



DEBT VULNERABILITIES IN DEVELOPING COUNTRIES: A NEW DEBT TRAP?

Volume I: Regional and Thematic Analyses





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INTRODUCTION

Yet again, unsustainable international debt burdens haunt the developing world and are fast becoming a core obstacle to the international community delivering on its repeated promises to enable sustainable development finance.

For the best part of two decades, the driving motor of the global economy has been debt, issued on a whim and traded for speculative purposes, rather than backing productive and long-term investment, including into the structural transformation of developing economies. With the world's total gross debt-to-GDP ratio nearing 250 per cent (BIS 2017: 283) and global debt stocks surpassing their record level at the onset of the global financial crisis (US\$ 142 trillions) by over US\$ 80 trillion in 2017, it is little wonder that international financial markets continue to show periodic nerves, and policy-makers in lead economies struggle to stabilize an increasingly volatile, fragmented and unbalanced global economy.

Advanced economies still hold the largest share of these debt stocks. This is as it should be in a context of sluggish recovery from a global economic crisis and impending stagnation. Yet, such continued dependence of world economic growth on debt, for the most part fuelling short-term speculative rather than long-term productive investments, is a constant source of instability as well as escalating income inequities. Governments in the core economies have been unwilling to tackle the systematic removal of toxic debt burdens, accumulated in the run-up to the global financial crisis of 2007/08, from non-bank private sector balance sheets in a comprehensive and orderly manner. In addition, with an irrational addiction to fiscal austerity, in particular in Europe, this has resulted in a surge of highly volatile international flows of cheap credit emanating from an excessive reliance on expansive monetary policies in these economies.

Not only have these policies failed to ensure a fast and lasting economic recovery based on closing the global demand gap, but the negative spill over effects of persistent deflationary tendencies in advanced economies and global financial fragility have by now had a profoundly disruptive impact on developing economies' prospects of sustained structural transformation. In this context, the growing stock of debt incurred by developing countries and transition economies - estimated to have reached \$7.64 trillion in 2017, an increase of over 80 per cent since 2009 - is bound to become a serious liability for their immediate future.

While external debt-to-GDP ratios remain relatively low by recent historical standards, on average rising from 21 percent in 2009 to 26 per cent by 2017, this masks much higher ratios in a growing number of individual countries, in particular in the Caribbean and African regions. Debt service and payment burdens have also risen markedly over the past few years. For all developing countries, the ratio of debt service-to-exports rose from 8.7 per cent in 2011 to 15.4 per cent in 2016, and, in poorer developing countries, debt service-to-government revenue ratio also climbed up steadily, from 5.7 per cent in 2008 to over 14 per cent by 2016. This increase in debt service burdens has hit the most vulnerable developing countries the hardest, including commodity exporters, countries dealing with large refugee inflows, and small island developing states.

Further signs of trouble on the horizon include a growing share of short- relative to long-term debt in total external debt stocks, as well as a significant slowdown in the growth of international reserves. These grew by only 4 per cent between 2009 and 2017, compared to 24 per cent between 2000 and 2008. The ratio of short-term debt to international reserves stood at just below 400 percent in 2016. While this is still substantially higher than the 230 per cent ratio at the start of the millennium, the relatively sharp decline since 2009, when this ratio stood at 580 per cent, is cause for additional concern (Report on external debt sustainability and development 2017, UN Secretary General).

The commodity price downturn that started in 2011 is, of course, a major factor in explaining the heightened dangers of sovereign debt crises across the developing world. Commodity price slumps have been accompanied by currency, banking and sovereign debt crises in vulnerable economies for centuries, and the current downturn is no exception. However, six years after the onset of the current slump, there are few, if any signs of a sustained recovery of commodity prices. While sector-specific aspects obviously vary, the common underlying reason for the prolonged stagnation of commodity prices is the lack of global macroeconomic policy coordination to facilitate a turn around. US expansion has been moderate and unstable which is unlikely to be helped by continued reliance on already overloaded monetary policy tools, including a return to 'normalised' interest rates, and humongous tax cuts for the super-rich. The EU is in even more dire straits, struggling to keep its diverse

economies under a shared political roof and exporting its deep internal macroeconomic imbalances between surplus and deficit countries to the rest of the world, rather than addressing these in-house. What few breaks there have been from continued downward pressures on commodity prices has been down to China's steady economic performance despite its own internal debt worries. But China alone cannot be expected to drag the world economy out of its fragmentation and lethargy.

In the absence of a strong and sustainable driver of global growth, downward pressures on most commodity prices are likely to persist, reflecting downward dynamics of excess supplies interacting with a continued lack of effective international demand. Most commodity exporters, left to their own devices, have little alternative but to compensate lower prices with higher export volumes, especially given that in many cases large investments into commodity export expansion had already been well under way when the price boom ended. This, together with continued slack in exports markets, is a recipe for a prolonged stagnation of commodity prices at historically low levels, even if global economic instability can also mean occasional short breaks from this downward trend, not least due to price speculation.

But depressed commodity prices and sluggish global aggregate demand, more generally, are not the only factors threatening external debt sustainability in the developing world. Beyond these 'classical' issues, developing countries' vulnerability to financial and debt crises is much higher now than it used to be due to their fast rising exposure to complex and largely unregulated international capital and financial markets. What matters is not only, and perhaps not even primarily, the size of debt relative to broad macroeconomic performance indicators, such as GDP and exports, but also the composition, ownership and currency denomination of this debt.

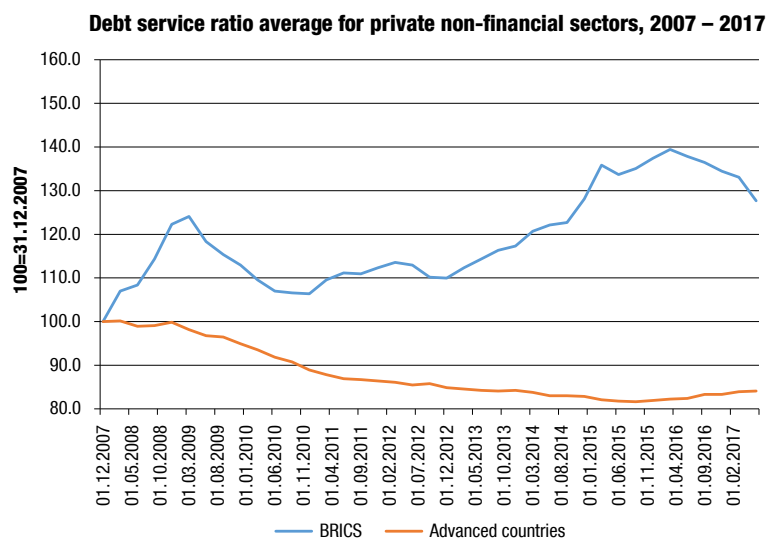
In larger emerging market economies, a main concern is the clearly unsustainable and badly hedged debt incurred by non-financial corporations in a context of their ample access to short-term foreign currency denominated debt. According to the IMF's Global Stability Report (2015), this rose from US\$ 4 trillion in 2004 to US\$ 11 trillion in 2010 and well over US\$ 18 trillion in 2014 across major emerging market economies. The increasing reliance of non-financial corporations in emerging developing economies on debt rather than equity to finance investment is also apparent in a renewed marked rise of their debt-to-equity ratios after 2010, when these had contracted sharply from high levels immediately following the global financial crisis (McCauley et al 2015). The

core driver of accelerated non-financial corporate indebtedness in these economies, reaching 140 per cent of combined GDP in 2016, has been excess liquidity in the international financial markets, coupled with the continued deregulation of developing country financial systems (UNCTAD 2016).

This also has meant rising debt servicing burdens. As the below graph illustrates, the debt servicing ratios of non-financial sectors in large developing countries have shown a steeply upward trend since the global financial crisis of 2007/08 that has only begun to reverse recently, in response to the reversal cheap credit flows to the developing world after 2014. These debt servicing ratios reflect the share of income used to service debt and are generally considered to be a reliable warning indicator of pending banking crises due to non-performing loans.

While the growth of problematic corporate debt in their non-financial sectors primarily affects middle- and upper-income economies with large domestic corporations, the growth of private sector foreign borrowing has increased debt vulnerabilities also in poorer developing economies as, for instance, Bonizzi and Toporowski in volume I of this publication argue for the case of Sub-Saharan Africa. For developing countries overall, the share of private non-guaranteed (PNG) debt in total long-term external debt stocks rose from 28 per cent in 2000 to almost 50 per cent in 2016. In Sub-Saharan Africa, this increased seven-fold in the first fifteen years of the millennium alone, from US\$ 10 billion in 2000 to US\$ 70 billion by 2015. Such foreign currency denominated debt not only increases private actors' exposure to external shocks, but it poses a potentially systemic threat to their economies when private debt burdens become unsustainable and governments are forced to shift private debt onto public balance sheets to avoid serial bankruptcies and subsequent financial crises.

At the same time, there also has been a marked shift towards raising public debt finance in developing countries from the private sector rather than from official and multilateral creditors, owing to a combination of limited access to the latter, at least on acceptable conditionalities, and temporarily cheap private credit flows. Thus, the share of external public and publicly guaranteed debt (PPG) debt owed to private creditors accounted for 41 per cent of the total in 2000, but had increased to well over 60 per cent by 2016. Furthermore, bond debt now constitutes an important share of PPG debt in developing countries as a group, having increased from 24 per cent in 2000 to 43 per cent in 2014. The considerable downsides of this trend towards tapping into international capital markets through the issuance of sovereign international bonds



Note: Advanced countries include Germany, Japan, United Kingdom and United States of America. Developing countries include Brazil, China, India, Indonesia, Mexico, Malaysia, Russia, Thailand, Turkey and South Africa.

Source: BIS debt service ratio statistics and UNCTAD Secretariat calculations

have become particularly apparent in the case of some least developed economies that took advantage of the availability of cheap private credit between 2011 and 2015, only to see themselves faced with impossibly high increases in yields on their bonds once fickle investor sentiments took a turn towards more caution. An example is Zambia, which issued \$1.25 billion at 11.4 per cent in 2015 compared to 5.63 per cent for an issuance in 2012. Similarly, Mozambique paid a yield of 16.26 per cent for an international bond issuance in June 2016, compared to much lower yields on a couple of years earlier.

Recourse to issuing debt, whether international or domestic, in national currency is not the panacea it has been hailed to be. Until recently, greater reliance on domestic public debt and on domestic bond markets largely reflected a win-win situation, driven by excess liquidity in the international financial markets. For developing country governments, the case for borrowing domestically is compelling. Even though in these economies domestic borrowing is generally more costly than external borrowing, they can shift the currency risk to international lenders and reduce their vulnerability to exchange rate volatility. International lenders in search of higher yields than were on offer in their home countries, in the context of strongly expansionary monetary policies there, did show willing to lend under local jurisdictions and assume the currency risk. Consequently, the turn towards a reliance on local currency debt issuance and bond markets did not stop few and large non-resident investors, guided primarily by global financial

conditions and erratic confidence in the host markets, from dominating developing countries' debt strategies for development.

Moreover, developing countries switching from external to domestic public debt could also be trading a currency for a maturity mismatch. Many developing countries are unable to issue long-term government securities at a sustainable rate of interest, yet need to be a position to pay off or roll over maturing and short-term obligations. This is the case, in particular, where domestic commercial banks with usually strong preferences for short-term portfolio allocation remain the dominant investor group in local currency bond markets, such as, for example, in much of Sub-Saharan Africa.

Last but not least, increased reliance on domestic public debt also raises complications for sovereign debt restructurings where these become necessary. External and domestic debts are no longer clearly separable, in terms of ownership structures, currency denomination and legal governance frameworks. From an economic point of view, there are strong and widely recognized arguments for treating domestic debt under local jurisdictions separately from external sovereign debt, essentially to avoid a deepening of economic contraction in the wake of the turmoil caused by external debt crises. But with an increasing proportion of locally issued public debt now held by non-residents externally, questions arise, for example, as to whether to differentiate between resident and non-resident holders of local-currency debt. While outright defaults on domestic debt in developing and

emerging economies are rare, given the huge social and political costs of such defaults, these are issues to be kept in mind.

As a result of these developments, by the end of 2017, the IMF assessed 22 low income countries with access to concessional funding (PRGT – eligible) to be at high risk of debt default, 28 at moderate risk and only 10 countries at low risk, with a further 5 countries already in default. This, of course, does not include the many developing economies, classified as middle-income countries, that are also on the brink of default on their sovereign debt or have already defaulted *de facto* if not *de jure*, in particular but not only in the Caribbean region. If more outright defaults on sovereign debt are not yet occurring, this is down to a combination of not necessarily encouraging reasons: In some emerging market economies, sensible anti-cyclical policy regime may be helping to stave off financial and debt crisis. But beyond these few economies, it is more likely that implicit defaults are simply not being declared and are not captured in the available official and international data. In addition, further shocks to many developing economies that may push them over the edge, are yet to come, for example if the as yet still cautious move to a ‘normalisation’ of monetary and interest rate policies in the advanced economies will continue.

Despite this dismal outlook, it is important to remember that debt instruments are an essential, even indispensable, element of any financing for development strategy. External debt is not a problem in itself. It only becomes a problem to the extent that the investments financed by such debt fail to boost income and export earnings required to service that debt. During the first decade of the 2000s, the external debt position of most developing countries improved markedly due to a combination of strong domestic growth, a favourable external economic environment and international debt relief, and interest payments consequently fell markedly, from over 15 per cent on average in the 1980s and 1990s to between 1 and 6 percent as recently as 2013. Easy access to debt refinancing in international financial markets and a heightened ability to attract investors to local currency denominated debt seemed to provide ample opportunities to continue on a path to transformational development. This path has, however, proven treacherous, and is by now showing its ugly head: Where external debt primarily results from speculative surges in cheap international credit, driven by policy decisions in advanced economies rather than by the promise of transformational investments, the link between external debt finance and productive income generation to service this debt is broken. Instead, cheap credit tends to finance trade and investment

unrelated to the real economy, resulting in asset bubbles, currency destabilisation and overvaluation, maturity mismatches, conspicuous consumption imports and overall macroeconomic instability.

Under such circumstances, developing country debtors will soon be unable to generate the resources required to service their debt obligations. In a global economy that lacks any viable mechanisms for international policy coordination, the resultant macroeconomic imbalances can only amplify: Private investors will flee developing country destinations, no longer attractive for their short-term financial investment strategies, thereby exacerbating the financing shortfall in these economies; developing countries, lacking policy space and multilateral finance to bridge liquidity shortfalls and sufficient development finance have little alternative but to “beggar-thy-neighbours” and compete for stagnant export markets through currency devaluations and related low cost-low income strategies as well as pursue counter-productive austerity policies, further undermining growth prospects and ultimately driving up relative debt levels.

To avoid this kind of debt trap spreading systematically across the developing world will require an international policy response far beyond ‘business as usual’. Ultimately only a ‘new global deal’ (UNCTAD 2017: 147-164), that proactively promotes productive investment for more and better-quality employment, reigns in speculative and rentierist private interests and drives the reform of international institutions to accord developing countries an effective voice in international policy-making, will be able to mobilise and deliver sustainable development finance, including through leveraging sustainable debt instruments and systematic debt relief. In the meanwhile, and as the UNCTAD has repeatedly pointed out (e.g. UNCTAD 2015: 141-147), an urgent task is the creation of an international regulatory framework to facilitate sovereign debt restructurings, where these have become inevitable, with the objective to ensure timely, effective and fair sovereign debt workouts that safeguard the debtor country’s future growth prospects and therefore its capacity to repay debt, as well as essential creditor rights.

The two volumes of this publication gather a range of contributions on specific aspects of this important and large topic. Volume I brings together papers that analyse different regional aspects of evolving debt dynamics in the developing world, detailing many of the issues raised in this introduction in these specific contexts. It also introduces an additional, and often neglected, wider feature of these debt dynamics, namely the role of microdebt crises across the developing world and the bankruptcy of the

microcredit model. Volume II turns to selected topics and policy options to mitigate developing country debt vulnerabilities in current circumstances, in which a 'new global deal' is unlikely to garner the required international political support.

In this volume, *Bruno Bonizzi* and *Jan Toporowski* look at the role of sovereign debt and the change in fortunes experienced by the majority of governments in Sub-Saharan Africa since 2012: While Sub-Saharan African economies generally benefited from large debt reduction under the debt relief initiatives of the 1990s and 2000s, and in particular the Heavily Indebted Poor Countries Initiative, this welcome trend has seen a reversal in recent years. The chapter provides a survey of trends in foreign debt in Sub-Saharan Africa until 2015 and analyses core causes of rising debt vulnerabilities in the region. The authors argue that, in line with standard models of sovereign debt sustainability, this is largely determined by three cycles: the macroeconomic cycle in the export markets that determines foreign currency cash flows, the macroeconomic cycle in the domestic economy that determines import and development finance needs, and the commodity price 'super-cycle' that determines the terms of trade of most Sub-Saharan African countries. On these counts, low growth in key export markets and low and stagnant commodity prices are, unsurprisingly, the main areas of concern.

However, according to the authors, the study of these cycles provides only a first and approximate step towards a fuller analysis of debt vulnerabilities in the region. Of vital importance are two additional factors, both of which are direct consequences of the rapid, yet still fairly marginal, integration of many of the region's countries into international capital markets: the rise in private sector indebtedness and the role played by the international monetary cycle. In the first case, the authors highlight the strong interdependencies between government and private sector borrowing that complicate sovereign debt management and heighten market risk exposures. The second factor – the international monetary cycle – determines the liquidity of international capital markets and, thus, the potential for and conditions of foreign indebtedness, whether public or private, but remains entirely outside the policy control of Sub-Saharan African governments. As the authors point out, given shallow domestic capital markets and limited local financing possibilities in domestic currency in many Sub-Saharan African economies, the growth of private sector foreign borrowing has become a main source of vulnerability of cross-border debt structures in the region. The chapter also explores the viability and limitations of a range of policy responses to rising

financial fragilities faced by governments in Sub-Saharan Africa, and suggests core policy priorities. This includes an appeal to both governments as well as multilateral agencies to take on board the need to go beyond traditional crisis-driven rescheduling and to promote a more active monitoring of international capital markets.

A supplementary report by *Bonizzi* and *Toporowski* provides an in-depth empirical analysis of the issues raised in their main chapter for five selected Sub-Saharan economies: Ghana, Kenya, Nigeria, South Africa and Zambia. This report highlights the heterogeneity of experiences and likely debt trajectories, but also shows that the core patterns discussed in their main chapter are present across selected countries, even if to differing degrees.

Kaltenbrunner analyses the rising indebtedness and financial fragilities of non-financial corporations (NFCs) in Brazil. She argues that recent changes in the financial practices and relations of Brazilian NFCs are attributable to financialisation and internationalisation processes very similar to those undergone by their counterparts in advanced economies. In fact, the financialisation of company strategies and the internationalisation of their production processes feed on one another and mutually reinforce each other: In an increasingly financialised world, financial access and sophistication have become important factors determining international "competitiveness". Financialisation arguably becomes a precondition for internationalisation, in particular for emerging market firms that enter international markets as latecomers. At the same time, internationalisation becomes part and parcel of more financially oriented company strategies.

According to neoclassical economics, NFCs' increased access to private financial markets should increase investment, growth and employment. In this 'financial deepening' view, the liberalisation of private financial markets increases the availability of financial resources, stimulates the overall efficiency of private investments, and enhances it through facilitating risk management and exerting corporate control. Kaltenbrunner finds that such a rosy view of the working of international financial (and product) markets is unwarranted, since it neglects important risks and challenges. Even in advanced economies, NFCs have increasingly generated income from financial rather than productive activities, increased their payments to financial markets in the form of interest, dividends, and stock buybacks, and have relied on retained earnings and/or sought external finance in open capital markets rather than from banks, with potentially negative

implications for capital accumulation, employment and income distribution.

As Kaltenbrunner shows for the case of Brazil, these tendencies carry even higher risks in emerging market economies. Not only is the diversion of resources into short-term financial assets and away from long-term productive investment particularly damaging to developing economies in need of extensive transformational investment. Moreover, these economies also operate from subordinate positions in the international economy, and this affects their internationalisation and financialisation processes. In contrast to advanced economy NFCs, their Brazilian counterpart's financialisation has been dominated by a sharp rise in external borrowing alongside a strong reliance on foreign currency funding sourced from offshore financial centres. Such increased leverage, as well as high exposure to exchange rate risk and maturity mismatches, all create serious financial fragilities that are likely to affect not only the NFCs themselves. Negative repercussions on the wider economy can include pressures on exchange rate policies to prioritize keeping the costs of NFC foreign currency debt down by targeting an overvalued exchange rate, rather than to promote use this policy tool to promote export-led industrialisation strategies through undervalued, or at any rate, 'weaker' exchange rates. More generally, and in particular where NFCs are large domestic economic players, financial risks and vulnerabilities incurred by such companies can easily develop into systemic financial risks for the economy as a whole.

