Bank Governors 2011; World Bank Group 2012; IMF 2013; The World Economic Forum 2016) to encourage and enable, in particular, domestic local currency *private* bond markets, and a growing focus on the need for *domestic* private institutional investors to participate in those markets. In this manner, domestic pension policy has been drawn into the debate, with the privatisation of pension delivery gaining a renewed focus. Importantly, this pivot towards the importance of domestic investors reflects disappointing results in relation to the stability of investment from international institutional investors. We present our own explanation as to why

international investors have not proven to be the key to financial stability: ultimately, the behaviour of foreign pension funds is determined by the nature of their liabilities, which are embedded in the conditions of their home economy (Bonizzi and Kaltenbrunner 2019). The problem of achieving stable sources of finance is not however necessarily solved by growing the domestic investor base, and reducing the proportion of state or corporate debt held by foreigners. External vulnerability may be reduced, but the behaviour of domestic pension funds is also more complex than previously allowed (Bonizzi, Churchill and Guevara 2020). This can be seen from the wide divergence in outcomes from pension reform, both in terms of pension fund holdings of domestic corporate debt (indicating their role in supporting development of the market), and – fundamentally – their success in providing adequate retirement provision.

This chapter is divided into four sections. Section 4.1 traces the development of policy on the development of LCBMs following the 1997 East Asian Financial Crisis, and the Global Financial Crisis. Section 4.2 reviews some regional experiences in market development. This is followed by a section (4.3) that considers these experiences in light of an understanding of the behaviour of international and domestic pension funds, drawn from our prior research. The conclusion (section 4.4) offers some alternative policy directions that are deserving of more consideration.

4.1 Policy debate

A prominent argument within the literature exploring the causes of the East Asian currency and banking crisis is that the success of capital account liberalisation depends on domestic institutional and regulatory factors (Corsetti, Pesenti and Roubini 1999). In terms of regulation, it was evident that more could be done to oversee and direct the behaviour of banks to limit risk-taking to more "acceptable" levels. A more significant suggestion however, was that the external vulnerability and financial system fragility in affected countries was partly due to the absence of domestic debt markets and a lack of diversity in the domestic currency instruments in which foreign capital could invest –a lack of appropriate institutions. In Thailand, foreign capital inflows had been channelled into equity or real estate leading to unsustainable asset price inflation – partially due to a lack of other appropriate investible assets (Sharma 2003). At the same time, domestic banks had sourced capital from international financial markets. This meant that the balance sheet of banks were exposed not only to maturity but also to currency

mismatches, meaning that the reversal in capital flows and resulting devaluation of the exchange rate badly affected net worth. Once crisis hit the banks, finance dried up for corporations that might otherwise have been able to turn to the debt markets: there was no "spare tyre". Financial liberalisation, therefore, should be undertaken only with the appropriate additional policies to develop domestic capital market institutions.

Borrowing in a foreign currency is seen as a key mechanism through which financial instability can be introduced by states and/or firms in emerging economies but is not necessarily a matter of choice. The inability of emerging economies to borrow in their own currency has been termed "original sin" (Eichengreen and Hausmann 2005), with the fault arising systemically from the organisation of global finance, only partly determined by the characteristics of the debtor country. This line of theorising also points to the benefits of creating local currency domestic bond markets, with instruments across all maturities. With long term capital markets, it was thought, it would be possible to draw patient capital from the institutional investors and other cash-pools in the advanced economies into emerging economies and so address maturity and currency issues together. Patient foreign portfolio inflows into long term debt markets, rather than being formed of hot speculative and destabilising flows, could match foreign direct investment in terms of commitment. Bond flows could be preferable to FDI, given that they did not result in the loss of control of domestic firms through foreign acquisitions.

The pathway to this institutional growth was understood to first involve the development of the public debt market. The state offers instruments over a range of maturities establishing a yield curve. This was expected to facilitate the development of a private debt market. On the demand side were international pension funds that had the capacity to hold longer-term assets, in addition to the desire to diversify their portfolios further by holding more emerging market assets. On the supply side, beyond the state, were the domestic firms struggling to raise affordable finance. This high cost of finance for domestic firms has been recognised as a problem across the spectrum of literature; in the financialisation literature for example, one consequence of operating within the global finance setting – beyond dealing with volatile exchange rates – is argued to be that emerging economies are often forced to keep interest rates high (Bonizzi 2013), with the consequence that bank lending can be very expensive. This high cost of domestic finance can explain much of the demand for the cheaper foreign denominated debt prior to the Asian crisis.

Post-global financial crisis

The Global Financial Crisis heralded a new era of volatile, destabilising capital flows in emerging economies. After a short lag, where questions of "decoupling" were hopefully raised, capital began flowing out at unmanageable speed and volume, only to return as the easy monetary policy adopted in the US and elsewhere led investors to reverse their actions, overwhelmed by concerns over funding and future liquidity levels in the absence of growth assets in their portfolios. Evidence emerged suggesting that the large participation of foreign pension funds and institutional investors did not act as a stabilising force during the retrenchment (Hofmann, Shim and Shin 2020a, 2020b).