Li provides a detailed assessment of China's growing debt vulnerabilities. With a total debt – to – GDP ratio standing at over 250 per cent in 2015, concerns about serious financial fragilities at the heart of the Chinese economy have been wide-spread, not least given China's weight and importance in the global economy and likely spill-over effects of financial turmoil in China on the rest of the world. Based on a brief overview of the size, composition and evolution of China's overall debt burden, *Li* identifies high corporate and local government debt as the main crisis points of Chinese debt burdens and structures. While it is clear that Chinese corporate debt levels are alarmingly high, *Li* argues that contingent liabilities arising for the government from this debt are lower than might be the case in other economies, mainly because of the predominance of domestic ownership of Chinese

corporate bonds and low exposure to currency risk. Growing local government debt, amounting to around 44 per cent of GDP in 2016, is the second weak link, all the more so since, at least until recently, local governments had increasingly relied on the fast expanding shadow banking sector. As *Li* highlights, the risks emanating from these types of debt also have to be understood in the context of financial liberalization trends in China more widely, and in particular shifts away from bank loans to corporate bonds and a wide array of other more high-risk financial instruments. This changed composition of corporate and local government debt also means that financial shocks are transmitted much faster to other parts of the economy.

It is not only the size and composition of China's debt that has been of concern, but also its accelerated growth over recent years. Looking at the main reasons for this upward trend, *Li* points out that the stagnant global economic environment following the global financial crisis of 2007/08, as well as highly volatile international capital flows in the wake of expansive monetary accommodation in most advanced economies, have evidently played a decisive role. However, internal factors also weigh in heavily, including sectoral excess capacities, the growth of illicit financial flows and the fast, if not entirely unchecked expansion of shadow banking practices and wealth management products, in particular.

Overall, *Li* sounds a note of caution for those who fear the spectacle of an impending major debt and financial crisis in China. Many special features of the Chinese economy – its size, its diversified structure, high household savings and wide-ranging capital control measures – together with low external debt exposure, low central government indebtedness and a still dominant role of the banking sector in credit provision, all combine to provide policy and structural buffers against large-scale financial turmoil. This said, *Li* makes it clear that these buffers are weakening rapidly and that systemic risk from non-performing loans to the corporate and local government sectors, as well as a vibrant shadow banking sector, require firm and speedy countervailing action by the government. This should include, in her view, putting the brakes on credit expansion and improving the quality of credit allocation, but also structural reforms of state-owned enterprises, taxation reforms to ensure sustainable local government revenues, as well as the continued systematic use of capital controls.

REFERENCES

Bank of International Settlement (2017), *Statistical Bulletin*, Monetary and Economic Department, December.

United Nations General Assembly (2017), *Report by the Secretary General of the United Nations on external debt sustainability and development A/72/253*, 31 July.

UNCTAD (TDR 2015). *Trade and Development Report 2015: Making the International Financial Architecture Work for Development*. United Nations publication. Sales No. E.15.II.D3. New York and Geneva.

UNCTAD (TDR 2017). *Trade and Development Report 2017: Beyond Austerity: Towards a New Global Deal*. United Nations publication. Sales No. E.15.II.D5. New York and Geneva.

SOVEREIGN DEBT SUSTAINABILITY IN SUB-SAHARAN AFRICA

BRUNO BONIZZI AND JAN TOPOROWSKI

ABSTRACT*

Governments in Sub-Saharan Africa have experienced an improvement in the sustainability of their external debt since the 1990s, due largely to debt reductions under the Heavily Indebted Poor Countries Initiative and improved financing terms. However, debt service and interest payments since 2012 indicate a reversal of this long-term improvement. The outlook for traditional sources of vulnerability, in export markets, and the commodity price super-cycle is deteriorating. Two structural factors have now been added to the sources of governments' vulnerability: the rise in private sector external indebtedness, and the volatile liquidity in international capital markets. The policy of governments and multilateral agencies needs to go beyond traditional crisis-driven rescheduling towards a more active monitoring of international capital markets and their liquidity and debt management, in particular for governments in Sub-Saharan Africa that are marginal participants in those markets but cannot influence their liquidity. Debt sustainability depends ultimately on global economic growth and the investment of multinational corporations.

* Original submitted in 2016.

INTRODUCTION

This chapter and its annex present a rigorous analysis of the main macroeconomic and financial challenges to external sovereign debt sustainability in Sub-Saharan African economies since the financial crisis of 2007-2008. The case of Sub-Saharan Africa presents particular analytical and policy challenges not only because African countries were supposed to be principal beneficiaries of the Heavily Indebted Poor Countries initiative of the International Monetary Fund and the World Bank, launched in 1999 as those institutions' contribution to the Millennium Development Goals with the aim of placing those countries' debt on a sustainable footing. Perhaps even more importantly, for the purposes of this chapter, Sub-Saharan Africa stands out in the world as the major exception to the international financial crisis set off by the sub-prime mortgage crisis in the United States in 2007. This, together with the expansionary monetary policy (so-called 'quantitative easing') of the US Federal Reserve since 2009, joined in the following year by the Bank of England and, since 2015, the European Central Bank, have lulled the international financial markets into a false sense of security about the prospects for the external debts of governments and business in Sub-Saharan Africa, and the emerging markets in general. This security is epitomised in the success with which the government of Ghana has successfully issued bonds in the Eurobond market in 2007 and since 2013. In 2013, a US\$ 400 million 10-year bond issued by the Government of Rwanda was over-subscribed, and sold at an interest rate of below 7%.

In fact, Sub-Saharan Africa's success, in not being drawn into the crisis emanating from the US, is in part due to the weak integration of the region in the international financial system at the time when the international crisis broke out, and subsequently by the run of high prices for African commodity exports. Once the expansionary monetary policy had relieved the illiquidity of bank and corporate balance sheets in Europe and North America, international capital flows moved South to emerging markets and found their way also to Sub-Saharan Africa. The region has not traditionally been regarded as an emerging market, because of undeveloped financial markets and historic political boycotts of its most economically developed country, South Africa. However, foreign capital was attracted by the relative stability of the region, and has been reintegrating the region into the international financial system, and falling commodity prices do not augur well for the sustainability of the external debt structures that are being created.

The Bretton Woods institutions (the International Monetary Fund and the International Bank for Reconstruction and Development, or the World Bank) focus on external government debt relative to GDP, exports and foreign currency reserves as measures of sustainability, emphasizing the role played by the rate of interest relative to the rate of economic growth as the measure of debt sustainability. This has been criticised for many years by UNCTAD because such considerations of dynamic solvency do not indicate clearly the thresholds at which debts become unsustainable (see Akyuz 2013). A key factor here is foreign exchange reserves that are supposed to hedge the current account payments (including debt service) position of a country. However, in considering the sustainability of sovereign debt, the private sector cannot be ignored as a potential, systemic claim on the government. As recent crises in Europe have revealed, private sector debt may also be unsustainable and confront governments with a fundamental dilemma of financial stability: should a government allow private sector debts to bring down its banking system; or should the government intervene and take on private sector liabilities. This is further discussed in section 4.1 below.

A second factor that tends to be neglected in calculations of sovereign debt sustainability is the distribution between domestic and external debt. Domestic debt is usually much more sustainable because it offers much greater possibilities for rolling over debt and varying its terms, as well as hedging payments on domestic debt with tax revenue. Such hedging, in the case of internal or domestic debt, can render ineffective the constraint on debt sustainability posed by rate of interest relative to the growth rate of the economy, since a government can tax domestic wealth or interest revenue to service its debt. Following the Brady Initiative of 1989, the Mexican Government was able to refinance much of its external (US\$) debt into domestic currency debt, thereby making it more sustainable. This is further explained in section 4 of this chapter, which points to refinancing techniques of debt sustainability as a policy instrument.

The chapter that follows is divided into three sections. The first section shows trends in sovereign debt in Sub-Saharan Africa. A key finding here is the growing share of external debt that is long-term, an important stabiliser, up to a point, of sovereign debt. A brief appendix explains the relationship of long-term to short-term debt. This is followed by a section on the background and implications of the respective current debt positions of governments in Sub-Saharan Africa,

namely the dependence of those positions on trends in commodity prices, the hedging of those positions by foreign exchange, the potential of private sector debt to destabilise government debt, and the role of monetary policy, exchange rates and interest rates, in maintaining the overall stability of debt structures. A third section discusses critically the currently used debt sustainability criteria.

The fourth section of this chapter discusses fiscal considerations and the broader macroeconomic policy implications of making the current debt structures sustainable. The standard approach to this issue is one of modelling the macroeconomic structures that will generate the income flows required in the foreseeable future by current debt structures. The key way of doing this is by comparing economic growth prospects, and the resulting income flows, with debt commitments. The limitation of this approach is that it takes debt structures as given. The chapter goes beyond this to examine how macroeconomic monetary and financial factors may cause shifts in those debt structures. Such shifts need to be managed to make those structures more sustainable.

I. TRENDS IN FOREIGN DEBT OF SSA¹

Along with similar trends in other parts of the developing world, in the decade prior to the financial crisis of 2008, the countries of Sub-Saharan Africa experienced a number of important changes in their external debt accounts. These can be summarised into two main points: firstly, overall external debt vulnerability has decreased, although in very recent

years the improvement has slowed down and may be even reversing to some extent. Secondly, the composition of external debt in SSA has changed, with private debt and private foreign creditors becoming more prominent.

A. THE INCIDENCE OF EXTERNAL DEBT IN SSA IN RECENT YEARS

The recent history of external debt in sub-Saharan Africa is characterised by a generalised improvement. Thanks to economic development and debt relief initiatives, such as the Highly-Indebted Poor Country and the Multilateral Debt Relief initiatives, the size and the burden of external debt in the run-up periods before the crisis declined. However, in recent years, there are signs that these trends may be reversing.

In the pre-crisis period and up until 2011, with a brief interruption in 2008, the ratios of external debt to Gross National Income (GNI) and exports decreased. On the one hand, this is due to the good growth performance of Sub-Saharan Africa, which averaged to more than 4% yearly in the 2000-2011 decade, including the global recession in 2009.²

On the other hand, external debt levels remained roughly stable (Figure 1). In the 2000-2008 period, levels for the region as a whole fluctuated within a range of US\$200 to 250 billion. Indeed, this range has been roughly constant since the mid 1990's for many African countries, initially under Structural Adjustment Programs, and more recently through the Highly Indebted Poor Country Initiative.

Figure 1. External debt levels

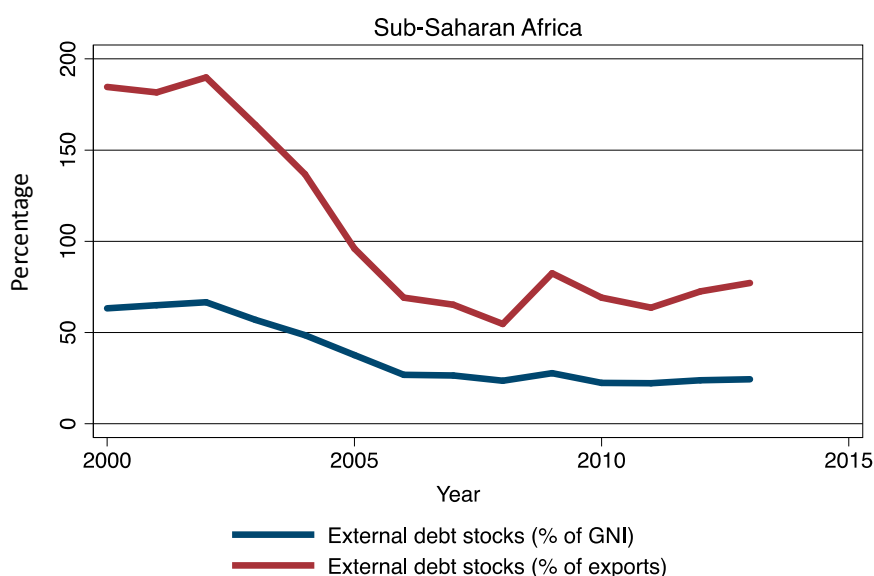
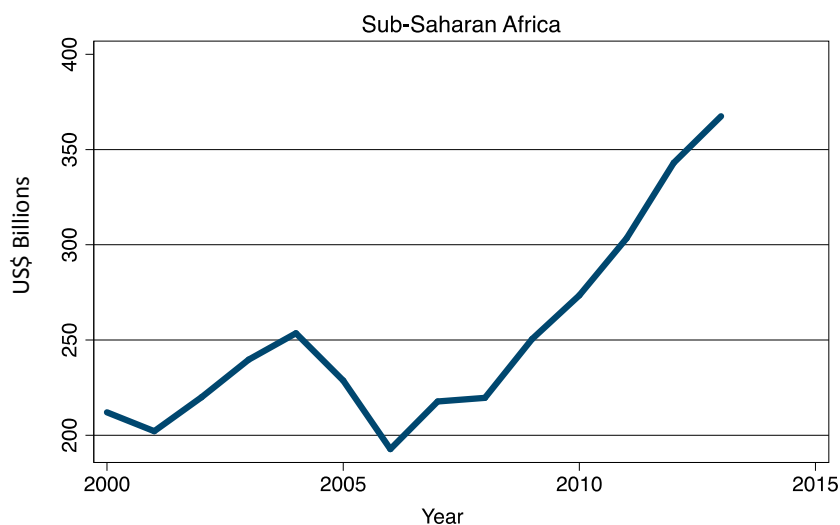


Figure 2. Total external debt

In recent years, however, debt levels have been rising again. In the post-crisis years, from 2009 till 2013, external debt levels for the region as a whole have risen from US\$ 219 billion to US\$ 367 billion (Figure 2). Although, the continuing good economic growth performance in the region is yet to generate a substantial increase in the proportions of debt to GNI and exports, the dramatic fall in these ratios stopped in 2009. This suggests the importance of absolute debt levels, and their associate policy measures, in driving the long-run trend in external debt stocks of Sub-Saharan Africa (SSA).

These trends are also reflected in the debt servicing figures. As shown in Figure 3 and 4, interest payments and total debt servicing, i.e. including principal repayments, have declined as a proportion of national income and exports, except in 2005.³ The figures also seem to indicate that interest payments and total debt servicing are highly correlated, with debt servicing increasing by more than the rise in the rate of interest.

The signs of a recent potential reversal of improving debt sustainability trends can be more clearly seen

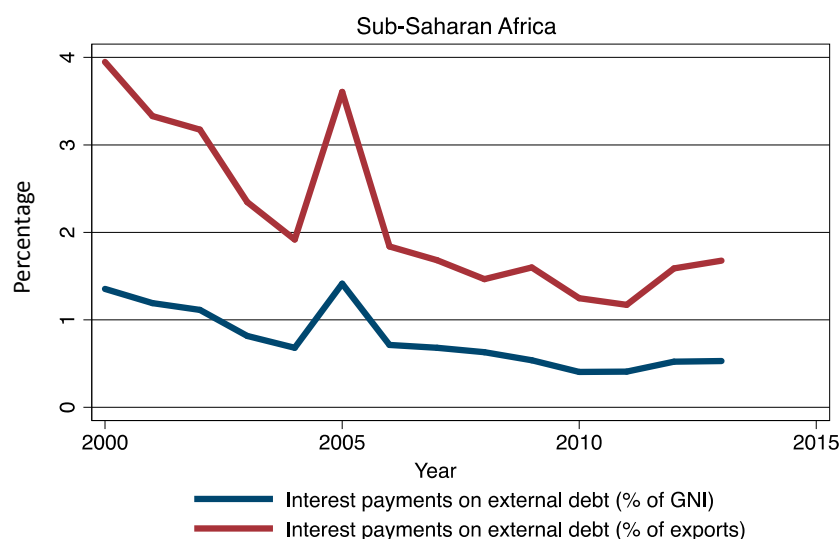
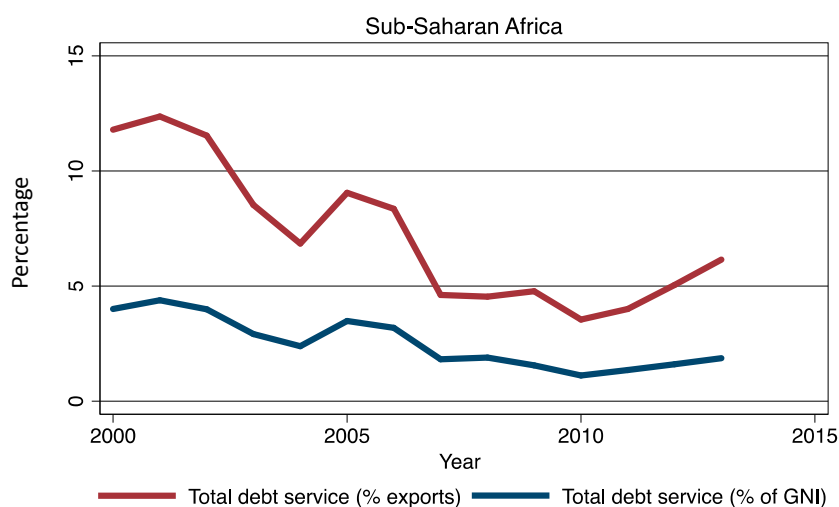
Figure 3. Interest payments

Figure 4. Total debt servicing



in recent years. In relation to exports, in particular, debt servicing, including both its interest and total components, has been rising since 2010.

Further indications of these trends can be found in figure 5. The importance of concessional credit, i.e. credit with a grant component higher than 25% of the total loan, has declined, which confirms the smaller reliance on non-market priced loans. Similarly, the decline in IMF credits in the years preceding 2009 suggests the smaller reliance on emergency credits by SSA countries. The spike in usage of IMF credit lines, in the post-crisis years however, suggests emerging troubles in external debt sustainability across the

region, as countries required the intervention of the IMF.

Additionally, the currency composition has changed substantially, away from traditional sources. As shown in figure 6, between 2000 and 2014, debt denominated in multiple currencies, often the result of multilateral official debt agreements, has declined from 7.3% to 1.2%. Debt denominated in US dollars still constitutes the majority of foreign debt, but has declined from 61% to 53% over the same period, although this has actually increased in the past few years. Similarly, debt in other advanced countries' currencies (with the exception of the Swiss Franc), has declined.

Figure 5. Concessional and IMF credit

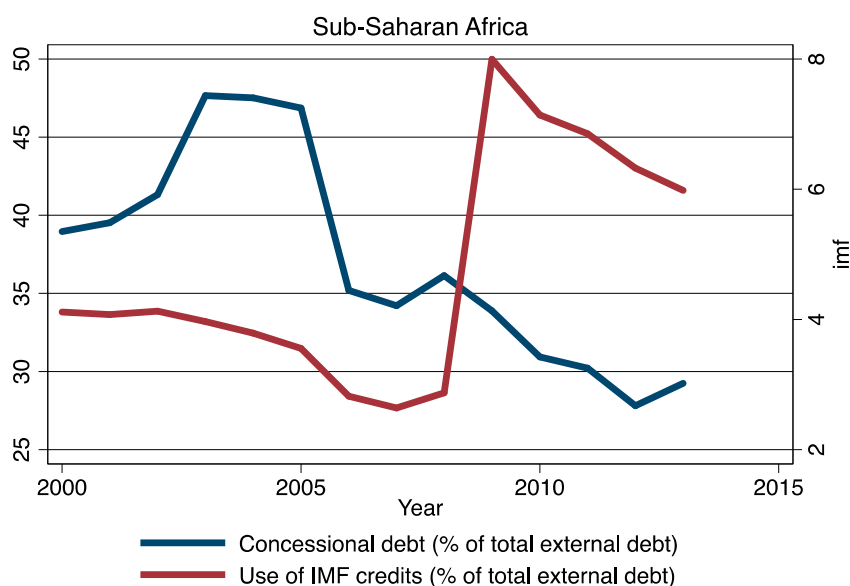
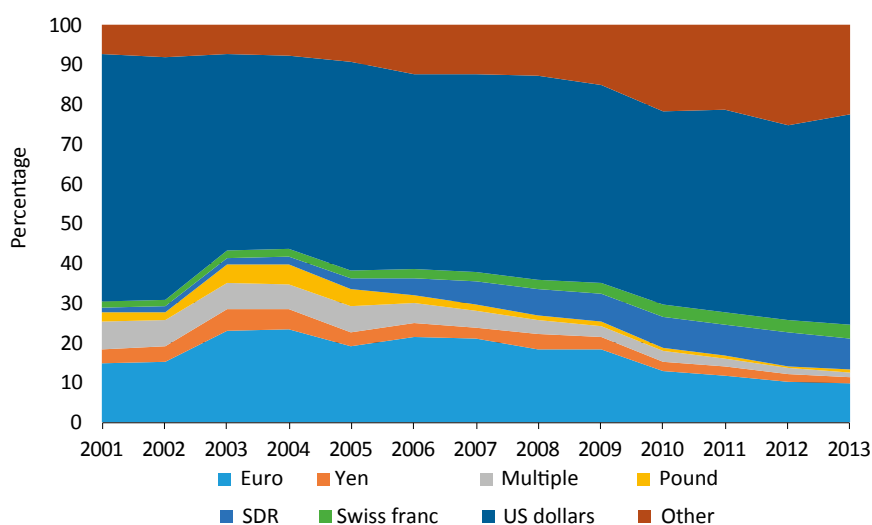
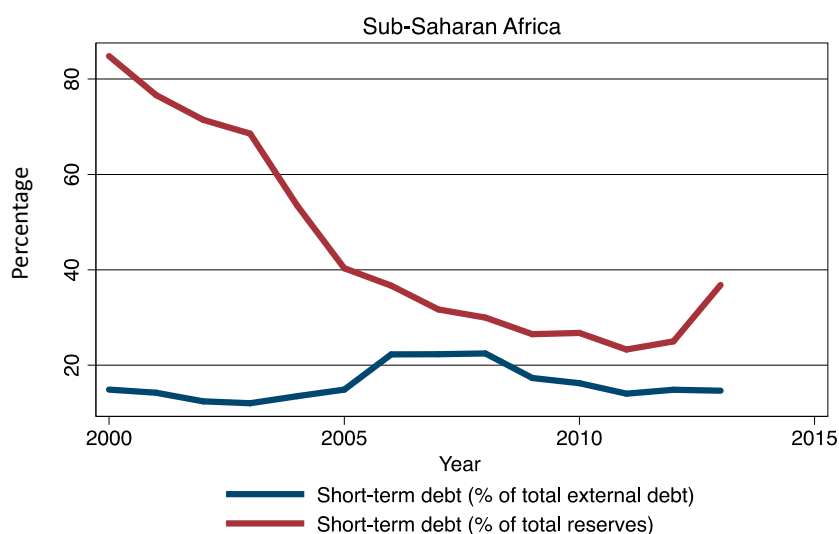


Figure 6. External debt currency composition

The increasing proportions of external debt have been in Special Drawing Rights and currencies other than those specified. Once again, these indicate greater access to external debt markets by governments and companies in SSA, able to borrow from other sources (e.g. the BRICS) and sometimes even in local currency.⁴ However, the increase in SDR borrowing, which is especially clear in the very recent past, may indicate the growing distress in parts of the region, since such borrowing is clearly from the International Monetary Fund.

The vulnerability to short-term debt is traditionally a key concern because as it increases, in the short term, the burden of debt service, also declines. As shown in figure 7, short-term debt has remained a constant and minor proportion of total external debt, oscillating around 15%. Furthermore, as a proportion of foreign exchange reserves, it has declined from over 80% to 22% in the 2000-2011 period. This suggests that the well-known phenomenon of reserves accumulation was also present in SSA countries during the past decade.

Figure 7. Short-term debt

The very recent deterioration of the short-term debt to reserves ratio reflects the increase in absolute levels of short-term debt, from US\$ 42 billion to US\$ 53 billion between 2011 and 2013. This 20% increase is in line with the total increase in external debt, but it outpaced reserves accumulation. Overall, the secular trend in SSA countries' external debt sustainability looks improving. However, since 2011, these trends have slowed down and in many instances reversed.

B. THE IMPORTANCE OF LONG-TERM AND PRIVATE DEBT

Apart from changes in the overall value of countries' external debt, there have also been important shifts in the composition of that debt. Over the past ten years, the importance of private sector external debt has been growing. As shown in figure 8, from a negligible proportion at the turn of the previous century, private debt has grown to about a fifth of total external debt in 2010.

Figure 8. Private and public external debt

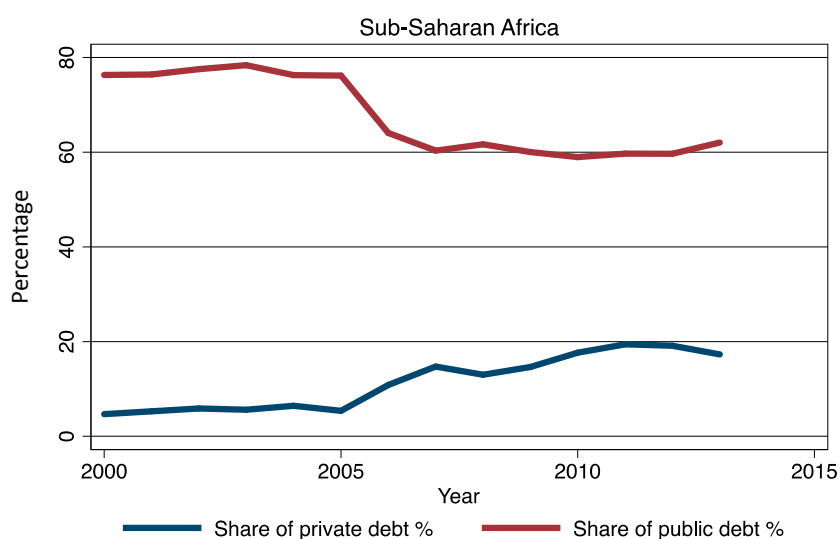


Figure 9 gives a detailed breakdown of SSA's long-term external debt.⁵ Several observations can be made. Firstly, while official creditors (bilateral and multilateral) accounted for about 80% of total external debt in 2000, in 2013 this figure has decreased to 55%, driven by a decrease in bilateral debt from almost 50% to 25%. Secondly, as a result of the first trend, the presence of private creditors in the public and publicly-guaranteed (PNG) debt has substantially increased, from 10% to almost 25% of total external debt in the same period.

This is due mostly to an increase in external bonds from about 5% to just under 15%. Thirdly, PNG, as already indicated in the previous figure, has increased from less than 5% to almost 20% of total long-term external debt. While most of this is commercial bank debt, private sector bonds have also grown over-time. Fourthly, bond markets, both public and private, have developed substantially, and now, account for 20% of total external debt, with a total capitalisation of about US\$ 73 billion.

Figure 9. Long-term debt composition

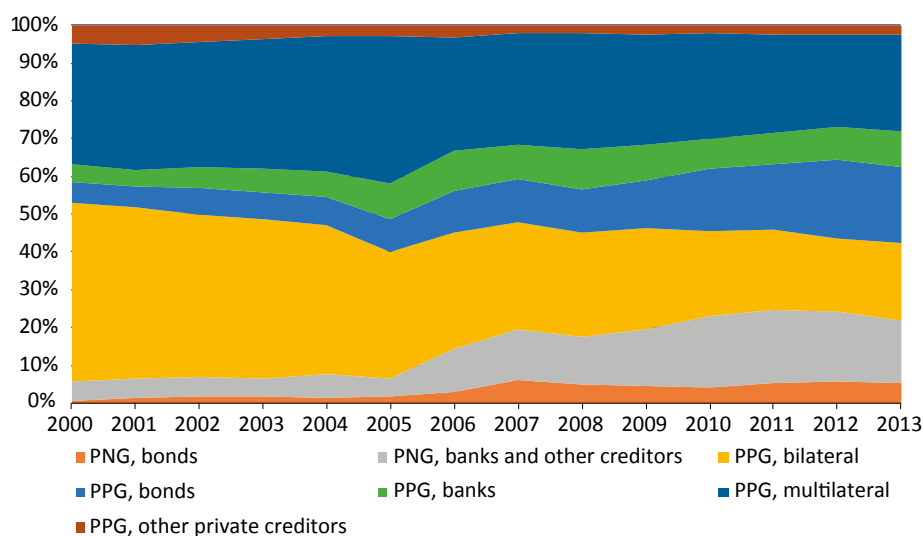


Figure 10. Disbursements composition

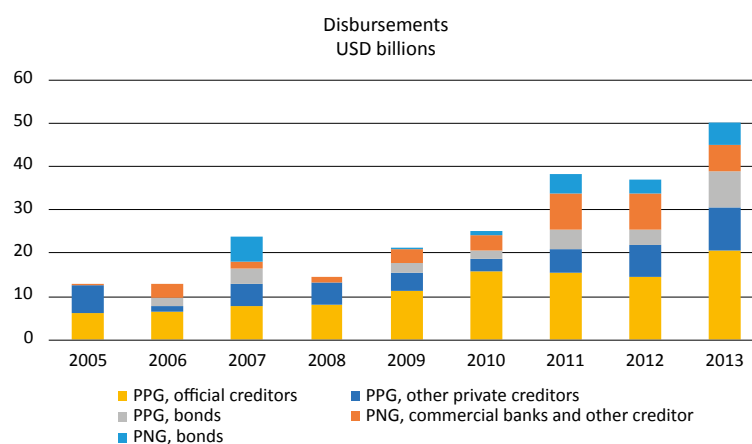


Figure 10 looks at disbursements by composition. Overall the disbursements have increased substantially in the 2011-2013 period, while, as shown in the previous section, debt-sustainability indicators show a mild deterioration. Total disbursements in 2013 have more than tripled since 2005 from US\$ 13 billion to US\$ 50 billion.

Although disbursements from official creditors remain important, there has been a remarkable expansion of debt flows to the private sector since the crisis. Bond markets in particular, which were almost irrelevant as a source of credit in 2005, have expanded dramatically: between 2011 and 2013 SSA private and public sectors have issued just under US\$ 30 billion of bonds, which amounts to 70% of the total external bonds stocks at the end of 2010. Moreover, as reported by Vellos (2015), the geographical scope

of these issuances has also broadened, with a total of 11 countries accessing international bond markets in SSA, some for the first time.

Overall these figures show an increasing involvement of the private sector in SSA's external debt. The public sector, previously reliant almost entirely on official credit, has become able to access private debt markets, through both commercial banks and bond markets. At the same time the SSA private sector has expanded its international borrowing, mostly through access to international banks, but recently, though to a smaller extent, also to corporate bond markets.

These trends are the product of two interrelated phenomena. First, the growing integration of African countries into the global financial system. International financial investors, subject to the low-interest rate

environment in Japan, North America and Europe, have been attracted by the substantially improved fundamentals of many developing countries, in a 'search for yield' for their portfolio investments. Although SSA remains the most peripheral of the developing regions in terms of financial integration, it has become a potentially attractive source of high-risk high-return investments.

For example, the leading MSCI equity index provider features three countries – Nigeria, Mauritius and Kenya - in its 'frontier markets' index, with Nigeria being the second biggest component of the index as of December 2015. Similarly, many African countries are part of the leading JP-Morgan bond indices, both the dollar denominated EMBI index, and the local currency bond index GBI-EM.⁶

Second, official development policy has itself become more supportive of the private sector. As documented in Bonizzi et al., (2015), there has been a shift in the official development policy consensus towards the promotion of private sector. Indeed, a substantial part of official flows from advanced countries goes to support private sector initiatives, including the financial sector, rather than humanitarian purposes. Furthermore, official flows themselves are increasingly being augmented with private funds through the process of 'blending', whereby private financial

institutions complement the official aid budgets with guarantees being provided by the borrowers and/or the donors.

This policy consensus helps explain the expansion of private sector lending to SSA. Indeed, the proportion could be even higher, since some of the official flows recorded in database hitherto presented could also potentially include substantial private flows registered as 'official' due to the 'blending' phenomenon. Nonetheless, as shown in Figure 11, while the average grant component on all new debts – the proportion of debts at a favourable rate – has declined overall, it has actually increased for loans from private institutions since 2009. This is likely due, at least in part, to the "blending" phenomenon.

The increasing presence of the private sector has two straightforward implications for the debt sustainability of SSA countries. First of all, while it is conceivable that most of the private sector debt is long-term, in general private lenders and private borrowers require higher interest rates. As shown in figure 12, interest rates have overall declined, in line with global trends, but interest rates charged by private lenders remain substantially higher than those for official loans. This results in a higher debt burden: as shown in figure 13, the total debt servicing cost of private debt outweighs the share of private debt to total external debt.

Figure 11. Grant component

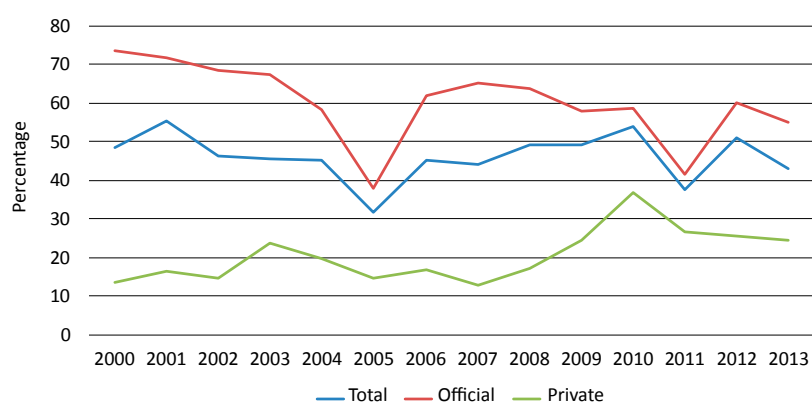


Figure 12. Interest rates

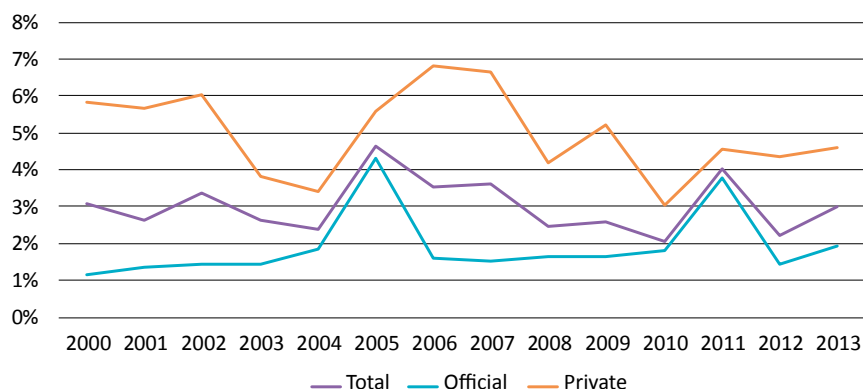
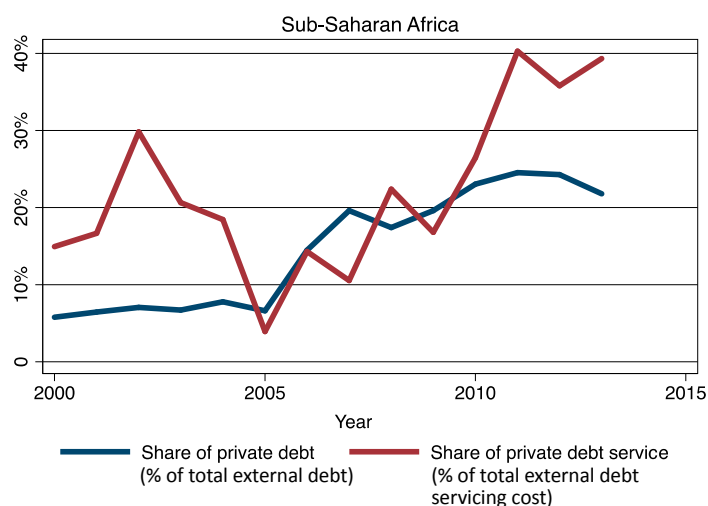
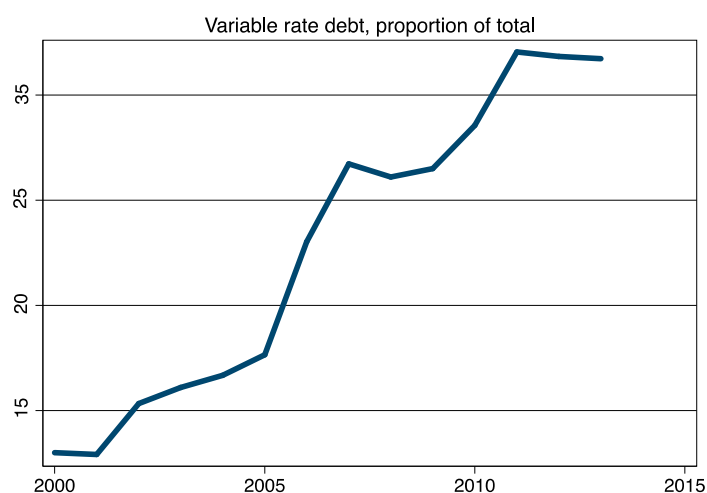
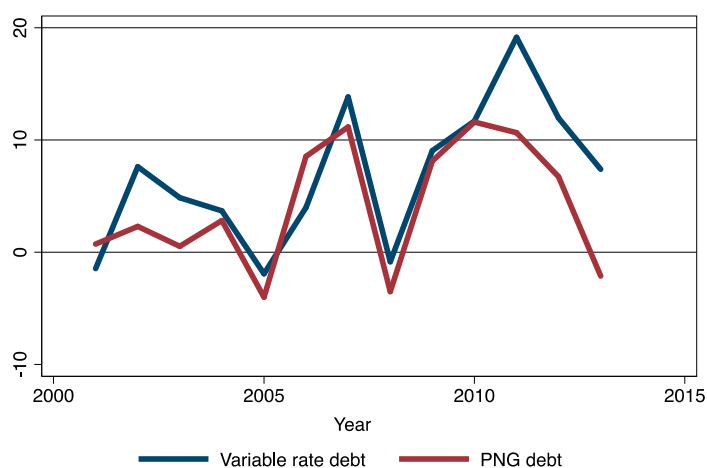


Figure 13. Debt servicing shares



Second, interest rates on private external debt are determined in global markets. While this clearly applies to bond markets in general, the same applies to all external debt to SSA African countries. The proportion of variable rate debt, i.e. debt whose interest rate floats with markets rates such as the LIBOR, increased from 11% to about 32% over-time (see Figure 14).

These increases have been effectively driven by the expansion of private debt: changes in variable rate debt, as shown in figure 15, are driven by changes in private debt, except in the last two years. This indicates that private debt is more directly exposed to fluctuations to global market changes.

Figure 14: Variable rate debt**Figure 15: Variable rate and PNG debt**

Overall, the recent changes in the composition of SSA countries external debt indicate an increasing involvement of private sector institutions, both as borrowers and lenders. Compared to public sector debt, interest rates on private sector debt are higher and typically linked to global market rates. These factors, combined with the observation about potential reversals of the secular decline in external indebtedness of SSA countries, suggest that external debt sustainability may warrant attention, in the coming years.

II. CAUSES AND IMPLICATIONS OF RECENT CHANGES IN EXTERNAL DEBT OF SSA COUNTRIES

This section explores a number of causes and implication of the changes in external indebtedness seen in the previous section. The first part discusses

the role of commodity prices and balance of payment issues as contributors to the recent surge in indebtedness of SSA countries. The second section deals with the integration of SSA countries into the global financial system.

A. COMMODITY CYCLES AND EXCHANGE RATES

From a national accounting point of view, external indebtedness depends, among other things, on current accounts. Although this view has been challenged in a financially interconnected world, where financial transactions vastly outpace trade-related transactions⁷, from a national accounting point of view, current account deficits imply a need for foreign resources to finance it.

Indeed, as Figure 16 shows, Sub-Saharan Africa overall had a current account surplus in 2004-2009, and then a small but deteriorating deficit in the 2009-2015 period. This corresponds broadly to the periods in which, as discussed in the previous section, external debt levels declined, and then rose again, indicating that current accounts positions do indeed partially explain the patterns of indebtedness of SSA countries. What is also clear from Figure 16, is that current accounts are mostly driven by trade in goods, except during the 2008-2009 crisis, when the deterioration of the services account also played a role in driving the current account into deficit.

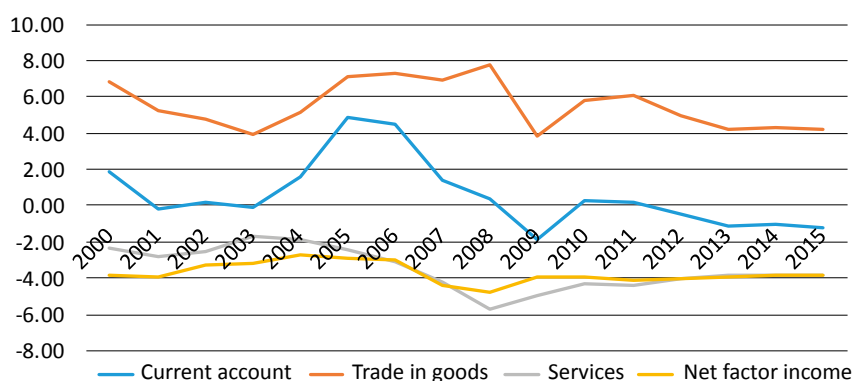
SSA countries have traditionally been commodity exporters. Indeed commodity-dependence is often seen as a major impediment to development in developing countries in general, and SSA in particular (e.g. Collier, 2002). As figure 17 shows, SSA registers a trade surplus in commodities and

a trade deficit in manufacturing during the entire 2000-2014 period.