In this context, the G20 came together at the Cannes Summit to agree an "action plan" to further support the development of local currency bond markets, as part of a strategy to build "resilience against the transmission of capital flow shocks, as well as helping provide finance for development" (G20 Finance Ministers and Central Bank Governors 2011: 1). The Action Plan articulated the role of local currency bond markets in increasing financial stability through their role in reducing "contagion effects across financial markets and spill-overs into the real economy" and noted that "as international investors strive for broader diversification of their portfolios, EMDE financial assets will become increasingly attractive. Therefore, EMDE authorities need to prepare for this development" (ibid.: 1). This new policy initiative was in reality just a more centrally coordinated push for the same policies being promoted prior to the Global Financial Crisis, with the only significant change being the admissibility of capital account management techniques, at least as a last resort option to curb excess capital inflows. However, a key concern in this latest incarnation of debt market promotion was the lack of progress in the majority of emerging economies in developing deep, liquid private debt markets with a range of instruments across the broad maturity spectrum. Furthermore, achieving this was increasing presumed to require "efforts to develop the domestic investor base" (ibid.: 1).

The 2011 Action Plan noted the inadequacy of help available to emerging and developing countries to take the steps necessary to establish institutional change and committed to addressing this issue by coming up with a way of measuring where a country stands in terms of the development trajectory and where there may be weaknesses or bottlenecks that could be prioritised in future reforms. All organisations that were already looking into this area were urged to work in a coordinated manner on this goal. In 2013,

the IMF published a diagnostic framework following collaboration between itself, the World Bank, the EDRB and the OECD (IMF 2013). Diagnosing the institutional situation of any country consisted in considering six key components of development: "the macroeconomic framework, composition and needs of the issuer and investor base, primary and secondary market structures and related market dynamics, regulatory and legal frameworks, and market infrastructure" (ibid.: 1). Key indicators were mapped to these categories. Action to improve on the investor base could include "a debt management strategy aimed at gradually lengthening the maturity structure of public debt and creating benchmarks for pricing reference" so as to "meet the needs of institutional investors (e.g., pension funds or insurance companies), thus attracting different types of investors and deepening the market" (ibid.: 15).

The World Economic Forum also entered the debate, through its Accelerating Capital Markets Development in Emerging Economics Initiative, established in 2014. The Forum published a White Paper in 2016, that made recommendations seeking to "broaden the investor base" by, amongst other things lowering the "actual and perceived risks of participating in the market for domestic and international investors" (The World Economic Forum 2016: 5). Demand from international investors was being held back for some reason, begging the question whether there was anything more that could be done to make investment more attractive, for example by reducing risks. A multi-agency "report-back" on the 2011 action plan, led by the IMF, proposed areas for action creating new appropriate instruments (IMF 2016). A link was drawn to the infrastructure needs of emerging markets. Infrastructure was argued to be ideal for pension funds due to matching pension fund long-term liabilities whilst reducing inflation exposure. New thinking in terms of "guarantee structures" and "credit risk enhancement instruments" were seen as necessary to make instruments acceptable to funds, alongside "direct engagement of government and multilaterals" (ibid.: 15).¹ In terms of domestic demand, the report argued for the relaxing of regulations regarding asset allocation for insurance and pension funds, whilst the World Economic Forum argued that further deregulation would help develop the capital markets more generally, using Colombia as an example: "Colombia subjects pension funds to relative profitability rules, which require funds to achieve rates of return above a prescribed minimum. These minimum return requirements limit risk differentiation and have created herd-like behaviour" (The World Economic Forum 2016: 11).

The IMF "report-back" found overall progress to date on domestic investor base and private market development underwhelming. Emerging market institutional investors had growing assets under management, but remained significantly less important than local banks. Furthermore these assets were still largely in government debt. In line with this, the Bank for International Settlements (BIS) published in 2019 a working paper "Establishing viable capital markets". Distinctly more rhetorical in nature than the "Cannes summit" publications, the paper bemoaned the "vestiges of financial repression" running through emerging economies, referring also to regulations regarding asset holdings by institutional investors, and to "paternalism" in relation to management of stock prices (BIS 2019). On the supply side, the paper noted that what growth there was in capital markets in emerging economies has been "somewhat flattered by issuances from state-owned firms and companies with large insider holdings" (ibid.: 1); in other words, progress to date was located in China and Brazil. This paper also, therefore, sought further focus on creating a domestic investor base through the "greater financialisation of household savings" (ibid.: 3) alongside a general promotion of "greater respect for market autonomy" (ibid.: 44). The paper noted that "many of the EMEs with the largest corporate securities markets relative to GDP, including Chile, Korea and South Africa, also have larger private pension, insurance, and/or mutual fund sectors" (ibid.: 28). The paper claimed that these investors "can be effective in providing long-term funds and are less likely to exacerbate volatility by selling into short-term corrections" (ibid.: 28).

4.2 Regional experiences

Emerging Asia

Prior to this global policy debate, several concrete measures to develop capital markets had been undertaken by emerging economies. At the end of 2002, ASEAN + 3 (Southeast Asian Nations (ASEAN), the People's Republic of China, Japan, and the Republic of Korea) launched the Asian Bond Markets Initiative (ABMI). The purpose of this Initiative was to develop bond markets, with a specific focus on local currency bond markets, and to "promote regional financial cooperation and integration to strengthen financial stability and reduce the region's vulnerability to the sudden reversal of capital flows" (Asian Development Bank 2017: 5). Another Asian Development Bank (ADB) publication highlighted institutional capacities in Hong Kong and Singapore:

(i) government bond yield curves extending up to 10 years, which are used as a reliable basis for pricing corporate bonds; (ii) efficient market infrastructure; (iii) sound regulatory environment; (iv) good secondary market liquidity; (v) liberal tax treatment of bonds; (vi) diverse issuer profile (consisting of triple-A rated supranational agencies, multinational corporations, and local corporations); and (vii) strong commitment by the authorities to develop and foster the domestic debt markets. In addition, bond markets in both countries are open to foreign investors, with hardly any restrictions and reporting requirements. (Fabella and Madhur 2003: 6)

Seeking to emanate this success, several countries set out on a process of institutional upgrade. During the initial phase (2002–2007), a period in which there was significant capital inflow into the region, action was taken to build the infrastructure needed to support and boost the supply and demand for local currency bonds in a number of ways. Settlement systems were promoted, and domestic credit rating agency capacity increased. The dissemination of key information was organised through a specially designed website (www.AsianBondsOnline.adb.org). In many cases the Initiative was pushing on an open door; Malaysia, for example, had taken steps since the late 1980s to grow its capital markets, with the central bank supporting development of the government and housing-backed (Cagamas) bond secondary markets through the setting up of principle dealer and auction systems (Adhikari et al. 1999; Rethel 2010; Hardie and Rethel 2019). Subsequently Malaysia adopted a ten-year Capital Market Masterplan in 2001.

The Republic of Korea had also adopted a Capital Market Promotion Act back in 1968 and the Bank of Korea (BOK) facilitated development through, for example, introducing a settlement system. The proportion of corporate debt to total debt peaked at over 60 per cent by the 1980s, but sterilisation measures to counter inflationary risks from inflows started to bring this proportion down (Asian Development Bank 2018). Despite progress, it was concluded that "institutional flaws in financial markets amplified the crisis" (ibid.: 3) and therefore the Republic of Korea was still very much part of the initiative, with aspirations to increase market transparency, increase the number of participants and adopt "international standards".

Insert Figure 4.1

The most notable development, however, has been in China, and also Thailand (see Figure 4.1). Focusing on China, both economic and financial systems have undergone radical transformation since 1979, yet remain distinct to those of neighbouring countries. Processes of decentralisation pushed economic power outwards from central to local government, and towards State Owned Enterprises (SOE), while at the same time a strong central grip was maintained on banking. Rapid development sparked demand for huge extensions of credit, and as quantity was the focus over quality, the result was a high incidence of non-performing loans, many of which were subsequently written off. The process of loan extension and write off – particularly at the point of the Asian crisis – lacked transparency, leading to accusations of incomprehensibility and fragility across the banking system akin to, if not worse than, what was seen in the worst effected countries. However, because China had not liberalised its capital account fully, it was almost entirely spared from the crisis, holding strong against devaluation and in fact making significant contributions to the IMF loans for neighbouring countries in crisis (Sharma 2003).

China was not spared, however, from internal pressure to reform its financial system (ibid.). Many changes have been made to bring banking to some level of comparability with international standards. New state development banks form part of a push to more clearly delineate between state-directed investments and investments made on the basis of bank evaluation by "commercial" banks, in the name of increasing efficiency in capital allocation. To clean up balance sheets and establish some level of capital adequacy, non-performing loans have been transferred to special institutions, and programmes of recapitalisation have been undertaken. At the same time, and relatedly, there have been big steps taken to create bond markets (Aglietta and Maarek 2007). An end to monetary financing of the state first led to booming large sovereign debt markets, and subsequently corporate markets have also taken off. State presence is felt on both sides of the market, through links with those firms able to issue debt, and with the banks able to hold it.

The measures across the region have been matched by significant, if not regular, market growth. The Deputy Governor of the Bank of Japan, making the keynote speech to the Asia Securities Industry and Financial Markets Association (ASIFMA) annual conference 2019, noted that:

Asia's capital markets have experienced remarkable growth since the Asian financial crisis in the late 1990s. Asia's share of global stock market capitalization soared from 1 percent in 2000 to 15 percent in 2017. Notably, the amount outstanding in local currency bond markets in Asia as a share of GDP in 2018 increased to more than double that in 2000. Obviously, the rapid expansion of Asian economies has driven the growth of the capital markets in the region. At the same time, the collective efforts of market participants, policy makers, and regulators both at national and regional levels have contributed to market liberalization and enhancement of market infrastructures in Asia. (Amamiya 10 October 2019)

Importantly, these developments occurred without a substantial privatisation of pension systems. South Korea, for example, partly funded its national pension system, which has grown to be the third largest pension fund in the world, but it remains under state direction, and also retains a defined benefit scheme for the majority of its population, ensuring some level of retirement income adequacy. In China institutional investors, such as pension funds, have played a minor role to date, with the main purchaser of its booming bond markets being banks, and the main issuers being SOEs: 82 per cent of the corporate debt market was SOE debt in 2018 (Molnar and Lu 2019). The role of pension funds is expected to grow in the near future – in fact one reason put forward for growing private bond markets is to provide suitable assets for emerging pension and insurance funds which are expected to deliver welfare to replace the "iron bowl" system of welfare provision via SOEs (Aglietta and Maarek 2007; Zhu and Walker 2018). In this way, causation is turned on its head in the Chinese context, with the egg coming before the chicken. These funds, however, will still not be private institutions: the majority of Chinese Pension assets are managed by the National Council for Social Security Fund, a State institution which manages an increasing proportion of the assets for the public retirement system, which has also been receiving share transfers of several Chinese SOEs (KPMG 2020).

Latin America

The experience of Asia presents commonalities but also important differences to the policy agenda in Latin America. The Inter-American Development Bank commissioned

research eventually published as the 2008 book *Bond Markets in Latin America: On the Verge of a Big Bang* (Borensztein et al., 2008a). The authors presented the benefits of market development and documented the recent divergent experiences of countries in the region (see Figure 4.2).