Furthermore, commodity exports account for about 63% of total exports on average throughout the 2000-2014 period, which makes the whole SSA region commodity-dependent according to the UNCTAD definition⁸. This proportion however has fluctuated throughout the period, with a trough in 2004 at 50% and a peak in 2012 at 72.5% (Figure 18). Indeed there seems to be a correlation between the share of commodity exports and the trade balance: as commodities became more important as exports, the commodity trade balance improved substantially, driving, especially in the 2009-2012 period, the overall trade balance into a surplus.

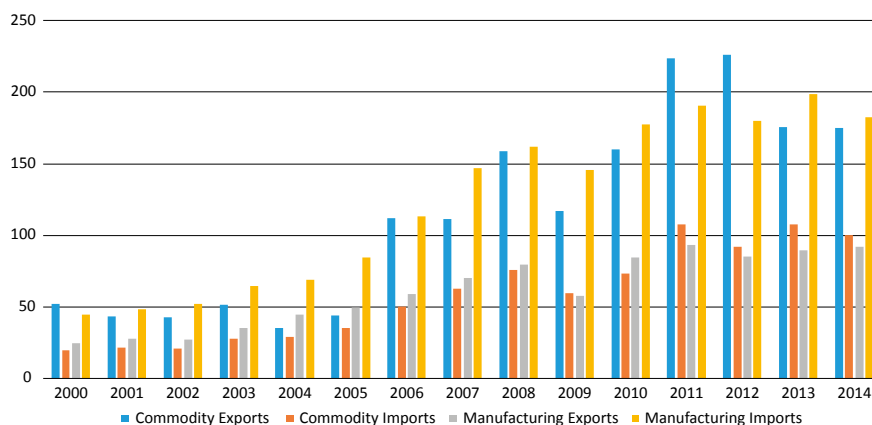
Conversely, the reliance on commodities also means that the decline in commodity exports in 2013 and 2014 resulted in a sharp deterioration of the commodity

Figure 16. Current account



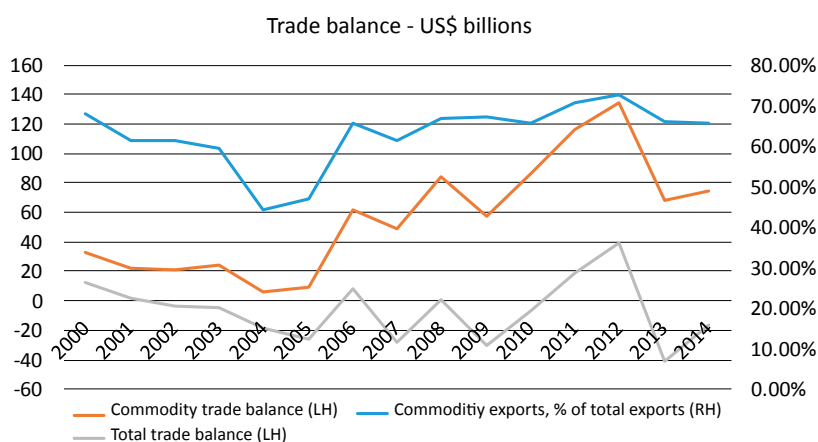
Source: *Economist Intelligence Unit*

Figure 17: Trade components



Source: *UN Comtrade via World Integrated Trade Solution*

Figure 18. Commodities and trade balance



Source: Authors' calculation based on UN Comtrade via World Integrated Trade Solution

trade balance, and therefore the total trade balance, feeding into the current account deficit.

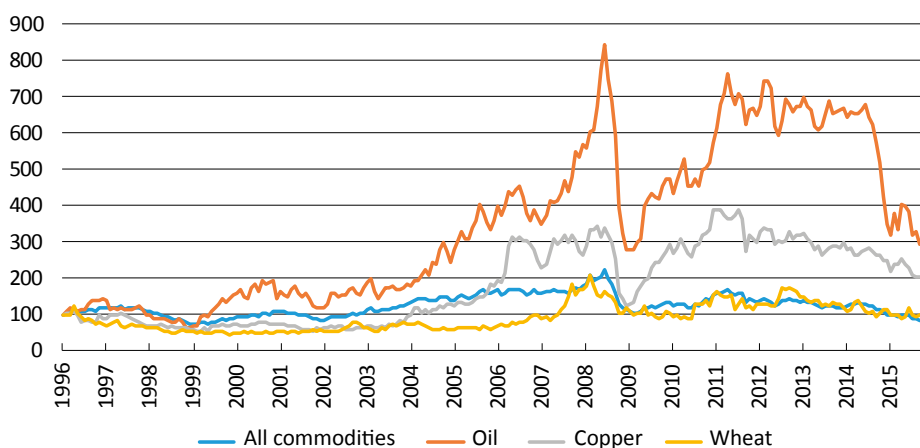
The cycle in commodity prices seems to be one of explanatory behind these trends. This chain of events clearly indicates that part of the recent deterioration in the trade balance is linked to the dynamics of commodity exports. As shown in figure 19, commodity prices which had been low or falling in the 2004-2008 period, recovered in 2009-2012, and have been declining since then. The recent deterioration in current accounts is therefore at least partially imputable to a decline in commodity prices.

This is even more striking considering the general depreciation of African currencies vis-à-vis the US dollar since 2011, shown in Figure 20. Instead of improving the trade account, depreciation exacerbates financial problems for SSA countries, since it increases the

burden of foreign currency debt, which, as indicated in the previous section, is still the overwhelming majority of external borrowing. This phenomenon also helps to explain the recent difficulties in debt servicing documented in the previous section.

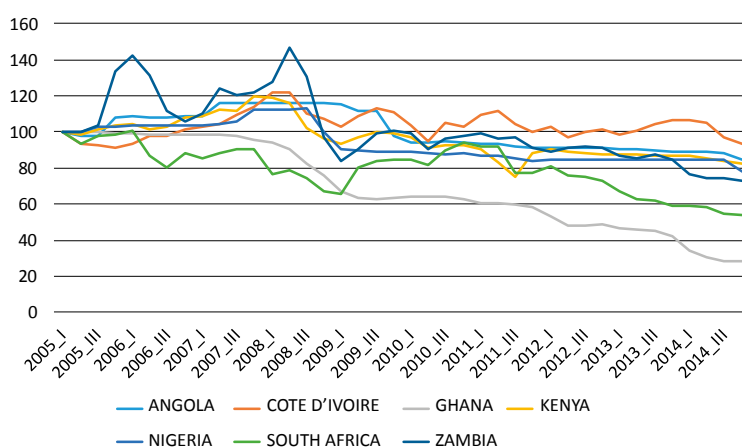
Furthermore, it is well known that for commodity exporters, exchange rates and commodity prices tend to move together. A comparison between figure 19 and figure 20 suggests that for several SSA countries, such a relationship seems to exist, since many currencies appreciated in the 2005-2008 period, during the commodity price boom, and have been depreciating since 2011. The effects of such a currency depreciation on the value, in domestic currency units, of external debt adds a further element to explain why low commodity prices increase the burden of debt.

Figure 19: Commodity Prices



Source: Bloomberg

Figure 20: Exchange Rates



Source: Economist Intelligence Unit, exchange rates vis-a-vis US dollar

Commodity dependence is therefore a crucial concern for debt sustainability in SSA countries. With low global growth, and a notable slowdown of economic growth in China, it is unlikely that commodity prices are going to recover soon. Overcoming commodity export dependence, and establishing a more diversified productive structure, is therefore an important goal not only for social and economic development but also for debt sustainability, in order to break down the pro-cyclical relationship between commodity prices, current accounts, and exchange rates.

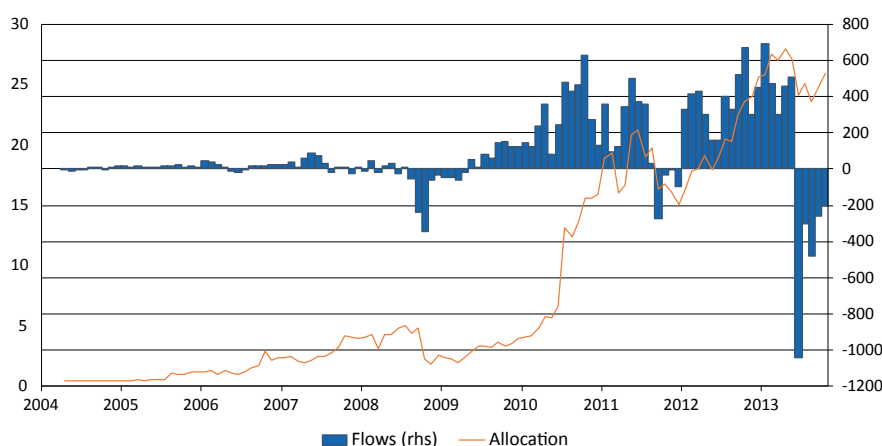
B. MONETARY POLICY, AND GLOBAL FINANCIAL INTEGRATION

As documented in section B, there has been a growing presence of private sector institutions in African

debt markets. In particular, SSA bond markets have expanded substantially in recent years, suggesting a greater integration of these countries into the global financial system.

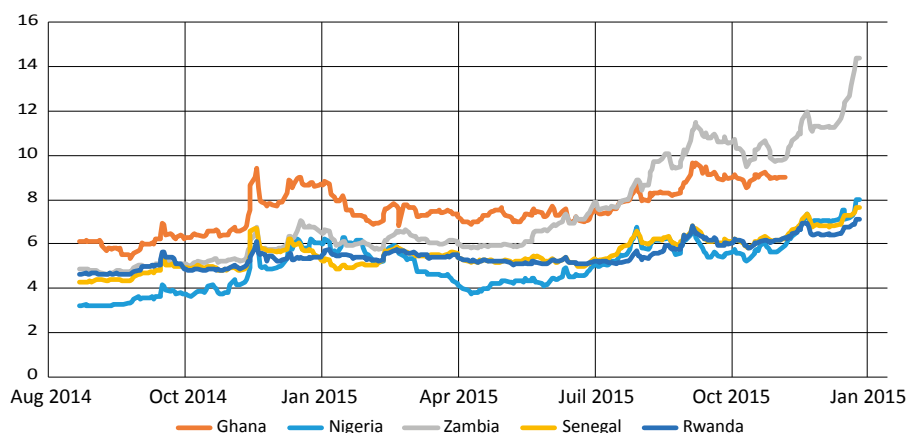
Figure 21 presents data of flows and allocation to SSA bonds intermediated by mutual funds. It is evident that monthly flows become much more substantial overtime. For example, in June 2013 alone, there were outflows of over a billion of US dollars from the region's bond markets. As a comparison, in October 2008, at the peak of the Lehman Brothers crisis, the outflows were about US\$ 350 million. As also evident from figure 21, flows to African bond markets have been positive most of the time in the post-crisis years, with dips in the second half 2011 and 2013. As a result, asset holdings – which also include capital and

Figure 21. Flows and allocation to SSA bonds funds



Source: Author's calculation based on Emerging Portfolio Research Fund, allocations are in US dollar billions, while flows are in US dollar millions

Figure 22. Spreads



Source: Author's calculation based on Bloomberg

Note: Yield spreads are calculated as the difference between the yields on foreign currency bonds, based on indices for each of the countries, and the yields on Bloomberg bond index for global developed countries debt.

currency gains –soared to about US\$ 26 billion at the end of October 2013. Compared to the figures shown above, this is more than a third of the size of the bond markets, indicating a substantial participation of asset managers into African bond markets.

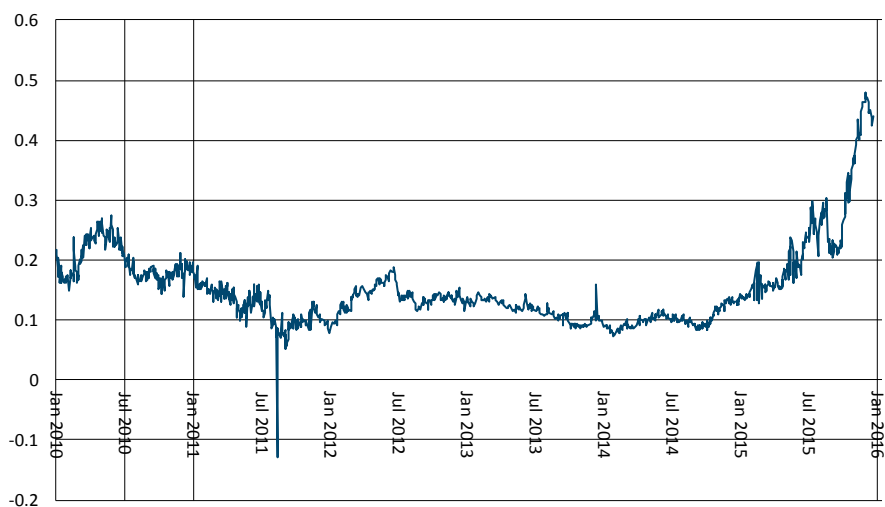
Foreign portfolio investment in the bond markets of SSA has aligned yields in those markets more closely to global bond markets. Figure 22 shows the dynamics of the yield spread over global bond yield indices for selected African countries, clearly showing a co-movement of spreads across countries. The rise in risk-premium on SSA countries is particularly evident in the second half 2015.

Risk-premia and spreads may be driven by either fundamentals or non-fundamental related factors. Indeed, a partial connection to the previous subsection indicates that commodity prices themselves, and their impact on current accounts, may have an impact on bond allocations. For example, Zambia is a prominent exporter of copper, which accounts for about 80% of the country's exports⁹. The fall of copper prices since 2011, shown in figure 18 may be indeed a reason why spreads have soared from 6% to over 15%, as investors become less confident in the country's potential for growth as well as the impact that commodity prices may have on the balance of payments. The slowdown in economic growth in China, a major commodity importer, is likely to generate further concern about the ability of borrowers in commodity exporting countries to service their foreign debts.

Besides these fundamentals, there is considerable evidence of a major shift in perceptions of risk in

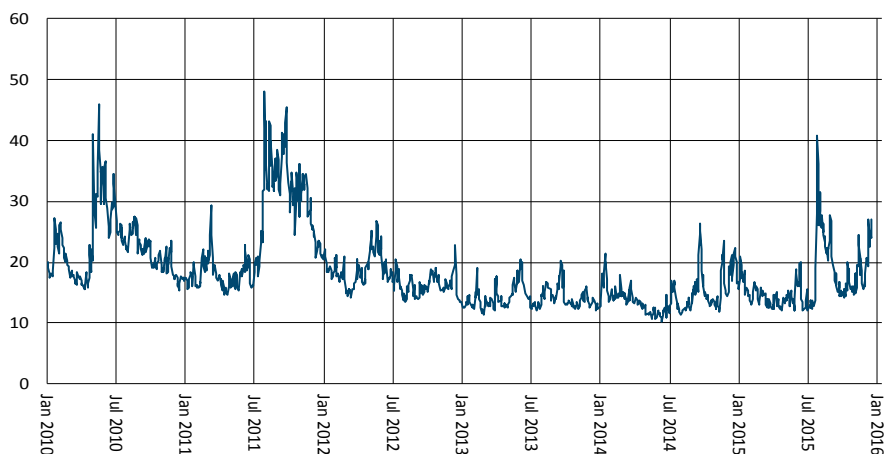
international capital markets, driven by expected changes in US monetary policy (Shin, 2012; Rey, 2013). Whenever US monetary policy becomes highly expansionary, with low interest rates and ample provision of liquidity, investors and lenders become more risk-seeking, reducing global risk-premia and spreads. Conversely, any prospect of monetary tightening tends to increase risk-premia, as investors become more risk-averse and invest in safer assets. With their emerging integration into global financial markets, SSA bond yields may indeed be affected by these processes. Figure 23 shows the expected 3-months US Treasury Bill rates, which can be seen as an indication of future monetary policy actions, as T-Bill rates tend to follow quite closely the FED's policy targets. It is very clear that international investors have been expecting a rise in interest rates throughout 2015, and therefore anticipating a monetary policy tightening, which in fact occurred in December. This could have contributed to explain why many SSA countries' spreads have been increasing in the same period. A frequently used indicator of investors' confidence is the Volatility-Index (VIX), shown in figure 24, which measures the implied volatility that investors expect from the S&P 500 index. Higher levels mean high expected volatility and therefore lower investors' risk appetite. Spikes in the VIX index can be seen in May 2010, the summer of August 2011 and August 2015, all notoriously turbulent periods for financial markets. Comparing this with figure 20 and 21, it can be clearly seen that during these periods inflows were much lower (May 2010) or negative (Summer 2011), and spreads soared (second half of 2015).

Figure 23: Expected 3-month US Treasury Bill Rate



Source: Bloomberg

Figure 24: Implied Volatility

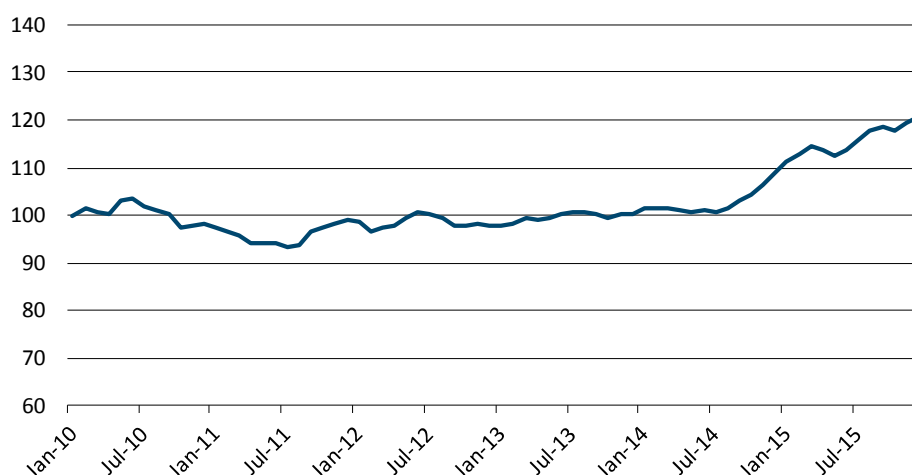


Source: Bloomberg

Finally the strengthening of the US dollar, as shown in Figure 25, which is also widely associated with the FED monetary policy stance, may also partially explain the increasing yields in SSA countries. As expectations are formed about the tightening of the FED's monetary policy, the US dollar appreciates and SSA currencies depreciate, increasing the burden of debt on the real resources of the economy. This may indeed reinforce the increasing yields in many of these countries, as investors become wary of increasing external debt burdens, and therefore require higher risk-premia. Many of the currencies in Sub-Saharan Africa are informally tied to currencies in Europe, with which they do most of their trade. In the case of the

Franc Zone, this is a formal currency board with the Euro. Fluctuations in the value of the US dollar against the Euro and European currencies therefore affect the real value of their external debt, which is mostly in US dollars (see figure 6 above).

In summary, the evidence presented in this section suggests that indeed the greater presence of private sector institutions into the SSA debt markets does make their financing conditions more closely dependent on global financial market trends. While the access of these countries to more diverse sources of credit can be potentially positive for external debt sustainability, it also adds the vulnerability of global

Figure 25: US Dollar Nominal Exchange Rate

Source: Bloomberg

financial factors to the traditional balance of payment concern. As SSA remains still a very small proportion of global bond markets, their sensitivity to global shocks may indeed be particularly serious. The integration of their markets into the global financial system therefore needs careful scrutiny to ensure that it does not generate more instability than benefits.

III. DEBT SUSTAINABILITY CRITERIA

The sustainability of a government is usually measured by reference to criteria of sustainability given by various debt and debt service ratios. In the HIPC discussions these were:

- a. The Net Present Value of Debt-to-Exports ratio;
- b. The NPV of debt-to-revenue ratio.

Other ratios were also commonly used to assess sustainable levels of government debt:

- c. NPV debt-to-gross national income (GNI) ratio;
- d. The Debt service-to-GNI ratio;
- e. The Debt service-to-exports ratio; and
- f. The Debt service-to-revenue ratio.

These criteria have a long history, going back at least to the international debt crisis of the 1980s, when commercial banks, multilateral lenders and the Bretton Woods institutions pored over such data to judge the credit-worthiness of borrowers and the value of existing loans. The criteria acquired a new

operational significance with the Heavily Indebted Poor Countries Initiative of 1996, which gave rise to some discussion of criteria for debt-sustainability, encouraged by the prospect of debt reductions, under the initiative, for poor countries whose governments could show that their debts were unsustainable. In the course of this it was argued strongly that the Initiative's debt sustainability criteria are not objective and lack a robust theoretical justification (see especially UNCTAD 2004 chapter II; Gunter, 2003; Hjertholm, 2003; and Sachs, 2002). On the other side, the World Bank argued that, given their limitations, the criteria were appropriate measures (Gautam, 2003).