Insert Figure 4.2

As elsewhere, the benefits of local currency denominated bond markets were seen as the reduction of currency mismatches arising from borrowing in the major international currencies, and also a reduction in the impact of banking crises on the broader economy: "The corporate bond market plays a key role in the financial system, providing cheap and stable financing for large, well-established corporations, leaving banks to specialize in lending to borrowers for which information asymmetries are greater" (Borensztein et al. 2008b: 1).

The Chilean fixed-income market around 2008 was similar in size to Korea's, following several phases of financial reform after 1973. According to Braun and Briones, "[f]inancial repression reached a peak" under disposed President Allende (Braun and Briones 2008: 153) and new thinking saw early measures to "free" interest rates from taxation as well as broad privatisation of the banking sector. The 1980s saw the introduction of private funded pensions, as an outright replacement for state pension provision and thus with mandated worker contributions. A banking crisis was followed by new prudential laws regarding for example reserve requirements, throwing some sand in the banking system and creating demand for government short term securities. Bankruptcy laws were also updated. During the 1990s capital controls were removed and a floating exchange rate was adopted. In addition, the state voluntarily started aiming for structural surpluses. Braun and Briones saw this in particular as a key catalyst for growth; public debt was considered to have been "crowding out" the issuance of corporate bonds. In the 2000s new regulations continued to support general capital market growth, with adjustments to the rules on asset allocation for institutional investors, tax reductions on capital gains and measures to enable assets to be used as collateral. Chile has also been commended for achieving macroeconomic stability. Mexico, despite having taken steps to build a domestic investor base through pension reforms, had relatively little development. Castellanos and Martinez posited that up to 2001 "the unstable conditions of the Mexican economy since the introduction of a formal private debt market in 1982 seem to have constantly hindered its development" (Castellanos and Martinez 2008: 63).

In Brazil, Leal and Carvalhal-da-Silva presented their case study findings as to why in a country where the public debt market was "one of the most liquid and sophisticated among emerging markets" (Leal and Carvalhal-da-Silva 2008: 188) the private market was still relatively small. Their conclusion was that the latter outcome was in fact the consequence of the former, arguing that the "federal government's gargantuan financing needs induce it to pass regulation favoring its own debt to the detriment of the development of the corporate financing market" (ibid.: 210). These regulations included, for example, asset allocation rules for institutional investors, and the role of treasury debt in meeting capital adequacy requirements. Survey results found firms complaining about the cost of issuance, whilst on the demand side, institutional investors had concerns over secondary market liquidity, incomplete establishment of a yield curve and lack of confidence in the bankruptcy framework. However, we can note here looking at Figure 4.2 that Brazil has developed further following the publication of this study, and now stands out as a regional performer.

Drawing on experience: some inconvenient truths?

Three themes have emerged in the contemporary (post Global Financial Crisis) policy literature, reviewed in section 4.1, regarding what is deemed necessary for success in developing local currency corporate bond markets: first, there is the need for macroeconomic stability – which is many cases is taken to primarily mean tackling rates of inflation; second, developing a domestic investor base, most obviously by privatising pension provision; and third, limiting state expenditure to avoid "crowding out" of the market by large state issuance.

We argue, however, that it is difficult to trace these lessons of best practice back to the actual experiences of countries, especially in the emerging Asia region, as reviewed in section 4.2. Take first the question of the possibility of "crowding out" of the bond markets by the state: this is the suggestion that private bond markets may be being held back where states are issuing too much debt at attractive interest rates. In the case of Chile for example, above, we saw the argument that fiscal austerity was key in enabling the private bond market to flourish. However, it should be noted that Chile is rather an outlier in terms of the reduced size of its outstanding domestic public debt securities to GDP (see Figure 4.3), and therefore there are few grounds for drawing a universal lesson in this regard. On the contrary, developed public sector bond markets are very often a precondition for deep private-sector bonds.

Insert Figure 4.3

Second, on the question of the proper role for domestic pension funds and other institutional investors, and the possible need to privatise pension systems in order to create the demand required for market development, there does not seem to be clear evidence of a positive relationship.. While Korea may have large pension funds, these are state-run. In Brazil and especially in China, bond market development has proceeded with a limited engagement of private pension funds. Again, the experiences of Chile – an outlier – seem to be being put forward as the "one true path" to the end goal of LCBM development without an adequate argument for this position.

Finally, and relatedly, the most contemporary policy contributions seem to seek to bypass or radically reduce the role of the state as a catalyst and guiding hand in the development of evolutionary institutional change in the financial system. But to discount the role of the state in the vast majority of successful cases seems, to us, to be a rewriting of history. In China, Korea and Brazil, the coordinating force of state participation, either through state banks, state investment funds and/or state led enterprises has been fundamental to market development. In our view, the expectation of success in the absence of state participation depends on a false understanding of the determinants of private pension fund behaviour.

4.3 Critical Counterviews

In this section we link our theories explaining the behaviour of both foreign and domestic pension funds to this question of whether either foreign or domestic institutional investors are necessary or sufficient for the growth of local currency domestic private bond markets. We argue that the behaviour of foreign funds is ultimately determined by the nature of their liabilities, which are embedded in the conditions of the home economy. As such, the ability of these funds to follow through with patient and stabilising investment abroad is undermined. Where funds are openly adopting liability-driven investment, emerging market assets form part of their growth portfolio, which is structurally volatile and open to more active management. Therefore, even if emerging economies are able to ostensibly reduce currency risk by issuing local currency debt, when the holders of that debt are still largely foreign investors, the currency risk has simply been shifted, not

removed altogether. This explains why we have seen what is being termed as "new forms of external vulnerability" (Kaltenbrunner and Painceira 2015) or "original sin redux" (Hofmann, Shim and Shin 2020b) especially during the "taper tantrum" of 2013, and in response to Covid-19, where emerging economies have seen large adjustments in domestic asset prices and the exchange rate despite relatively sound domestic economic conditions.