The debt sustainability criteria may be criticised for taking an unduly mechanical view of debt sustainability. Such ratios typically take the current and future structure of financial obligations as given, and to be matched with a given gross income-generating capacity in an economy, determined by economic resources (labour, natural resources), a given capital stock, and economic growth, determined by the growth of domestic and foreign demand for the output of the economy, with limited scope (and least in developing countries) for the government, through monetary and fiscal policy, to influence that demand. In practice, except in times of economic crisis, debt structures are rather more variable where refinancing offers opportunities to change the terms and maturity of financial obligations. The second limitation of the debt sustainability criteria is that they do not take into account private sector debt which has become a factor in emerging market financial economic crises since the 1994 Mexican crisis. In the twenty-first century, private sector external debt is also a factor in

sovereign debt sustainability because, for reasons of financial stability, governments cannot walk away from private sector external debt difficulties.

A second way in which this chapter broadens out the traditional debt-sustainability criteria is by taking into account the maturity structure of foreign debt. This appears in the traditional criteria as various debt-service ratios (criteria d to f above), which tend to rise as debts mature, because short-term debt increases debt service by adding principal repayments to interest payments. Such a rise in debt service would indicate improving sustainability (because debt is being paid off). On the other hand a low debt-service ratio may indicate that accumulated interest and principal will be much greater in the future and may then be unsustainable.

The appendix to this chapter explains how debt-service ratios change with refinancing along the yield curve, and with liquidity cycles in international financial markets.

This chapter therefore takes a broader view of sovereign debt sustainability, informed much more by twenty-first century experience of debt crises arising in a world in which banking markets are much more integrated than they were in the last century, with greater scope for refinancing to vary debt structures, but also new threats to government debt sustainability coming from the private sector and fluctuations in the liquidity of international capital markets. This is further explained in sector 4 of this chapter.

IV. POLICY CONSIDERATIONS AND IMPLICATIONS

It is widely recognised in the debt sustainability literature that the soundness of a government's external debt position depends on the macroeconomic structure of the economy over which the government attempts to exercise policy jurisdiction and its existing foreign debt obligations. However, the structure of those external debt obligations is also fluid at the margin, and not just because missed payments lead to mounting arrears. This fluidity can lead to significant changes in the composition and maturity structure of debt. By composition we mean here the respective shares of private and public external debt.

A. INTERDEPENDENCE WITH PRIVATE SECTOR FOREIGN INDEBTEDNESS

The development of private sector external indebtedness is crucial in the matter of government sector external debt sustainability for the following reasons:

First, private sector external indebtedness affects the foreign currency reserve position of a country. Even where there are capital controls¹⁰, the surrender of foreign currency borrowed abroad and brought into a country adds to the foreign currency reserves of that country. Although foreign currency reserves are an asset of the government, they hedge not only the foreign indebtedness of the government, but also of the private sector, in the sense that the private sector may draw on those reserves. An imposition of capital controls to prevent the private sector drawing on the reserves amounts to allowing the exchange rate to float, with usually destabilising consequences for the value of the domestic currency and potentially catastrophic consequences for the sustainability of government sector debt: while the value in the domestic currency unit of foreign currency reserves may increase as a result of the devaluation of domestic currency, the value of external government borrowing, usually much greater than the foreign currency reserves, would also rise *pro rata*.

Second, governments cannot totally disregard the external borrowing of their private sector when that borrowing is imperilled. In the case of trade finance, which normally makes up the bulk of private external short-term borrowing, this is usually insured through government export credit insurance facilities in Europe and North America, as a way of supporting those countries' export trade. Failure to make payments is compensated by the export credit insurance, which turns the unpaid trade credit into an official claim of the exporter's government against the government of the importing country. In this way trade debts between private firms become claims against governments. In small dual sector developing countries, where the more dynamic modern sector is strongly integrated with foreign markets, large private businesses are more likely to be 'systemic' in the sense that a breakdown in their private external debt payments may have catastrophic effects on the business cycle. The scope and impact of such a breakdown have increased in recent years as a result of policies of privatisation. A responsible government could not ignore these broader macroeconomic consequences of private sector foreign indebtedness and may even come under pressure from governments of countries where creditor banks are based to take over the management of the private sector debt. This is likely to be enhanced by the fact that the line between the private and public sectors is blurred even in free market economies¹¹. The usual market way of resolving unsustainable private sector debt is through a recession, which imposes additional fiscal burdens on governments at a time of shrinking tax revenues. The result is a rise in public sector debt.

Co-financing of commercial lending by multilateral lending agencies such as the International Finance Corporation, or ‘blending’ of official aid in order to leverage in additional development finance (Bonizzi, Laskaridis and Toporowski 2015) reinforces the informal obligation of governments in developing countries to support foreign borrowing by the private sector in that country. Even multinational corporations that are formally financed outside the developing countries in which they operate¹² can usually dictate concessional terms from governments in return for continuing their operations when those corporations’ financial circumstances deteriorate.

Third, and to some extent arising out of government support for the private sector in a country, sovereign debt and its sustainability depends on the extent and direction of refinancing of government debt into private sector debt. This is illustrated by the case of the Mexican government’s foreign borrowing at the end of the 1980s. A combined process of opening its capital account to portfolio finance and privatising state corporations, allowed the Mexican government to generate a portfolio capital inflow whose proceeds were used to refinance foreign currency debt into domestic currency debt. In theory domestic currency debt is more sustainable because the government may determine more easily its revenue in domestic currency and has the option of taxing wealth-holders in its country. It should however be pointed out here that the private sector foreign financing boom ended badly with a devaluation of the Mexican peso at the end of 1994 that negatively affected Mexican corporations financed abroad, as well as the Mexican government which had taken to financing its deficit with so-called *tesobonos* offering repayments linked to the exchange rate of the dollar. However, this kind of refinancing of public sector foreign debt into private sector obligations is perhaps only really available to middle to high income countries such as Mexico. In Sub-Saharan Africa such a refinancing of external government debt to private sector financing has limited possibilities, although these are increasing as countries develop.

Related to this is the issue of debt and interest as purely distributional variables. Government debt is often treated as a ‘burden of future generations’¹³, omitting to explain that an obligation to pay interest and principal to future generations also means that some members of future generations will receive such payments from other, tax-payer members of future generations. This is complicated when such debt is foreign debt, so that the obligation is to make payments to foreign residents. This may arouse nationalist resentment, as it did during the 1980s debt crisis. But there is another reason why foreign debt

is less sustainable than domestic debt. Domestic debt may be more easily devalued by a government through inflation, and its corresponding inflation of tax revenue. And even if a government follows the virtuous path of stable prices, a government has the option of levying an annual wealth tax to defray the cost of its domestic borrowing and, in this way, obliging holders of government debt themselves to pay through their taxes some portion of the payments on that debt.¹⁴

This means expanding the fiscal base may be less relevant for the poorer countries of Sub-Saharan Africa with comparatively narrow fiscal bases. But it remains a possibility for countries in the region as their domestic fiscal base expands and offers greater room for manoeuvre. In this respect, UNCTAD’s Debt Management and Financial Analysis System (DMFAS) has important potential.

B. THE INTERNATIONAL MONETARY CYCLE

In the previous section A, it was argued that the profile of government debt and its sustainability cannot be separated from private sector debt, both domestic and external because refinancing into private sector debt is a technique of sovereign debt management, and because governments cannot completely shed responsibility for private sector debt. This section considers the international monetary cycle that determines the liquidity of international capital markets and hence the potential for private and public sector external indebtedness, as well as the potential for refinancing along the yield curve.

As outlined in section II.B above, the international monetary cycle is driven by the monetary policy of central banks in countries that are international financial centres or intermediaries, principally the United States of America, but also Great Britain, Switzerland and the European Monetary Union, and to some extent also Tokyo and Singapore. The monetary cycle determines the liquidity of capital markets in those financial centres, in the sense that changes in central bank interest rates alters the composition of financing in those centres, because the relative cost of different types of financing is changed, and also in the sense that open market operations, such as the recent ‘quantitative easing’, exchange central banks reserves for long-term securities, thereby making markets for those securities more liquid. In the case of international financial centres, the liquidity of their capital markets necessarily includes the liquidity of international markets.

For example when the Bank of England buys a British Government bond from an insurance company, the

insurance company is left with a more liquid portfolio. Since financial institutions in London hold international portfolios, i.e. the insurance, the maturity of whose portfolio is determined by insurance regulations and the structure of its liabilities, rather than the monetary policy of the British Government. The insurance company will therefore buy another security to replace the one purchased by the Bank of England. In this way, the bank deposit that the insurance company got for the security initially sold to the Bank of England, will circulate around international securities markets, making it more liquid, driving up prices and making it more attractive for governments and companies to issue longer-term securities.

Capital controls affect the direction of flows in the international capital market both when capital controls seek to exclude such flows, and when such flows are allowed. The elimination of capital controls in the United States and the UK during the 1970s made London and New York into international financial centres where institutional investors were able to diversify their portfolios internationally. The maintenance of capital controls throughout most of the rest of the world concentrated their diversification efforts on those markets that were accessible, such as Switzerland, Luxemburg and the Netherlands. The process of inflation in the international capital market then extends the maturity of loans that may be issued.¹⁵

In the early years of this century, the international capital market had experienced a degree of inflation when the Federal Reserve loosened monetary policy in the wake of the dotcom bubble collapse in 2000. The market then suffered a major breakdown or illiquidity in 2008-2010, as a result of the well-known over-issue of collateralised debt obligations by commercial banks and subsequent efforts by those banks to repair their balance sheets by issuing further capital. The response of central banks was the policy of aggressive buying of long-term securities known as 'quantitative easing'. This was the kind of inflation of the international capital market that allowed Ghana to issue its Euro-bond in 2013.

V. CONCLUSION

The standard model of debt sustainability correctly identifies cash flows from macroeconomic structures, in the form of net export revenues and fiscal revenues, as the variables that determine the sustainability of given debt structures and the dynamics of those debt structures. For Sub-Saharan Africa, this approach gives the following determinants of the sustainability of debt structures:

1. The macroeconomic cycle(s) in the export markets of a country, that determine the direction in which those exports will evolve and hence, for the export-constrained economies of Sub-Saharan Africa, the foreign currency cash flow;
2. The macroeconomic cycle in the domestic economy that determines import and development financing needs;
3. The commodity price 'super-cycle' that determines the terms of trade of countries in Sub-Saharan Africa.

At any one time, the point reached in each of these cycles determines the evolution of the (income) cash flows available to service debt obligations and, in relation to a threshold cash flow needed to settle current contractual obligations, determines the dynamics of debt structures. Cash flows in excess of that threshold may be used for the early repayment of debt, or added to foreign exchange reserves as a hedge against future debt repayments. Cash flows below that threshold then require postponement of payment and the build-up future debt obligations.

However, the analysis of these cycles gives only a first approximation to the processes that actually happen in the creation and evolution of international debt structures. As indicated in section I above, on this first approximation, the macroeconomic fundamentals for debt in Sub-Saharan Africa do not look good: low growth in key export markets and the fall in export commodity prices suggest debt problems. To this indication two key interrelated elements must be added to give a more complete analysis of sovereign debt sustainability. The first of these is the private sector external indebtedness. This is outside government control. The government may choose to try to control such indebtedness through capital controls. However, as explained above, this does not mean that the economy can be independent of developments in commercial markets for international finance.

The second element is the international monetary cycle that determines the liquidity of the international capital market. In turn, that liquidity determines the ability of the private sector to extend its foreign borrowing. This is particular importance for the development of private sector business in Sub-Saharan Africa. With the exception of South Africa, local financing possibilities in domestic currency are relatively undeveloped, may have little purchase abroad and may, in any case, be handicapped by the lack of entrepreneurs' own financial resources. This means that private sector capital will be dominated by multinational businesses

which are the most prominent non-financial corporate borrowers in the international capital markets.

The growth of private sector foreign borrowing (see section II.A above) has therefore increased the vulnerability of cross-border debt structures in Sub-Saharan Africa to the next down-turn in the international monetary cycle¹⁶. To some extent this is off-set by the shift in cross-border sovereign borrowing towards the longer end of the maturity spectrum, where debt service payments are less burdened by principal repayments. However, the monetary cycle itself is not strictly linked to the monetary policy of the key central banks in the international financial system. The impact of that policy on international capital markets depends on the willingness of largest multinational corporations to reduce the liquidity of their balance sheets and resume investing in fixed capital, to restart the upturn in the macroeconomic cycle in the export markets of Sub-Saharan Africa and reverse the downturn in commodity prices. Failing such a revival, even continued loose monetary policy in the global financial centres is unlikely to reach Sub-Saharan Africa to facilitate debt-refinancing in the face of reduced cash flows.

A key immediate requirement is the monitoring of foreign borrowing by the respective governments and the private sector in Sub-Saharan Africa in light of the deteriorating macroeconomic fundamentals and the international monetary cycle. This is perhaps even more urgent than in middle income countries because of the fragility of domestic markets (except perhaps in South Africa and Nigeria) and the marginal position of Sub-Saharan Africa in the international capital markets to which it has been exposed. In the longer-term, there is a need for new institutional structures of international debt management to avoid the kind of destructive economic processes that accompanied the rescheduling of international debt in the 1980s and the 1990s.

Finally, it should be pointed out that the countries of the Franc Zone, in West and Central Africa, have a special situation because of the currency board that links their currency to the CFA Franc. Although government external debt is relatively low in these countries, due to the fiscal restrictions placed on governments in the Zone and debt reductions under the HIPC programmes, these countries too have experienced a large growth in private sector debt in recent years. Lesotho, Swaziland and Namibia make up a monetary union with South Africa, and this means that their monetary cycle is essentially determined within the region.

APPENDIX: THE DEPENDENCE OF SHORT-TERM DEBT ON LONG-TERM FINANCING POSSIBILITIES

Unsustainability of external debt is widely associated with a build-up of short-term foreign debt (World Bank, 2000) – a well-known fact in the financial markets since the late 1970s. For this reason, short term capital flows (or ‘hot money’) are widely regarded as destabilising and are the common target of capital controls as an instrument of financial stabilisation policy of governments (see Gallagher 2011, UNCTAD 2015, p. 46). There is a common view in the critical literature that the dysfunction of short-term capital flows is inherent in such financing, because short-term financing requires rolling over if it is not to be a drain on the reserves of the unit (government or company) financing themselves in this way. However, the literature tends to ignore the motivation for rapid accumulation of short-term obligations that arises from dysfunctions in the long-term debt market.

In general, governments and private sector borrowers prefer to borrow long-term. This is because longer-term borrowing postpones the repayment of principal and thereby reduces the debt-service drain on income. Except in the case of floating rate loans, long-term borrowing stabilizes the cost of finance. Moreover, where the financial deficit that the borrowing covers is short-term (for example, in the case of trade finance or a bridging loan), a long-term loan offers a liquid reserve for the period(s) during which the loan is not needed. For example, supposing that a borrower needs a trade credit for three months, in order to import medical supplies, with the credit being repaid over three months from the sale of those supplies. However, the borrowing agency (government or commercial) finds that the loan can be borrowed for a year. It is then preferable for the agency to borrow for the longer term because for the remaining nine months of the term of the loan, the agency has the funds to repay the loan under its own control. Holding the funds as assets gives the agency a more liquid balance sheet which would reduce any further borrowing costs. Obviously, if the yield curve is normally upward-sloping, there is a cost to this, in the form of the margin between the interest paid for the loan, and the interest received on the funds which the agency holds. But this may be a small cost to pay for having a more liquid balance sheet, ready access to funds for other purposes and so on (see Toporowski, 2008).

For these reasons, governments prefer to borrow long-term and the build-up of short-term borrowing is usually an indicator less of ‘excessive’ availability of speculative short-term capital but more as of inability

to borrow long-term. In other words, an excess of short-term borrowing is not so much a problem of its supply as it is a symptom of problems in the market for longer-term loans. This was very apparent in the 1982 debt crisis, when the build-up of short term borrowing was preceded by a shut-down of the primary market for new issues of developing country long-term debt.

It follows from this that an expansion of short-term sovereign borrowing is a result not so much of an increase in short-term capital in search of borrowers, as of a liquidity cycle in the market for long-term loans. When international capital markets are fairly liquid, sovereign or commercial borrowers have an option

to borrow long-term, and thereby save on financing costs, because of lower immediate repayments, and stabilise those financing costs. When international capital markets are illiquid, sovereign or commercial borrowers are forced to try to borrow short-term, in the hope of 'funding', or refinancing, their short-term borrowing into longer-term borrowing when the liquidity of the international capital market picks up. The 1982 international debt crisis was largely resolved by refinancing into longer-term IMF and World Bank borrowing. As indicated above in section I, since the turn of the century the maturity structure of sovereign debt in Africa has moved significantly towards longer maturities. This 'funding' reflects the greater liquidity of international capital markets since 2000.

NOTES

1. All figures in this part of the chapter are from the World Bank World Development Indicators, unless otherwise stated.
 2. Source: World Bank Development Indicators
 3. In most of these figures the 2005 looks like an outlier. When broken down by country, this looks entirely driven by Nigerian figures, which look anomalous in that year and, given the size of the country, bias the aggregate figures.
 4. <http://www.africaresearchinstitute.org/publications/africa-debt-rising-2/>
 5. These figures refer only to long-term debt, since short-term debt figures in the World Bank database do not allow for a distinction between private and public debt.
 6. See for example this fund by JP-Morgan, which includes the benchmark allocation of the EMBI index <http://www.jpmorganassetmanagement.lu/en/showpage.aspx?pageid=44&fundid=22&shareclassid=7605>
 7. See for example Borio and Disyatat (2011)
 8. The state of commodity dependence 2014, <http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=1171>
 9. Zambia UN Comtrade report. <http://comtrade.un.org/pb/FileFetch.aspx?docID=5830&type=country%20pages>
 10. It is often presumed that capital controls seal off a country's domestic financial system from international finance. This has never been the case for key parts of the private sector, for example large corporations in South Africa. A more nuanced view has always been that capital controls *distort* capital flows, rather than eliminating them, and that certain planned distortions may improve the efficiency of domestic finance (see Diaz Alejandro 1984, UNCTAD 2015, p. 49). Dollarization may also transfer private sector external borrowing into the country with adverse effects for the stability of borrowing in both foreign and domestic currencies. Cf. Berg and Borensztein (2000).
 11. The border between the private and public sectors is perhaps most obscure in those countries most publicly dedicated to private enterprise, where such dedication is supposed to show itself by public sector support, including financial support, for the private sector.
 12. We distinguish here between *developing* countries, whose financial systems are not integrated into the international financial system, and *emerging* markets, whose financial systems are more open and in the process of integrating with the international financial systems. In Sub-Saharan Africa, South Africa is the only emerging market. It is often thought that the difference between developing countries and emerging markets is the existence of capital controls enforced by governments of the developing countries. However, in practice, capital controls seem to make little difference in determining whether a country is 'emerging', or merely developing: South Africa has capital controls, while the countries of the Franc Zone have limited capital controls but nevertheless poorly developed financial systems.
 13. Notably in the 'Ricardian Equivalence' narrative.
 14. This kind of capital levy was advocated by famous economists such as David Ricardo, John A. Hobson. John Maynard Keynes, Joseph Schumpeter and Michał Kalecki.
 15. The process is essentially much the same as the inflation of international banking in 1974, which resulted in a boom in syndicated lending until the international debt crisis of 1982. See also the Appendix to section 2.2 above.
 16. The picture here needs of course to be disaggregated by country, as well as between government and private sector borrowing. Disaggregating by country raises the issue of scale: the markets of Sub-Saharan Africa are dominated by two countries that account for the vast bulk of private sector foreign borrowing, namely South Africa and Nigeria. In the remaining countries public and publicly guaranteed foreign borrowing predominates.
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REFERENCES

- Akyüz Y (2013) 'Waving or drowning? Developing countries after the financial crisis' *Research Paper* No. 48, South Centre, Geneva.
- Berg, A., and Borensztein, E., (2000) 'The pros and cons of full dollarization' *Working Paper* No. 00/50, Washington DC: International Monetary Fund.
- Bonizzi, B., Laskaridis, C. and Toporowski, J. (2015) *EU Development Policy And The Promotion Of The Financial Sector*, Working paper, Financialisation, Economy, Society & Sustainable Development (FESSUD) Project.
- Borio, C. and Disyatat, P. (2011) *Global Imbalances and the Financial Crisis: Link or No Link?*, BIS Working Paper, Bank for International Settlements.
- Collier, P. (2002) *Primary Commodity Dependence and Africa's Future*, The World Bank.
- Díaz-Alejandro, C.F., (1985) 'Good-bye financial repression, hello financial crash' *Journal of Development Economics*, Vol. 19, No. 1-2, pp. 1–24.
- Gallagher, K. (2011) 'Regaining Control? Capital Controls and the Global Financial Crisis' *Working Paper* No. 250, University of Massachusetts Amherst, Political Economy Research Centre.
- Gautam, M. (2003) *The Heavily Indebted Poor Countries (HIPC) Debt Initiative, An OED Review* Washington, DC: World Bank, Operations Evaluation Department (OED) (www.worldbank.org/oed/).
- Gunter, B.G., (2003) 'Achieving Debt Sustainability in Heavily Indebted Poor Countries (HIPC)' in Ariel Buira (ed.) *Challenges to the World Bank and IMF, Developing Country Perspectives* London: Anthem Press, pp. 91–117.
- Hjertholm, P. (2003) 'Theoretical and Empirical Foundations of HIPC Debt Sustainability Targets' *Journal of Development Studies*, Vol. 39 No. 6, August: pp. 67–100.
- Rey, H. (2013) *Dilemma Not Trilemma: The Global Financial Cycle and Monetary Policy Independence*, Jackson Hole, Federal Reserve Bank of Kansas City.
- Sachs, J.D., (2002) 'Resolving the Debt Crisis of Low-Income Countries' *Brookings Papers on Economic Activity*, 2002 (1): pp 257–86, Washington DC: The Brookings Institution.
- Shin, H. S. (2012) 'Global Banking Glut and Loan Risk Premium', *IMF Economic Review*, 60, 155–192.
- Toporowski, J., (2008) 'Notes on Excess Capital and Liquidity Management' *Working Paper* No. 549, Annandale-on-Hudson, New York : The Jerome Levy Economics Institute of Bard College, November, pp. 1-10.
- UNCTAD (2004) *Economic Development in Africa Debt Sustainability: Oasis or Mirage*. New York and Geneva: United Nations.
- UNCTAD (2014) *Debt Management and Financial Analysis System Programme, Annual Report*. New York and Geneva: United Nations.
- UNCTAD (2015) *Trade and Development Report, 2015* Geneva: United Nations.
- World Bank, (2000) 'The Benefits and Risks of Short-term Borrowing' *Global Development Finance* Vol. 1, May, pp. 77-95.
- Vellos, R. (2015) 'Sub-Saharan Africa's Sovereign Bond Issuance Boom', *Open Data*, accessed at <http://blogs.worldbank.org/opendata/sub-saharan-africa-s-sovereign-bond-issuance-boom> on January 23, 2016.

SOVEREIGN DEBT SUSTAINABILITY IN SUB-SAHARAN AFRICA

Additional report: individual countries debt conditions and projections

BRUNO BONIZZI AND JAN TOPOROWSKI

ABSTRACT*

This report complements the main chapter discussing the debt sustainability of Sub-Saharan African (SSA) countries. It will first present statistics on debt sustainability issues raised in the main report, for selected economies. It will then proceed to project some of the debt statistics, under very simple assumptions, to highlight the relevance and significance of the factors highlighted in the main paper for SSA external debt sustainability. The countries selected are Ghana, Kenya, Nigeria, South Africa and Zambia.

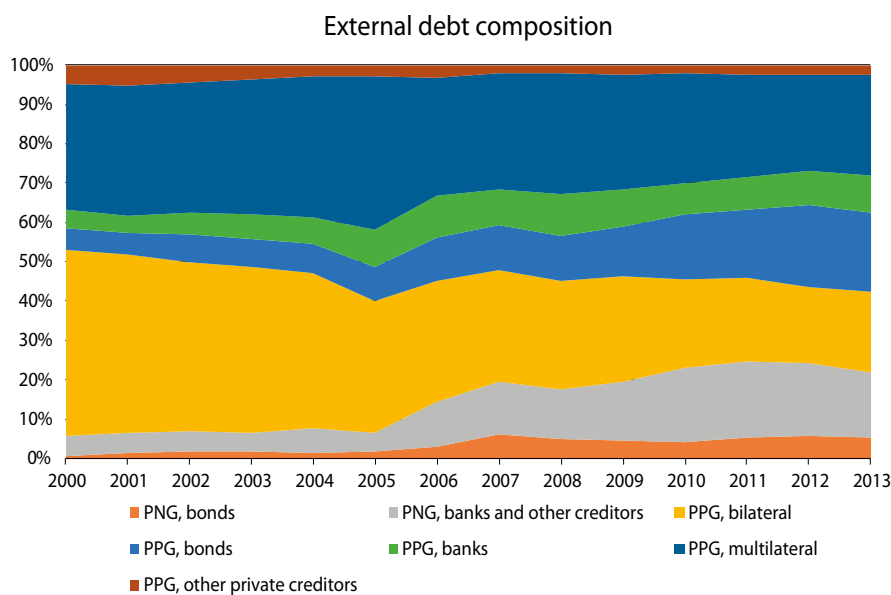
* Original submitted in 2016.

INTRODUCTION

In the main chapter, the trends of external debt statistics of SSA were presented. It was shown that, according to several broad indicators, SSA debt has become more sustainable over the past fifteen year, although the process shows signs of potential reversal in the very recent periods. Over the same period, the private sector has become more important both as foreign creditor and borrower from SSA countries. The sustainability of SSA external debt is closely related, on the one hand, to the super-cycle of commodity prices, which continues to be a driving force behind trade balances, and on the other hand to the conditions of global financial markets, a factor that becomes more important as private sector institutions increase their importance in SSA debt markets.

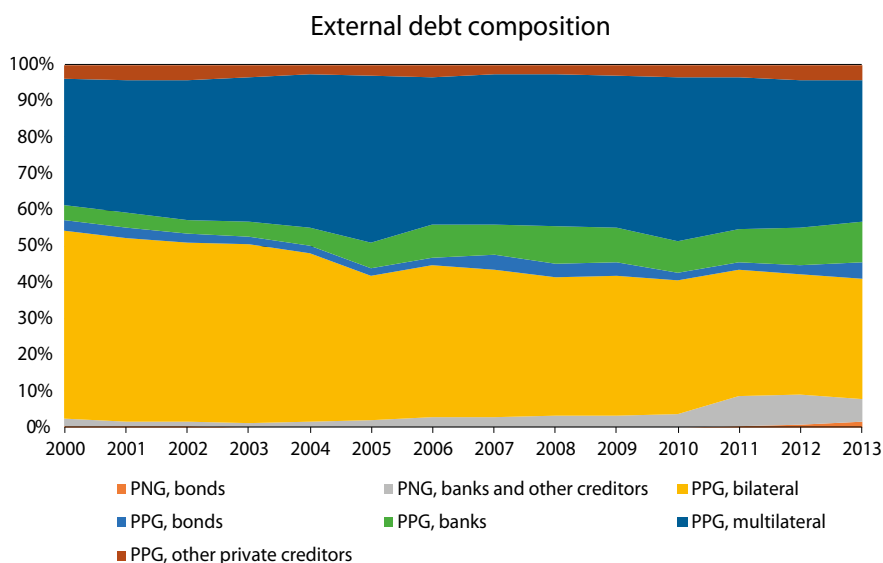
Looking at country-specific statistics is informative, not least because of the heterogeneous size of the country components. South Africa, unlike the rest of SSA, is considered an ‘emerging market’ rather than a developing country, with a longer history of financial integration. As a matter of fact, at the end of 2013 South Africa alone represented about 38% of total external debt from the region. Comparing Figure 1 – which is also shown in the main paper – with Figure 2, it is also clear that by excluding South Africa, the SSA external debt composition changes substantially. PPG debt from official creditors accounted for about 65% in 2013, compared to only 36% if South Africa is included, and the size of the bond market is drastically smaller.

Figure 1. External debt, SSA except South Africa



Source: Authors' calculations based on World Bank WDI

Figure 2. Sub-Saharan Africa total



Source: Authors' calculations based on World Bank WDI

While this snapshot would induce us to believe that the trends discussed in the main papers are simply driven by the dynamics of South Africa's external debt, this is actually not the case. Figure 3-6 show several key debt sustainability indicators for five selected SSA economies: Ghana, Kenya, Nigeria, South Africa and Zambia.¹ These figures testify the improvement and stabilisation in terms of external debt exposures.

Declines in gross and net debt to GDP and exports are evident across all countries. These countries also seem to converge to quite similar ratios, which are also in line with the regional statistics presented in the main chapter, and present similar dynamics over-time. If anything, South Africa seems to be an exception to the regional trends, in that most of its ratios have not substantially changed over-time.

Figure 3. External debt to GDP ratio

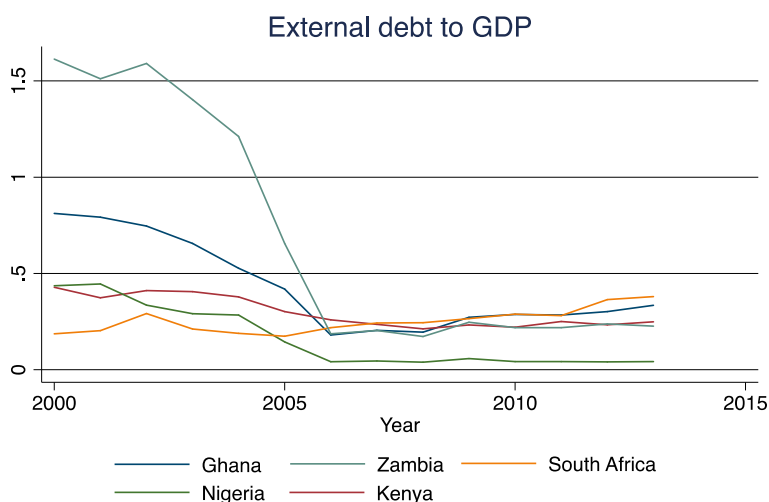


Figure 4. External debt to exports ratio

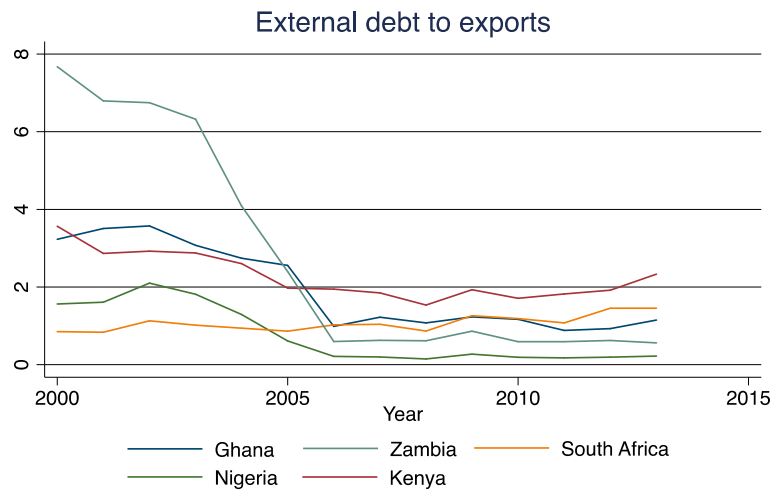


Figure 5. Foreign exchange reserves to GDP ratio

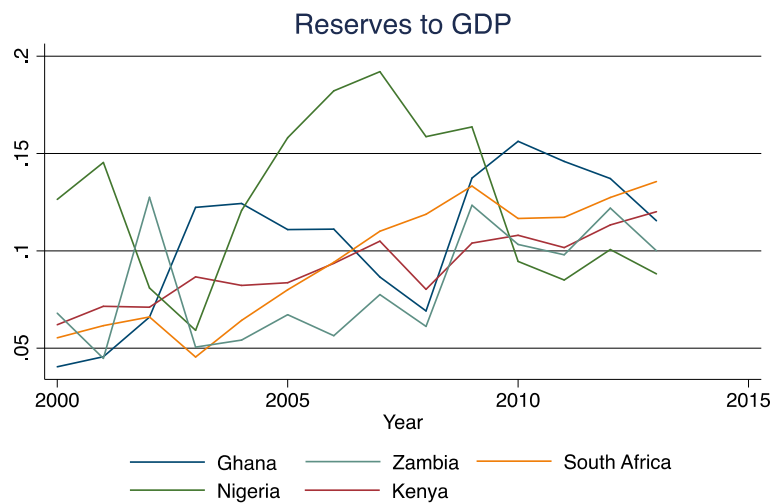
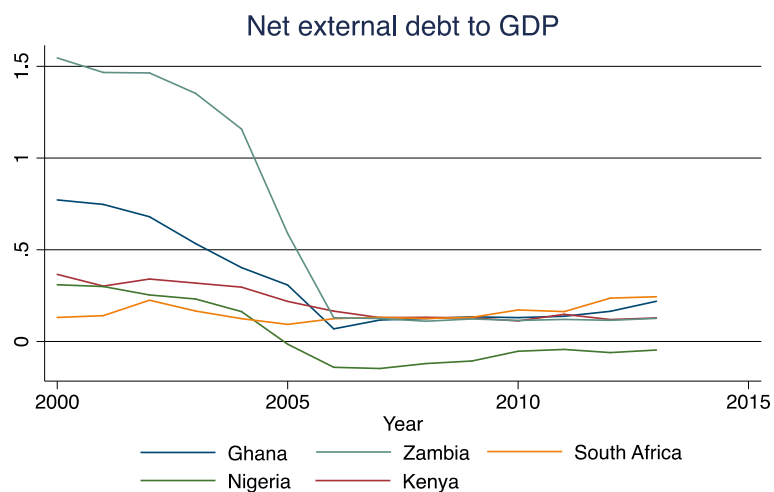


Figure 6. Net external debt to GDP ratio



More cross-country heterogeneity exists as to the presence of the private sector in the debt markets. As figure 7 shows, South Africa's external debt is fully in the hands of private creditors, whereas for Kenya the figure is 10%. In other countries, the share has been increasing overtime, especially in 2005-2007, so that private foreign creditors own about 40% of the external debt of Zambia and Ghana and about 60% of that of Nigeria. In terms of private sector foreign indebtedness, the situation is even more polarised: in Nigeria and South Africa, private borrowers have increased – dramatically so in Nigeria – to about 60% of total external debt. In Zambia the figure increased to about 50% in the 2005-2011 period, but has declined to 20% recently. For Ghana and Kenya, the proportion is negligible.

The increasing presence of foreign private lenders is therefore a relatively common phenomenon for SSA countries, but disproportionately affects the bigger and more developed countries in the region. In terms of private sector borrowing, the disparity is even more sizeable, since some countries are excluded from the process. While in the case of Nigeria and South Africa, this may be explained by the size and development of the economy², it is less clear why a country such as Zambia would see such a high development of private sector borrowing. A possible explanation may come from the fact, which will be shown below, that Zambia's export sector is substantial, so that, despite the relatively underdeveloped economy, export-oriented companies have easier access to international credit.

Figure 7. Private creditors

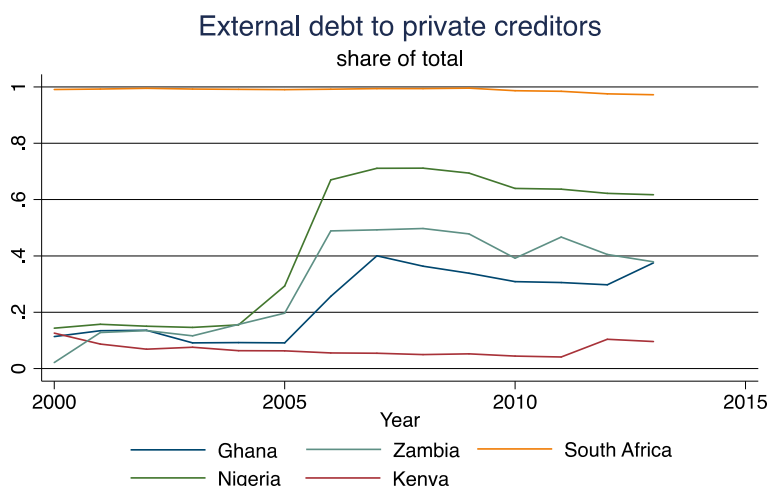


Figure 8. Private sector borrowing

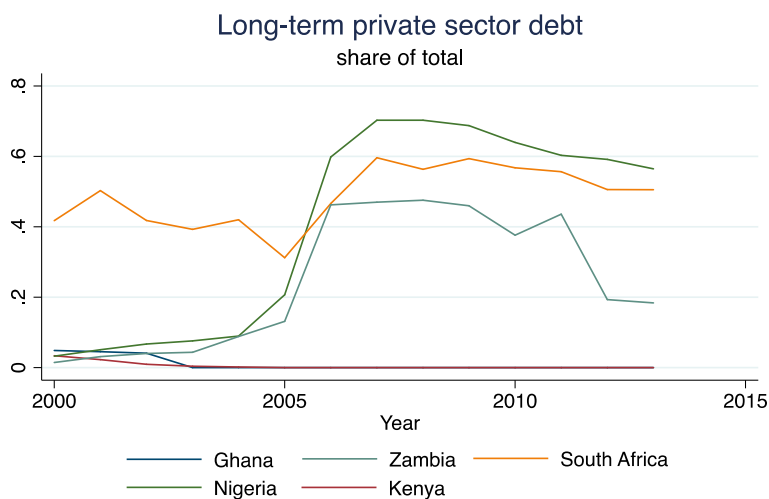
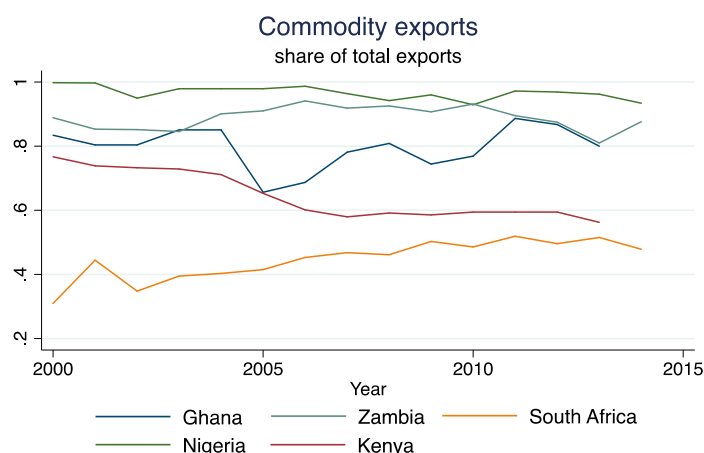


Figure 9. Commodity exports share

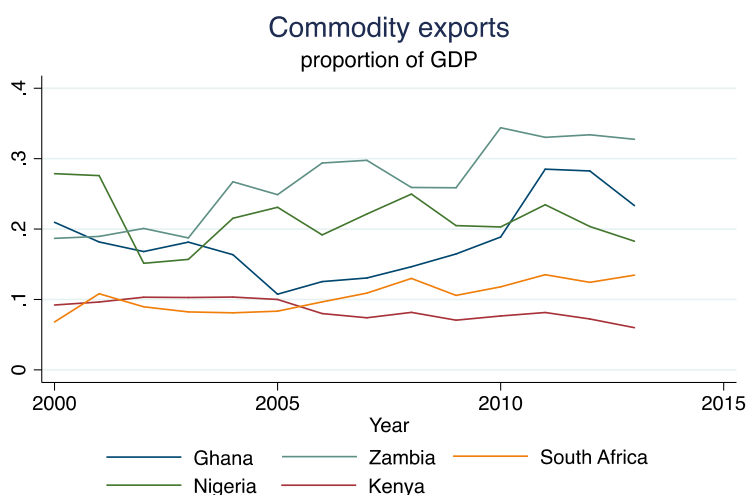


Source: Authors' elaboration based on UN Comtrade (through WITS)

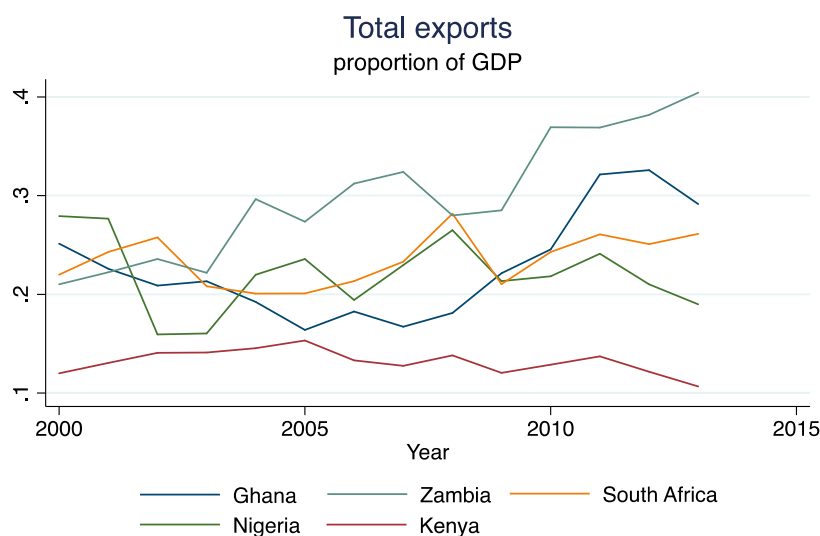
The dependence on commodity exports is also widespread across all the selected countries. As shown in Figure 9, only South Africa³ is below the commodity-dependence threshold defined by UNCTAD of 60%, but still shows a proportion of about 50%. Kenya has had a relatively stable proportion of commodity exports, which have accounted for about 60% since 2000. Zambian, Ghanaian and Nigerian exports are almost entirely consisting of commodities. In Nigeria this is entirely constituted by fuels exports, and copper-related exports in Zambia, whereas in Ghana it is a mixture of gold, oil and agricultural exports.⁴

Despite their relevance in the external trade of these economies, the impact of export revenues as a proportion of total economic activity varies across countries. As of 2014, in Zambia, commodity exports represent over a third of GDP, whereas in Nigeria the proportion is lower at about 20%. In Ghana, the ratio has sizeably grown overtime from about 12% in 2005 to 25% in 2014. In South Africa, the ratio has also increased but to a smaller extent, from 8% to about 15% of GDP. To the contrary, in Kenya these have actually declined from 10% to 6% of GDP in the same period.