To understand the behaviour of domestic funds it is helpful again to revisit historical experience. Across the Latin America region and in parts of Central and Eastern Europe – where similarly timed pension reforms created large private domestic funds – there have been different trajectories in terms of asset holdings, caused not only by differences in regulation concerning asset allocations, but more fundamentally by structural factors including distinctions in the variety of capitalism in each country, and by financial subordination. This has meant that pension funds have hit upon a lack of investible domestic assets, and have instead shifted to holding, for example, more foreign assets. These experiences are raising the question of the sequencing necessary to achieve deep, liquid markets.

Foreign Pension Funds: Liability-Driven Investment and New Forms of External Vulnerability/Original Sin Redux

Eichengreen, Hausmann and Panizza (2003) argued that one determinant of currency mismatch was what they termed "original sin" – the difficulty/impossibility for some countries of borrowing from foreign investors in their own currency – a difficulty lying systemically with the organisation of global finance, rather than being somehow the fault of the country in question (Eichengreen, Hausmann and Panizza 2003). As discussed above, enticing foreign institutional investment into emerging economy LCBMs was considered to be sensible by the international community, and one way to reduce original sin, because in addition to being very large cash-pools, institutional investors such as pension funds are also thought uniquely able to invest long-term. Unlike banks with their short-term deposit liabilities, pension commitments are supposedly stable and predictable, and allow for strategies of buying and holding assets over a number of years.

However the experience of the Global Financial Crisis and the subsequent taper tantrum and Corona crisis have showed that despite the rising participation of foreign institutional investors in domestic bond markets in emerging economies, these countries are still subject to massive capital retrenchments and gyrations in asset prices and exchange rates – largely independent of domestic economic conditions. Our view is that this is due to the structural vulnerabilities created by emerging economies' integration into a (spatially) structured and hierarchic international monetary and financial system. Our theory of investor behaviour invalidates the arguments behind the current push for market development as a source of financial stability, which relies on the above characterisation of institutional investors as patient capital.

In Bonizzi and Kaltenbrunner (Bonizzi and Kaltenbrunner 2019) we argue that structural developments specific to the advanced economy (AE) setting have led to a particular form of liability-driven investment by AE institutional investors. The asset allocation decisions of institutional investors are dependent on the condition of their liabilities - investors seek to hold portfolios that match their liabilities as much as possible. However, a perfect match is only possible at a certain point of maturity and in reality, funds are divided into two distinct categories - those assets that match liabilities, and those that are chosen for growth, with the size of each of these components dependent on factors such as the maturity of the fund, and the funding level. The liabilities of institutional investors depend on spatially contingent factors relating to institutions, regulations and macroeconomic developments in AE. Given this, there is no way for emerging market assets, given their own spatially specificity and "subordinate position in the spatially uneven international financial and monetary system" (ibid.: 422) to match AE investor liabilities. As a consequence, allocations to emerging markets are made in the growth side of the portfolio. These investments are volatile, and are only marginally determined by "fundamentals" in the recipient countries.

Bonizzi and Kaltenbrunner argue that this framework accounts for both the growth in emerging market inflows by AE pension funds and insurance companies following the Global Financial Crisis and their large retrenchments during moments of international market turmoil. Equity market inflation in advanced economies, caused in part (and somewhat ironically) by the growth of institutional investor inflows, ceased at the turn of the century, and equity prices fell calamitously. Partial recovery in prices was again lost with the Global Financial Crisis, while at the same time, quantitative easing combined with commitments to fiscal restraint undermined yields on government bonds. Liabilities are valued by discounting future cashflow commitments using interest rates, so at this point the value of liabilities was being pushed up by the dropping rates at the same time that increased life expectancy was increasing estimations of cashflow

commitments. Funding deficits emerged. The only way to close these gaps was through allocating more assets to the growth part of the portfolio. Emerging economy assets were considered ideal for this growth portfolio given their higher returns but also their improvement in macroeconomic fundamentals at the time and apparent diversification benefits.

However, these allocations are re-assessed actively, and capital has been withdrawn whenever conditions changed in the advanced economies, as seen in the 2013 taper tantrum, and in the outbreak of Covid-19. As highlighted in Kaltenbrunner and Painceira (Kaltenbrunner and Painceira 2015) and more recently by the BIS (Hofmann, Shim and Shin 2020a, 2020b) with the concept of "original sin redux", whereas the participation of foreign investors in local currency bond markets reduces the currency mismatch (original sin) of domestic agents, it shifts that same mismatch from the borrower onto the lender. This opens a mechanism where a currency depreciation reduces the value of assets when converted into home currency. Linking this to the analysis above, where emerging market assets are held in the growth component of institutional investor portfolios, depreciation induces sell-offs which can be discerned in higher emerging economy bond spreads. In support of this hypothesis, it is notable that "EMEs with higher shares of foreign ownership in local currency bond markets have experienced significantly larger increases in local currency bond spreads" (Hofmann, Shim and Shin 2020a: 2).