Figure 10. Commodity exports to GDP



Source: Authors' elaboration based on UN Comtrade (through WITS) and EIU

Figure 11. Exports to GDP

Source: Authors' elaboration based on UN Comtrade (through WITS) and EIU

This shows that, although commodity dependence is a widespread phenomenon in SSA countries, the impact on the wider economy depends also on the size of the export sector within the economy. For example, Ghana and Kenya have similar GDP per capita values⁵, and their exports, as shown above in Figure 9, are commodity dependent, and similar in Kenya to a smaller extent. Nonetheless, as Figure 11 shows, Kenya's exports to GDP ratio is very low, oscillating between 10% and 15%, while those of Ghana have increased to about 30% of GDP. Although this can be explained partially by the bigger size of the Kenyan economy – if anything because the population size in Kenya is some 20 million bigger – the impact of commodity dependence, and therefore of the commodity price super-cycle, on the economy of the two countries is likely to be substantially different, despite their high reliance on commodities.

DEBT PROJECTIONS

This section presents a simulation exercise for the analysis of debt sustainability in the countries considered. The purpose of this exercise is not to give precise numerical estimation of the future of SSA external debt, but to show the relevance of the themes discussed in the main chapter for the impact on debt sustainability.

Assumptions made

The projections made in this exercise are not based on econometric estimation, nor a complete macroeconomic model. The key goal of the exercise

is to show what will happen to current accounts and net external indebtedness of the five SSA countries. This is achieved by projection forward of a few determining macroeconomic variables for the five countries, according to different scenarios. Projections are made for the 2015-2020 period. Several assumptions have therefore been made. First of all, the growth of countries nominal GDP excluding the current account (a proxy for domestic growth), exports, and imports, are projected to grow, subject to shocks, at the same rate as they did in the 2000-2014 period. Although it is possible that this assumption will not be met in practice, as global economic growth slows down, in the absence of a complete macroeconomic model for the domestic economy, this is a reasonable approximation. Secondly, the proportion of commodity exports to total exports, the share of private creditors to total external debt, the non-trade components of the current account (apart from debt payments) are assumed to be remained constant at their 2014 level.⁶

Thirdly, the proportion of current account that is covered by net foreign debt is assumed to be half for Kenya and Zambia, and one third for Ghana, Nigeria and South Africa. This assumption originates from both the stylised observation of the relationship between current accounts and net debt in the 2000-2014 period, and different levels of openness to foreign investments between the two country groups. Ghana, Nigeria and South Africa receive more sizeable inflows from portfolio equity and FDI than the other countries, and can therefore finance a current account deficit to a larger

extent without increasing their net indebtedness. Finally, the impact of the change in exchange rates is assumed away. This is due to two reasons: firstly, determination of the exchange rate would require a model of supply and demand of assets or a foreign exchange market, which is beyond the scope of these projections; secondly, it is assumed that, for commodity exporters, exchange rate movements will not have substantial impacts on exports, and, as for imports, the impact can be assumed to be null in net terms, by assuming that the elasticity to exchange rate is equal to unity, leaving the current account largely unchanged.⁷

Four scenarios are projected. In the first scenario, which constitutes a benchmark scenario, no additional shock is imposed on the system. In the second scenario, there is a one-period permanent decline in commodity price. These are assumed to be different across countries: for Ghana, Kenya and South Africa, the fall is assumed to be 28%, for Nigeria, 50%, and for Zambia 20%. These represent respectively the fall in the composite commodity price index, the oil price index, and the copper price index, presented in the main chapter, seeking to reflect roughly the type of commodity that different countries export. Exports will decline in line with the commodity share of exports. In this scenario, imports are assumed to fall one-to-one with the decline in exports as a proportion to GDP, but, as discussed above, there is no impact from the exchange rate.

The third scenario is equal to the second one, but no decline in imports given by the lower GDP is assumed. The idea behind this scenario is a global easing of monetary and financial conditions. Due to abundant global liquidity, despite the decline in exports, countries are able to finance a higher import bill.

The fourth scenario stands in contrast to the third one, in that it assumes a tightening of global monetary

and financial conditions. Interest rates that private creditors charge the countries rise by 2.7% - this number is an average of the increase in the spreads of government bonds across African countries in 2015. Dependent on their debt exposure, as well as the share of private creditors to total external debt, countries will face higher interest payments, and therefore a deterioration in their net factor income position.

As means of comparison, the projections made by the Economist Intelligence Unit are also shown.

Ghana

Ghana, as indicated in the previous section, has a relatively high exposure to commodity exports as a proportion of GDP, and about 40% of its external debt being held by private creditors. Its nominal GDP, exports, and imports growth rate were respectively 11.75%, 13.65% and 11.2%. Exports have therefore outpaced imports, which have grown in line with GDP, and as a result, with no shock the current account deficit would be eliminated by 2020, stabilising the net debt position – scenario 1.

Ghana's exposure to a commodity price shock is substantial, making the current account deteriorate by 5% of GDP in 2014. The strong export growth will however induce the current account deficit to decline overtime, back to a 10% level by 2020 – scenario 2. No adjustments on imports, as assumed in scenario 3, will induce the current account to deteriorate by an additional 2% points of GDP. Although the current account is projected to improve as in scenario 2, the larger deficit induces the net debt position to increase to over 60% of GDP. Ghana's exposure to an increase in interest rate spreads appears visible in the short-run, as indicated by a decline of an additional 0.7% of GDP of the current account, inducing a slight divergence in the path of long-term net debt to GDP ratios.

Figure 12.

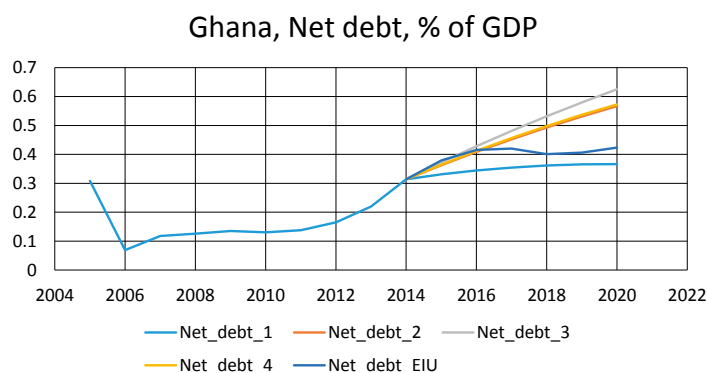
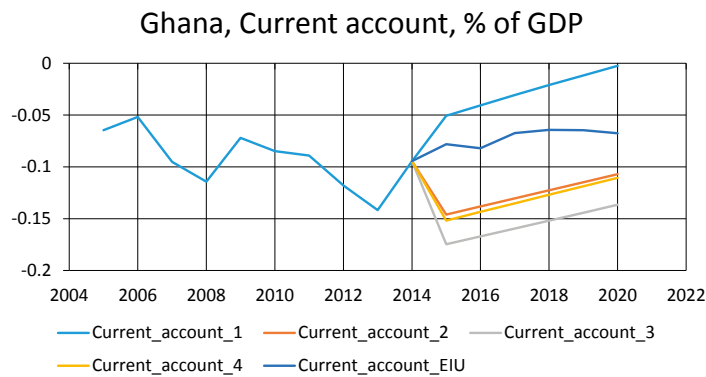


Figure 13.



Kenya

Kenya's export sector, and commodity exporting sector in particular, was shown to be the smallest as a proportion of GDP in the country sample. This is also reflected in the growth rate of its nominal exports, which have grown by 8.69% per year on average, while nominal GDP grew by a 10.69% and imports by 12.4%, suggesting the country is

dependent on imports to a greater extent than other countries. As shown in figure 15, this results in a downward linear trajectory of the current account, which has been going on since 2005, and if continuing in line with scenario 1, would deteriorate to almost 20% of GDP by 2020, with the result of a soaring net debt to GDP position, increasing from 18% to over 60%.

Figure 14.

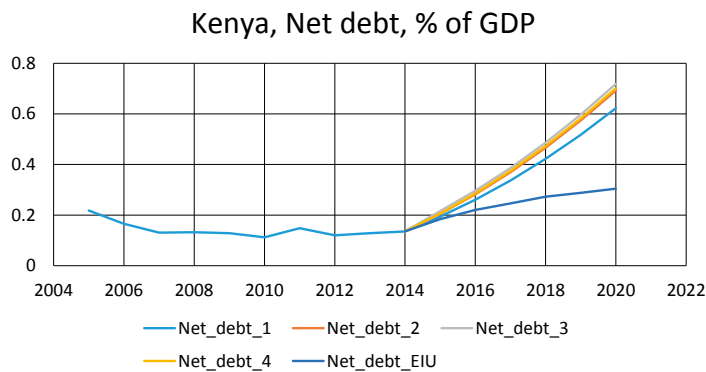
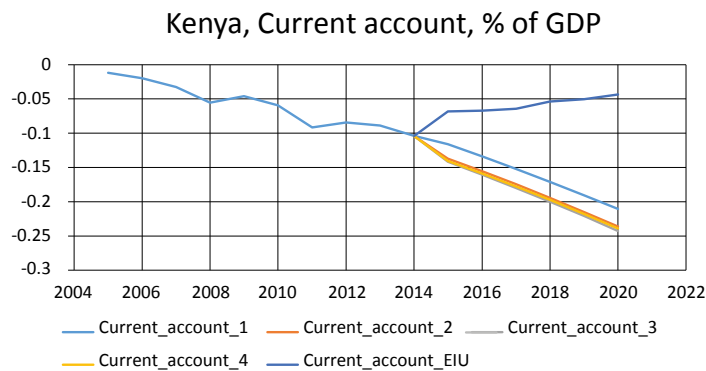


Figure 15.



The country's exposure to commodity prices and monetary considerations does not seem to have a major impact. In all scenarios, both the current accounts and the net debt positions present relatively similar numbers and trajectories.

Kenya does seem, in this sense, much more vulnerable to traditional balance of payment considerations. Indeed, only a major adjustment to the current account, as projected by the Economist Intelligence Unit, can revert the long-term growth in its net indebtedness. This may be the result of a decline in the growth of imports, as in the EIU projections, but it may also be possible, given the slightly lower reliance on commodities, that Kenya could see growth in other type of exports, such as manufacturing or services.⁸

Nigeria

Compared to Ghana and Kenya, Nigeria depends almost fully on oil exports, which exhibited a strong growth and allowed the country to present very high current account surpluses. This in turns contributed to the negative net debt figures⁹ shown in Figure 16. Similar to Kenya, the country presents a relatively higher growth rate of imports compared to exports,

respectively 13.93% and 9.64%, but unlike Ghana, nominal domestic growth has been quite substantial at 15.31%. This is likely a reflection of the much bigger size of the Nigerian economy, opening a bigger space for domestic GDP growth unrelated to the international trade sector. As shown in the previous section, Nigeria has seen a greater involvement of the private sector in its external debt, currently standing at 60% of the total.

If the past 15 years' trends were to continue, as shown in scenario 1, the country seems to be directed to a stable situation, with current account surpluses slowly declining to zero, and net debt figures stabilising at around 5% of GDP. This is however highly unlikely, given the 50% decline in oil prices in 2015, and Nigeria's commodity dependence. Indeed, scenario 2, 3 and 4, all show a divergence, with current accounts turning to a deficit of about 5% of GDP by 2020, and in net debt turning positive to 5-10% of GDP. Despite the higher share of private creditors, an interest rates shock will not affect Nigeria, resulting in a complete overlap of scenario 2 and 4. This is due to the low external debt figures of the country, both in net terms as shown, but also in gross term - 6.5% of GDP in gross terms as of 2014.

Figure 16.

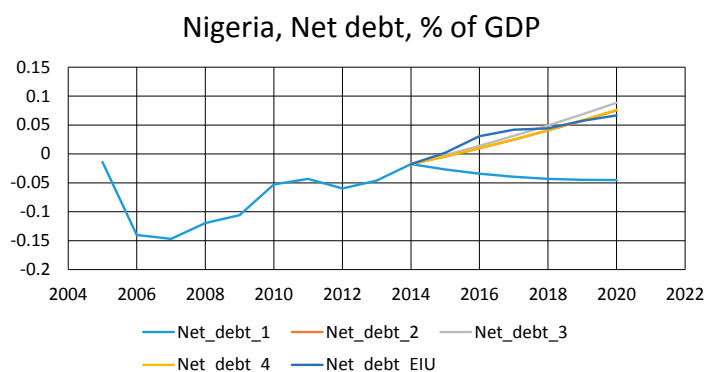
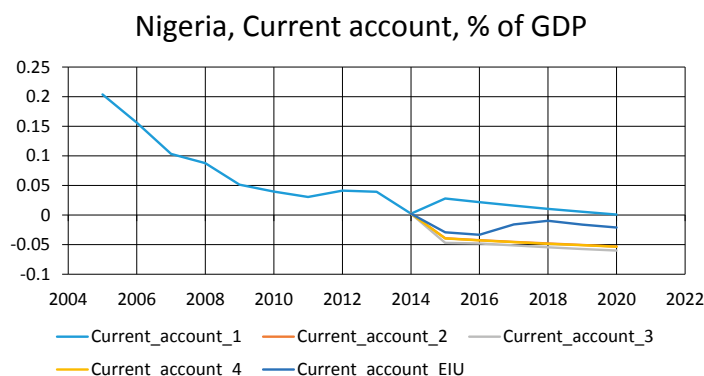


Figure 17.



South Africa

South Africa is, by all standards, more similar to emerging and advanced countries than other countries in the sample. It is the least reliant on commodities, almost 100% of its external debt is held by private creditors, and presents lower growth rates than the rest of the countries: nominal exports, imports and domestic GDP increased by 7.7%, 9.2% and 6.9% respectively. It also presented a current account deficit throughout the period and a positive net debt figure that substantially differs from the gross figure – about 27% of GDP vs. 41% GDP, suggesting a high pace of reserves accumulation.

The baseline projection suggests a modest improvement of the current account in the short-run, and a stabilisation at 6% of GDP by 2020. Commodity

price shocks do have a substantial impact on this trajectory. Scenario 2 presents a sharp initial decline of the current account deficit to 9%, with a long-term deterioration to 11.5%, which would increase to 10% and 13% in case of an easing on import financing as shown by scenario 3. The large external debt stock, coupled with the high share of private creditors, also make South Africa relatively more sensitive to an interest rate shock. The initial decline increases to 9.5%, with a long-term deterioration to 12% by 2020.

In all scenarios, net debt figures increase substantially, from 28% to just under 40% GDP. The baseline projection seems to be in line with EIU's own projections, which therefore predict a limited impact of the commodity price decline for South Africa, and predict a further current account correction by 2019, implying a more or less stable net debt to GDP ratio.

Figure 18.

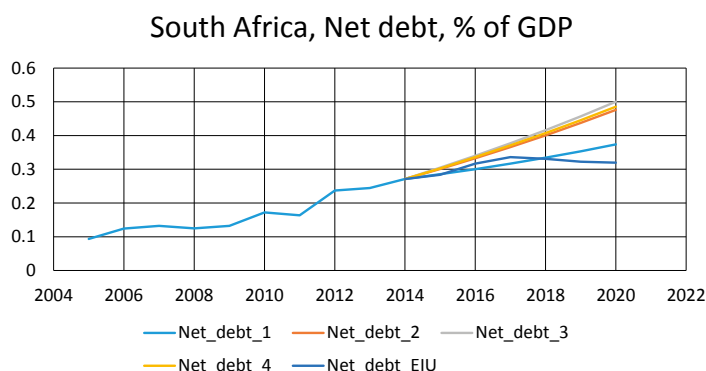
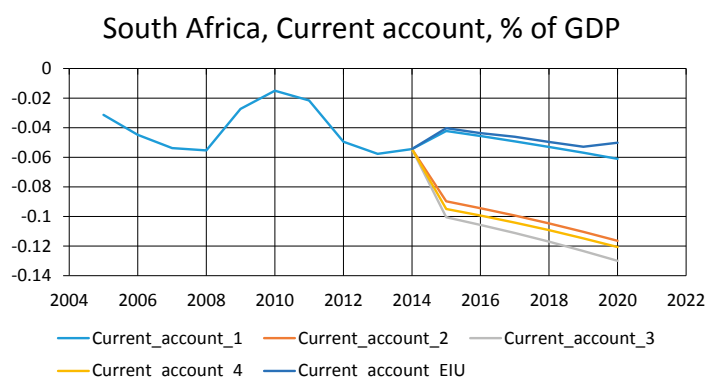


Figure 19.



Zambia

Zambia is the smallest amongst the countries in the sample. Nominal exports have grown fast over the 2000-2014 period, at an average of 18.9%, likely driven by the boom in copper imports from China. Imports have grown at an average of 15.6%, outpacing domestic nominal GDP at 13.1%. Booming exports have driven the current account to a surplus in the post-crisis years. Without any impacts from commodity prices, as in scenario 1, the current account would continue an upward trajectory, pushing net debt to a negative position.

However, given the commodity dependence of Zambia's export sector, the impact of commodity prices is likely

to be substantial. Indeed, in scenarios 2, 3 and 4, the current account deficit decline initially to 4%, 5.7% and 4.2% of GDP. The fast growth rate in exports will reverse this deterioration in the long-run, and by 2020 the current account is likely to be between 1% and -1% of GDP.

Despite an initial increase, net debt is likely to stabilise in the long-run. The projections indicate a figure between 20% and 30% of GDP. The EIU projections predict a bigger initial impact from commodity prices, but the long-run adjustment is very similar to that projected here.

Sensitivity to external shocks from interest rates exists, but is also contained, given the low share of private creditors (which was shown to be 20% as of 2014), despite the 27% external debt stock to GDP.

Figure 20.

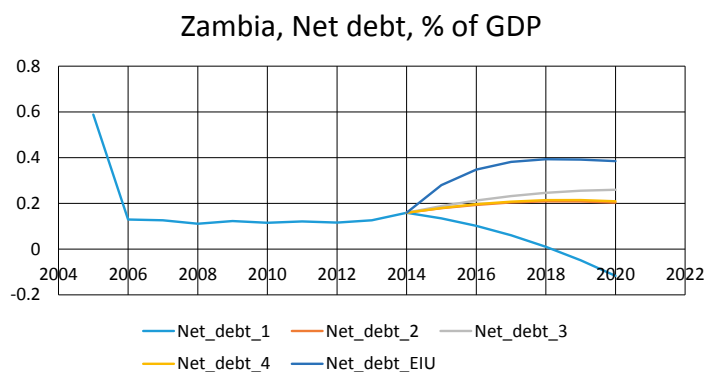
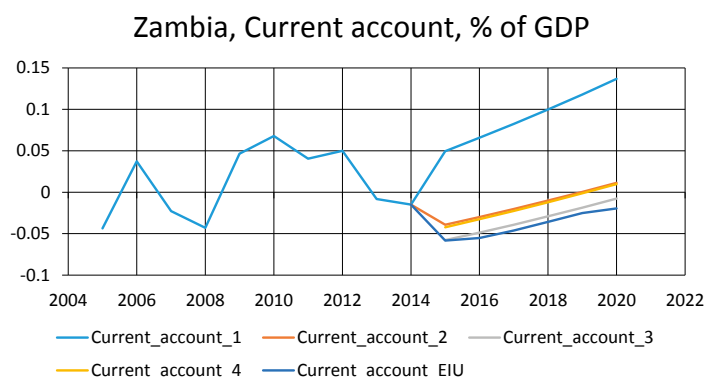


Figure 21.