The significance of this explanation is that it undermines the suggestion that somehow, the development of local currency bond markets with the participation of supposedly long-term and patient foreign institutional investors will be enough to address financial instability arising from the subordinate position of emerging markets in the global financial system. The resulting policy conclusion of the BIS is to continue developing local currency bond markets, but do so with a stronger participation of domestic long-term investors, that is, pension funds. This conclusion echoes what was already a tenet of the earlier version of "original sin"; the pathway to absolving this sin relied on "privatizing social security systems to generate a broad constituency of domestic investors opposed to the manipulation by sovereigns of domestic debt markets" (Eichengreen and Hausmann 1999: 36). As the next section shows, drawing on our collaborative work on Colombia and Peru (Bonizzi, Churchill and Guevara 2020), not even that policy recommendation is a panacea to achieve stable source of financing for EMEs.

Domestic Pension Behaviour

The proceeding arguments might all be marshalled in favour of the contemporary policy agenda focus on the necessity of creating a local investor base. However, the empirical evidence presented about the diverging experience of Asia vis-à-vis Latin America should raise doubts about the merits of developing private funded pensions. Despite a much more explicit promotion of private pension funds, on the whole Latin American capital markets remain underdeveloped, and more prone to foreign-induced financial instability. This is despite significant containment of inflation and state expenditure.

Explaining this involves recognising that domestic pension fund behaviour can also be affected by an economy's position of subordinate financial integration. In a study into Peru and Colombia, Bonizzi, Churchill and Guevara (Bonizzi, Churchill and Guevara 2020) focus on structural factors shaping pension fund demand. The "extraversion" of the productive structure "leaves capital markets peripheral to financing domestic companies and limits public sector borrowing", holding down the supply of bonds being issued. At the same time, subordinate financial integration has led to a growing presence of foreign investors in domestic financial markets, adding pressure to demand. This leaves capital markets peripheral to the dynamics of the economy. In these circumstances, domestic institutional investors have turned to foreign financial investments, and to new asset classes. Pension funds in these countries have adopted more sophisticated asset allocations and investment practices including turning to derivatives (Cardozo Alvarado et al., 2015). Most importantly, AFPs (Administradora de Fondos de Pensiones) have been crucial in developing the demand for an "alternative" asset class, a phenomenon common to pension funds in advanced economies (Bonizzi and Churchill 2017). These assets comprise mainly of private equity and infrastructure funds, and to a smaller extent hedge funds (Bonizzi, Churchill and Guevara 2020). Therefore, in the context of subordination, pension privatisation and lack of state involvement have hindered rather than promoted the development of stable local bond markets.

A further concern has to be raised at this point: namely the ability of private pension systems to adequately provide income for retirees. Failure to do this efficiently has, in some cases, led to a (partial) reversal of pension privatisation. The trajectory of Poland in particular rewards scrutiny. In Poland, as in several Latin American countries, radical pension reform was undertaken before the turn of the century shifting pension provision to private funds, with contributions from certain categories of workers mandated by law. As elsewhere, this move was taken partly to reduce fiscal pressures on the state, and partly to develop a domestic investor base (Raddatz and Schmukler 2008), as "the presence of a stable domestic investor base that includes institutional investors is thought to contain yields and foster stability in bond prices and yields" (Andritzky 2010). However, Poland has quite radically changed direction, whilst retaining a similar goal of reducing its requirement for foreign capital.

Following the pension reforms of the 1990s, institutional investors in Poland, including pension funds, quickly became the second largest investor in the Treasury bond market. This development was linked to Poland's ability to weather the 2007–2008 crisis relatively well, where "high investment outlays made by the public sector played an important stabilizing role ... [in replacing] ... the reduction of investment by the private sector ... [and helped] ... to sustain internal demand" (Janc, Jurek and Marszalek 2013). Public sector debt "rose by more than 50% between 2007 and 2011" (ibid.). Nonetheless, private pension funds were widely seen to be performing poorly, particularly in relation to their high fees and disappointing returns. Aided by a court ruling that the funds were technically public bodies – due in large part to the mandatory nature of their contributions - a re-nationalisation was undertaken by the PO (Civic Platform) government in 2013. Government bonds were retired, and foreign assets put in the demographic reserve fund (demographic reserve fund FRD). Despite this change in direction, the Public Finance Sector Debt Management Strategy 2017–2020 was still centred around an aspiration to reduce the foreign currency denominated State Treasury debt to less than 30 per cent, and with it the foreign holdings of all state debt. Given that of the domestic holdings, pension funds now held a small proportion of domestic state treasuries, this goal was to be achieved through the domestic banking sector. The state banking sector in particular has been growing in size and aspiration over this timeframe. According to the Commission's 2019 Country Report on Poland, the state "controls about one third of the banking sector, as well as the biggest insurance company" (European Commission 2019). These developments, disparagingly summarised by the FT as a "rush to banking sector socialism" (Miszerak and Rohac 2017), are promoted more optimistically by agents of the state itself.²

4.4 Conclusions

Acknowledging the determinants of the actual rather than the desired behaviour of pension funds - which are often, it must always be remembered, private financial institutions – raises questions concerning the feasibility and/or desirability of the policies being adopted in the name of local currency bond market development, especially given the risks this poses on the provision of adequate retirement income for a country's population. The countries that have achieved most notable growth in their domestic local currency corporate debt markets - for example China and Brazil - have not done so primarily on the back of private domestic investor demand. It has been state banks that have been pivotal in providing a stable growth of demand, and state-led enterprises pivotal in providing a stable growth of supply of bonds underlying market development. More broadly, the questions regarding the overall benefits of private bond market development remain, in our view, open. From a post-Keynesian perspective, where investment leads savings rather than the opposite, it does not make sense to think of development as being held back where there is a lack of access to international capital, beyond the balance of payment constraint. The argument behind the requirement made on countries to liberalise their capital accounts in recent decades is therefore undermined. Given liberalisation, and the consequences it has on interest rates and exchange volatility for emerging and developing countries due to their subordinate position, it is easy to see why the development of local currency sovereign and corporate debt markets is appealing. However, the argument has not yet convincingly been made that would demonstrate that market-based finance with full capital account liberalisation ("financialisation") enables development as efficiently and safely as a banking system (including state-led development banks) (Scherrer 2017).

References

Aglietta, M. and Maarek, P. (2007). Developing the Bond Market in China: The Next Step Forward in Financial Reform. Economie Internationale, (111), 29-53. Amamiya, M. (2019). Development of Asia's Capital Markets: Roles and Challenges Keynote Speech, ASIFMA Annual Conference 2019, 10 October https://www.bis.org/review/r191010b.htm (Accessed: 09 January 2021). Andritzky, J.R. (2010). Government Bonds and Their Investors: What Are the Facts and They Do Matter? IMF Working Paper WP/12/158.

https://www.imf.org/external/pubs/ft/wp/2012/wp12158.pdf (Accessed: 26 August 2020).

Asian Development Bank (2018). ASEAN+3 Bond Market Guide Republic of Korea. *Asian Development Bank*. https://www.adb.org/publications/asean3-bond-market-guide-2018-republic-korea (Accessed: 26 August 2020).

Asian Development Bank (2017). The Asian Bond Markets Initiative: Policy Maker Achievements and Challenges. *Asian Development Bank*. https://www.adb.org/publications/asian-bond-markets-initiative (Accessed: 26 August 2020).

BIS (2019). Establishing Viable Capital Markets: Report Submitted by a Working Group established by the Committee on the Global Financial System. https://www.bis.org/publ/cgfs62.htm (Accessed: 24 August 2020).

Bonizzi, B. (2013). Financialization in Developing and Emerging Countries. *International Journal of Political Economy*, *42*(4), 83–107.

Bonizzi, B. and Churchill, J. (2017). Pension Funds and Financialisation in the European Union. *Revista De Economia Mundial*, 46, 71–90.

Bonizzi, B., Churchill, J. and Guevara, D. (2020). Variegated Financialisation and Pension Fund Asset Demand: The Case of Colombia and Peru. *Socio-Economic Review* ISSN (print) 1475-1461.

Bonizzi, B. and Kaltenbrunner, A. (2019). Liability-Driven Investment and Pension Fund Exposure to Emerging Markets: A Minskyan Analysis. *Environment and Planning A: Economy and Space*, *51*(2), 420–439.

Borensztein, E., Cowan, K., Eichengreen, B. and Panizza, U., (eds.) (2008a), *Bond Markets in Latin America: On the Verge of a Big Bang?*. Cambridge, MA; London: The MIT Press.

Borensztein, E., Cowan, K., Eichengreen, B. and Panizza, U., (2008b) Building Bond Markets in Latin America. In Borensztein, E., Cowan, K., Eichengreen, B. and Panizza, U. (eds.), *Bond Markets in Latin America: On the Verge of a Big Bang?* (1–29). Cambridge, MA; London: The MIT Press.

Braun, M. and Briones, I. (2008). Development of the Chilean Corporate Bond Market. In Borensztein, E., Cowan, K., Eichengreen, B. and Panizza, U. (eds.), *Bond Markets in Latin America: On the Verge of a Big Bang?* (151–185). Cambridge, MA; London: The MIT Press. Cardozo Alvarado, N., Rassa Robayo, J.S. and Rojas Moreno, J.S. (2015). Caracterización del mercado de derivados cambiarios en Colombia., *ODEON*, 9, 7-79. DOI: http://dx.doi.org/10.18601/17941113.n9.02 (Accessed: 09 January 2021).

Castellanos, S.G. and Martinez, L. (2008). Development of the Mexican Bond Market. In Borensztein, E., Cowan, K., Eichengreen, B. and Panizza, U. (eds.), *Bond Markets in Latin America: On the Verge of a Big Bang?* (51–89). Cambridge, MA; London: The MIT Press.

Corsetti, G., Pesenti, P. and Roubini, N. (1999). What Caused the Asian Currency and Financial Crisis? *Japan and the World Economy*, *11*(3), 305–373.

Eichengreen, B. and Hausmann, R. (eds.), (2005) *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economies*. Chicago and London: University of Chicago Press.

Eichengreen, B. and Hausmann, R. (1999).Exchange Rates and FinancialFragility. NationalBureauofEconomicResearch.https://ideas.repec.org/p/nbr/nberwo/7418.html (Accessed: 24 August 2020).

Eichengreen, B., Hausmann, R. and Panizza, U. (2003). Currency Mismatches, Debt Intolerance and Original Sin: Why They Are Not The Same and Why It Matters. NBER Working Paper Series. *National Bureau of Economic Research (NBER)*. https://www.nber.org/papers/w10036 (Accessed: 26 August 2020).

EuropeanCommission(2019). CountryReport:Poland.https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-poland_en.pdf (Accessed: 26 August 2020).

Fabella, R. and Madhur, S. (2003). Bond Market Development in East Asia: Issues and Challenges. *ERD Working Paper Series No. 35*. https://www.adb.org/publications/bond-market-development-east-asia-issues-and-challenges (Accessed: 26 August 2020).

G20 Finance Ministers and Central Bank Governors (2011). G20 Action Plan to Support the Development of Local Currency Bond Markets. G20. https://www.mofa.go.jp/policy/economy/g20_summit/2011/pdfs/annex03.pdf (Accessed: 26 August 2020).

Hardie, I. and Rethel, L. (2019). Financial Structure and the Development of Domestic Bond Markets in Emerging Economies. *Business and Politics*, *21*(1), 86–112.

Hesse, C., (2016) Polish pension fund reform: getting away with a black eye *EME* Strategy Report 7 July 2017, Joh. Berenberg, Gossler & Co. KG distributed commercially by Financial Times

Hofmann, B., Shim, I. and Shin, H.S. (2020a). Original Sin Redux and Policy Responses in Emerging Market Economies During the COVID-19 Pandemic. In Djankov, S. and Panizza, U. (eds.), *COVID-19 in Developing Economies* (353–361). VOX EU CEPR. https://voxeu.org/content/covid-19-developing-economies (Accessed: 2 January 2021).

Hofmann, B., Shim, I. and Shin, H.S. (2020b). Emerging Market Economy Exchange Rates and Local Currency Bond Markets Amid the Covid-19 Pandemic. *Bank for International Settlements*. https://www.bis.org/publ/bisbull05.htm (Accessed: 31 July 2020).

IMF (2016). Staff Note for the G20 IFAWG Development of Local Currency Bond Overview Recent Developments and Kev Themes. IMF. Markets of https://www.imf.org/external/np/g20/pdf/2018/061518.pdf (Accessed: 26 August 2020). (2013). *Local* Currency Bond IMF Markets _ A Diagnostic Framework. http://www.oecd.org/daf/fin/public-debt/Local-Currency-Bond-Markets-Diagnostic-Framework-2013.pdf (Accessed: 26 August 2020).

Janc, A., Jurek, M. and Marszalek, P. (2013). Studies in Financial Systems No 7 Financial System in Poland. *Financialisation, Economy, Society & Sustainable Development (FESSUD) Project*. http://fessud.eu/wp-content/uploads/2012/08/Poland-Studies-July-2013.pdf (Accessed: 26 August 2020).

Kaltenbrunner, A. and Painceira, J.P. (2015). Developing Countries' Changing Nature of Financial Integration and New Forms of External Vulnerability: The Brazilian Experience. *Cambridge Journal of Economics*, *39*(5), 1281–1306.

KPMG (2020) China Pensions Outlook: Looking ahead after a year of change https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2020/03/china-pensions-outlook-

looking-ahead-after-a-year-of-change.pdf (Accessed: 11 Jan 2020).

Leal, R.P.C. and Carvalhal-da-Silva, A.L. (2008). Development of the Brazilian Bond Market. In Borensztein, E., Cowan, K., Eichengreen, B. and Panizza, U. (eds.), *Bond Markets in Latin America: On the Verge of a Big Bang*?(185–217). Cambridge, MA; London: The MIT Press.

Miszerak, M. and Rohac, D. (2017). Poland's Rush to Banking Sector Socialism. *Financial Times*, 30 June.

Molnar, M. and Lu, J., (2019) State-Owned Firms Behind China's Corporate Debt *Economics Department Working Papers No. 1536 OECD*. <u>https://www.sipotra.it/wp-</u>content/uploads/2019/03/State-owned-firms-behind-China-s-corporate-debt.pdf

(Accessed: 11 January 2021).

Raddatz, C. and Schmukler, S.L. (2008). Pension Funds and Capital Market Development: How Much Bang for the Buck? *World Bank*. https://openknowledge.worldbank.org/handle/10986/6308?locale-attribute=en (Accessed: 24 August 2020).

Rethel, L. (2010). Financialisation and the Malaysian Political Economy. *Globalizations*, 7(4), 489–506.

Scherrer, C. (ed.) (2017). *Public Banks in the Age of Financialization*. Cheltenham, UK; Northampton, MA, USA: Edward Elgar Publishing.

Sharma, S.D. (2003). *The Asian Financial Crisis: Crisis, Reform and Recovery*. Manchester and New York: Manchester University Press.

The World Economic Forum (2016). *Accelerating Capital Markets Development in Emerging Economies: Country Case Studies*. The World Economic Forum. http://www3.weforum.org/docs/WEF_accelerating-capital-markets-development-in-emerging-economies.pdf (Accessed: 26 August 2020).

World Bank Group (2012). Supporting the Development of Local Currency BondMarkets: Interim Report on Implementing the G20 Action Plan on the Development ofLocalCurrencyBondMarkets.

https://documents.worldbank.org/en/publication/documents-

reports/documentdetail/275781468335977188/supporting-the-development-of-localcurrency-bond-markets-interim-progress-report-on-implementing-the-g20-action-planon-the-development-of-local-currency-bond-markets (Accessed: 26 August 2020). Zhu, H. and Walker, A. (2018). Pension System Reform in China: Who Gets What Pensions? *Social Policy & Administration*, *52*(7), 1410–1424.

¹. This connects with another transnational policy discourse under the title of Maximising Finance for Development. This project promotes methods of creating "blended finance" – combining state and multilateral development finance with private international finance – institutional investors, thought to have long-term horizons and lots of cash to invest – for projects working to meet the Sustainable Development Goals (SDG).

². An advertising feature distributed by the FT claims that the institutions in which the state is taking a large part of or total control (e.g. PKO Bank Polski, and the Polish Development Fund (PFR)) are playing a prominent role in "industrial modernisation". Poland is described here as "a dynamic economy that plays to its strengths and knows where it is going" with the ambition to "narrow the economic gap between it and its western neighbour by 2030" (Hesse 2016).