Summing up

The evidence presented with these projections shows two main things:

1. The sensitivity to commodity prices remains a key concern. Commodity dependent countries, where the export sector is sizeable, are likely to see substantial deterioration of the current account in the short-run. Only in Kenya, which has both a lower degree of commodity dependence and a smaller export sector, the shock is likely to have a limited impact.
2. The sensitivity to external monetary and financial conditions is sizeable, when measured as the ease of financing current account deficits. In this sense, easy global monetary conditions have the “perverse” effect of worsening current account deficits, due to the lack of adjustment in imports.
3. The sensitivity to a global risk-aversion and interest rate shock are contingent on having two conditions in place: a large external debt stock, and large presence of private creditors. These conditions are clearly present in South Africa and to a smaller extent Ghana, which therefore will likely face the additional burden of higher debt repayments. In other countries, where external indebtedness is low from the start, such as Nigeria, or where private creditors still have a minor impact, such as Kenya and Zambia, the impacts are likely to be minor.
4. In the long-run the sustainability of net debts and current account is likely to be determined by the growth of exports and imports and domestic GDP. In the absence of major foreign-driven corrections, such as “sudden

stops” in foreign financing, only countries where either exports or domestic GDP growth outpace imports growth see a stabilisation or their long-run net debt position. Where these conditions are not present, current account adjustments may occur, either as a result of exchange rate movements, or due to domestic policy choices. Additional factors, such as increasing FDI or portfolio equity inflows could also have a sizeable impact, and make a current account adjustment less pressing.

CONCLUDING REMARKS

In this additional report, we have looked at country-specific experiences, in light of the general evidence presented in the main chapter. It was shown that although the levels of the trends presented in the main chapter, i.e. the lower external indebtedness debt conditions and the higher presence of private actors, differ across countries, most countries have experienced these trends to some extent. Therefore, although heterogeneity across countries exists, the patterns described in the main chapter are likely to be common across the SSA region.

Heterogeneity however is important in determining the vulnerability of the countries to external shocks. It was shown in the projections that a large commodity export sector is likely to create substantial pain in the short-term, given the recent fall in commodity prices. Similarly, a large external debt stock combined with a large presence of private sectors may add on to these problems. In the long-run, the structure of the economy, in particular the growth of imports relative to exports and GDP, combined with the continuing abundance of loose monetary and financial conditions, are likely to be crucial factors in determining SSA external debt sustainability.

NOTES

1. The data source for country-specific figures is the Economist Intelligence Unit, unless otherwise specified.
 2. Both in terms of GDP and GDP per capita, the two countries present much higher statistics than the other three.
 3. Such ratios are of course dependent on the definition used for “commodity” exports. In the main chapter and this addendum, these are based on the SITC nomenclature and comprise: SITC 0 (Food and live animals) SITC 121 (unmanufactured tobacco) SITC 2 (Crude materials, inedible, except fuels) SITC 3 (Mineral fuels, lubricant and related materials) and SITC 68 (non-ferrous metals).
 4. Source: UN Comtrade
 5. According to IMF data, nominal GDP per capita in Ghana and Kenya was respectively 1481 and 1358 US dollars.
 6. For the commodity share of exports this is actually 2013 for Kenya and Ghana, due to data availability from UN comtrade.
 7. That is, the decline in imported quantities due to exchange rate depreciation will be completely offset by the higher import bill given by the depreciation. In other words, *ceteris paribus*, exchange rate movements leave the current account unchanged.
 8. Indeed, looking at the data, Kenya already presents a surplus in the service trade account.
 9. That is reserves holdings have been until the end of 2014 higher than gross external debt.
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THE FINANCIALISATION OF NON-FINANCIAL CORPORATIONS IN BRAZIL

ANNINA KALTENBRUNNER

ABSTRACT

This chapter analyses the changing financial relations, behaviour and practices of non-financial corporations (NFCs) in Brazil. It shows that akin to the NFCs of developed countries, Brazilian companies have seen important changes of their financial relations, including a massive rise in debt levels, the switch from bank to market financing, and the increased holding of liquid and short-term financial assets. In contrast to developed country NFCs, these changes were dominated by a rise in external borrowing, in particular on international financial markets. The chapter argues that NFC financialisation in emerging capitalist economies (ECEs) is fundamentally shaped by their integration in the world economy. Moreover, this integration takes place in a subordinated way. This chapter focuses particularly on the (subordinated) internationalisation of production of large Brazilian NFCs. Finally, the chapter concludes with some thoughts on the implications of the processes observed. This is particularly important given the concentration of observed processes in a few large companies and specific sectors, which can have important implications for the structure of the economy.

INTRODUCTION

This chapter analyses the new financial behaviour, practices and relations of large non-financial corporations (NFCs) in Brazil. A literature on developed country NFCs, often summarized under the heading of financialisation, shows the changing relations of firms to financial markets. Phenomena observed include the rising levels of debt, the shift from bank to market borrowing, the resulting rise of financial payments both in the form of interest payments and dividends, the rise in shareholder value orientation, and importantly the holding of financial rather than real assets. The latter also contains the observation that NFCs have increasingly generated income from financial rather than productive channels. In contrast to the conventional literature on finance and development, in the financialisation literature these phenomena negatively affect growth, employment and income distribution.

Several authors have pointed to similar developments in the financial behaviour of NFCs in emerging capitalist economies (ECEs) (Demir 2008, Araujo, Bruno et al. 2012, Correa, Vidal et al. 2012, Karwowski 2012, Levy-Orlik 2012, Seo, Kim et al. 2012, Powell 2013). For example, Powell (2013) shows that Mexican firms have increasingly borrowed from markets rather than banks. Karwowski (2012) points to the rising holding of liquid financial assets by South African firms. This chapter contributes to this literature by analysing in detail the changing financial behaviour of large Brazilian NFCs. In particular, it enquires into the manifestations and drivers of NFC financialisation and discusses how this financialisation differs from that observed in developed countries.

The chapter highlights the fundamental changes in the financial behaviour of large Brazilian NFCs over recent years. These firms have seen a surge in their overall debt levels, which have been sourced from financial markets rather than banks. In contrast to developed countries, this debt has been primarily external, that is it has either been denominated in foreign currency, has been held by foreign investors, or has been issued offshore on international financial markets. At the same time, Brazilian firms have increased their holding of liquid financial assets. Moreover, several Brazilian NFCs have become very active on the local derivatives market, partly to hedge their rising foreign currency exposure, but also to speculate on expected exchange rate

changes (Farhi and Borghi 2009, Fritz and Prates 2013).

In line with Paineira (2011), Powell (2013), Lapavitsas (2014), and Kaltenbrunner and Paineira (2016), the chapter argues that these financial changes, and their peculiar nature, are intimately linked to ECEs' rising integration into the world economy. This internationalisation, in turn, has taken a subordinated and hierarchic character which has fundamentally shaped the nature of the financialisation phenomena observed in these countries. Moreover, the chapter points to the intimate and symbiotic relationship between the observed changes in NFCs' financial practices and their (international) productive relations (Kaltenbrunner and Karacimen 2016).

The chapter ends with some thoughts about the potential implications of these financial changes for the structure of the economy and hence for industrialisation, employment and income distribution. For example, observed financialisation phenomena have been concentrated in certain sectors. Moreover, they have been limited to large and dominant firms, leading to a bifurcation of the company sector in Brazil. These structural changes, however, have had important policy implications. Methodologically, the chapter draws on secondary data, existing literature and insights from several semi-structured interviews conducted with representatives from large Brazilian companies.

Following this introduction, section 2 presents a short review of the literature on finance and growth and the financialisation of NFCs. Section 3 presents a detailed discussion of the financialisation phenomena observed in Brazil and Section 4 discusses the potential drivers of these phenomena. Section 5 concludes and points to some implications for the 'real' economy.

I. FINANCE, FINANCIALISATION AND DEVELOPMENT

According to neoclassical economics, NFCs' increased access to private financial markets should increase investment, growth and employment. In this 'financial deepening' view, the liberalisation of private financial markets increases the availability of financial resources, stimulates the overall efficiency of private investments, and enhances it through facilitating risk management and exerting corporate

control (e.g. King and Levine 1993, Levine 1997). In a similar vein, in the open economy the liberalisation of capital accounts should allow savings to be pooled and allocated efficiently, helping countries to smooth consumption in the face of temporary liquidity shortfalls, and exert disciplining pressures on governments (Prasad, Rogoff et al. 2004). Although these functions are seen to be performed irrespective of the specific structure of the financial system, there is an implicit assumption that, as systems mature, financial *markets* will be more effective in this respect than arms-length bank lending (Levine and Zervos 1998).

A more critical view of the link between financial development and capital accumulation is espoused in a recent, interdisciplinary literature on the changing relations of NFCs with financial markets, summarised under the heading of financialisation (e.g. Ertürk, Froud et al. 2008, Stockhammer 2010, French, Leyshon et al. 2011, van der Zwan 2014). This literature shows that NFCs in developed countries have increasingly generated income from financial rather than productive activities (e.g. Crotty 2003, Stockhammer 2004, Krippner 2005), increased their payments to financial markets in the form of interest, dividends, and stock buybacks (e.g. Boyer 2000, Lazonick and O'Sullivan 2000, Duménil and Lévy 2004), and have relied on retained earnings and/or sought external finance in open capital markets rather than from banks (Lapavitsas and Powell 2013). The sources of these changes are either located in the productive sector itself, as increased competition and monopolisation have led to a declining rate of profit and increased the attractiveness of financial investments (e.g. Boyer 2000, Brenner 2004, Duménil and Lévy 2004), or changes in institutional governance and financial market policies. These institutional changes refer particularly to the rising threat of hostile takeovers and the shift from "retain and reinvest" to creating shareholder value (e.g. Froud, Haslam et al. 2000, Lazonick and O'Sullivan 2000).

In this literature, the rising involvement of NFCs with financial markets has potentially negative implications for capital accumulation, employment and income distribution. For example, Stockhammer (2004) and Orhangazi (2008) show that firms' increased investment in financial assets and payments to financial markets have weighed on their ability and willingness to undertake long-term fixed investment. At the same time, NFCs' restructuring and downsizing to increase profitability and shareholder value have led to rising unemployment, falling job security and worsening income distribution (Lazonick and O'Sullivan 2000).

A small, but growing literature shows that NFCs from EMEs have started to adopt similar practices, relations and balance sheet characteristics to those in developed countries. On the asset side, several authors have pointed to the increased importance of financial investments, both for hedging and speculative purposes (Demir 2008, Demir 2009, Araujo, Bruno et al. 2012, Levy-Orlik 2012, Seo, Kim et al. 2012, Powell 2013). In particular, EME NFCs have substantially increased their holding of cash and very liquid short-term financial assets (Kalinowski and Cho 2009, Correa, Vidal et al. 2012, Karwowski 2012, Powell 2013). In several countries this increased holding of liquid assets was accompanied by a rising exposure to local derivative markets. For example, Rossi Junior (2011) and Farhi & Borghi (2009) discuss the widespread speculative use of derivatives and strong losses of NFCs in the 2008 global financial crisis in Brazil, Mexico, South Korea, Hong Kong, and China.

On the funding side, large EME firms have started to substitute market funding for bank borrowing, frequently offshore and mostly in foreign currency (IMF 2014, BIS 2015, McCauley, McGuire et al. 2015). For example, the IMF (2015) shows that EM corporate debt as a percentage of GDP increased from just above 45% of GDP in 2005 to nearly 75% in 2014. As a share of total debt, bond financing increased from around 9% in 2005 to more than 16% in 2014. According to the Bank for International Settlements (BIS), the outstanding stock of international debt securities of emerging market non-banks stood at US\$ 1.2 trillion in 2014, nearly half of all international debt securities (BIS 2015). The share of domestic bank lending declined from around 84% in 2005 to 78% in 2014. Foreign bank lending also saw a small decline from around 7% to around 5% in 2014 (IMF (International Monetary Fund) 2015). In many countries, bank borrowing has remained limited to short-term, often foreign currency debt to manage their working capital. At the same time, domestic corporate bond and stock markets have grown rapidly (World Bank 2007). Despite these general trends, the specific financial changes have varied from country to country. For example, whereas in Turkey external debt continued to be dominated by bank lending in Turkey, Brazilian firms have increasingly substituted market for bank funding (Kaltenbrunner and Karacimen 2016). The next section presents a detailed discussion of the changes observed in the Brazilian context. It first looks at the liability side of NFCs' balance sheets and then analyses their holding of financial assets.

II. THE CHANGING FINANCIAL BEHAVIOUR OF LARGE BRAZILIAN NFCs

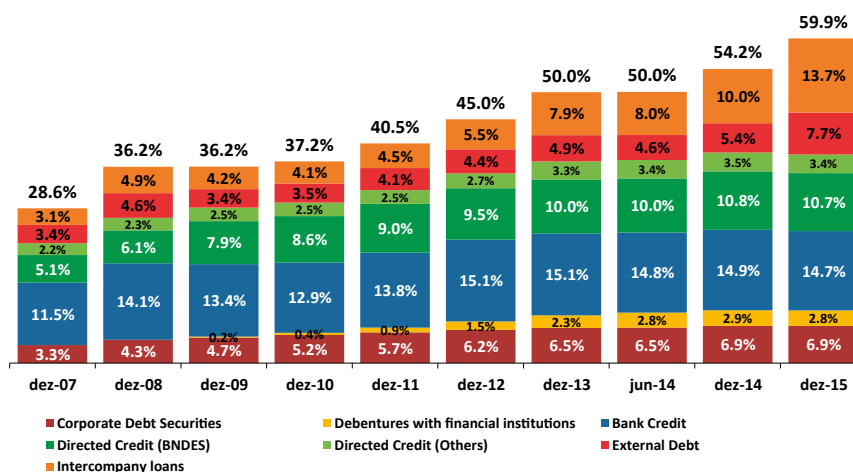
A. THE LIABILITY SIDE OF NFCs' BALANCE SHEETS

According to the IMF (2015), Brazil's firms saw the fourth largest increase in total debt of all ECEs between 2007 and 2014. Over that period, total corporate debt increased around 15%, a growth rate which was only surpassed by China, Turkey and Chile. According to the BIS and the Institute of International Finance (IIF), total corporate debt of Brazilian companies stood at more than one trillion US\$ at the end of 2015 (Wheatley 2015).

Figure 1 gives a more detailed break-down of NFCs' financial obligations.¹

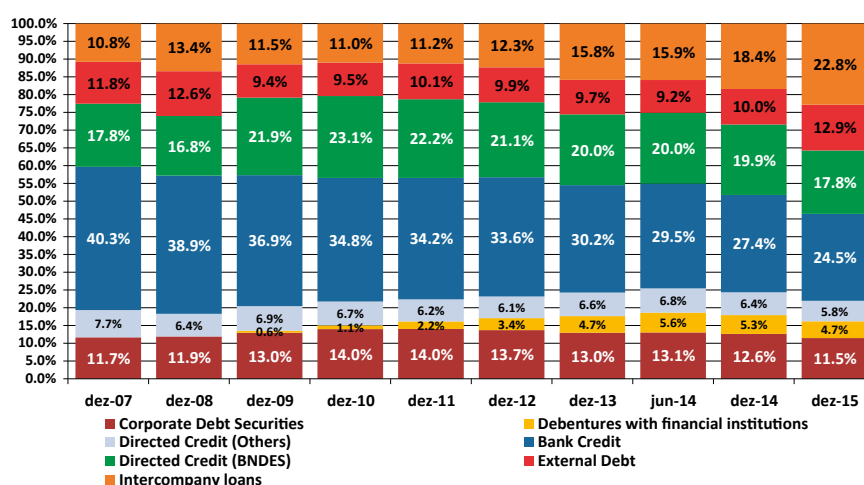
One can observe the overall increase of NFCs' financial obligations relative to GDP, which surged from 28.6% in December 2007 to nearly 60% in December 2015; which means it more than doubled in less than 10 years.² The majority of this increase was driven by external debt and intercompany loans, which rose to 13.7% and 7.7% of GDP respectively at end of 2015, up from 3.1% and 3.4% at the end of 2007.³ With regards to onshore borrowing, the highest increase was registered by market debt (corporate debt securities and debentures with financial institutions) which rose from just 3.3% in 2007 to nearly 10% in 2014.

Figure 1: Financial obligations of NFCs, % GDP



Source: CEMEC (2016)

Figure 2: Relative Share of NFCs Financial Obligations



Source: CEMEC (2016)

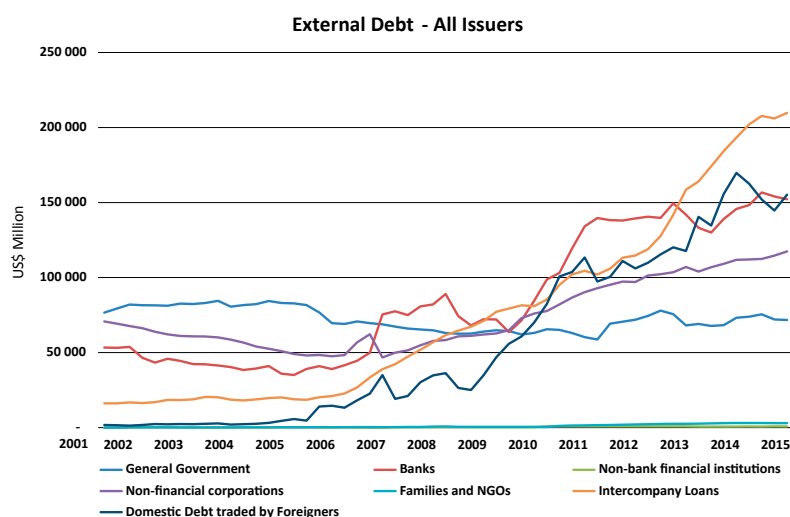
Figure 2, which shows the relative share of these different financing options, confirms this trend.

Whereas the share of directed credit stagnated and that of bank credit nearly halved, both external financing and market financing expanded their contribution. The relative share of external debt and intercompany loans increased from 10.8% and 11.8% in 2007 to 22.8% and 12.9% respectively in 2015. Whereas corporate debt securities more or less stagnated, debentures with financial institutions increased from zero to nearly 5% in 2015. Indeed, banks seemed to have preferred financing Brazilian NFCs via debt securities rather than bank loans (Ernani and Macahyba 2012). According to a recent

survey by the BIS, holdings of private debt securities as a percentage of total assets by Brazilian banks increased from 3% in 2004 to 6% in 2013 BIS (Bank for International Settlements, 2015).

A few large companies have issued the lion's share of this debt. According to the data company Economática, the energy and mineral giant Petrobras and Vale accounted for 46% and 10% of the total debt respectively. Other companies with large outstanding debt included the meat giant JBS, the telephone company Oi, and Eletrobras (Economia 2016). In terms of sectors, industrial and energy companies saw the largest increase in debt between 2010 and 2015 (Almeida, Novais et al. 2016).

Figure 3: External Debt, All Issuers, US\$ Millions



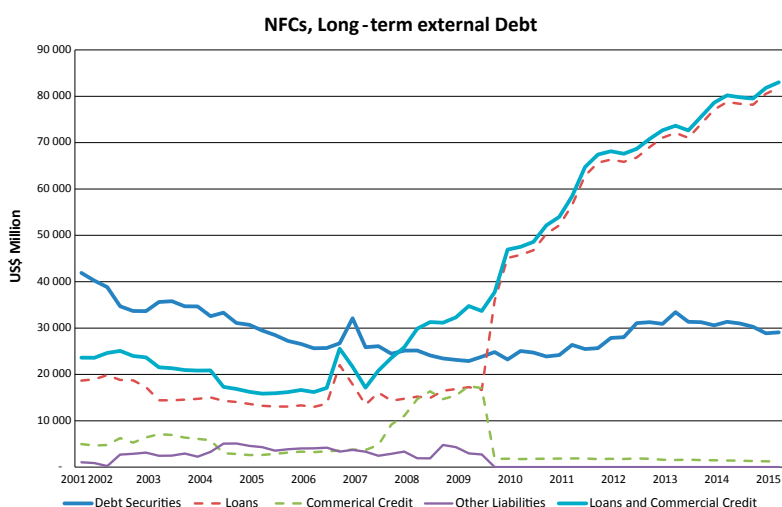
Source: Central Bank of Brazil (BCB), Gross External Debt Statistics

Notes: External debt includes all liabilities owed by residents to non-residents

The above data points to the relative increase of external debt in NFCs' total outside financing. Figure 3 shows NFCs' external debt in absolute amounts and compared to other key economic agents' external borrowing.

It confirms the strong increase in external debt of Brazilian corporations, both financial and non-financial.⁴ In absolute values, total external debt of Brazilian NFCs increased from around US\$ 70 billion in 2002 to US\$ 118 billion in 2015. According to the same data, this increase was concentrated in long-term financing. More than 95% of NFCs' external debt in June 2015 was of a long maturity. Again a large share of this external debt was concentrated in a few companies. According to CEMEC (2016) Petrobras and Vale accounted for 34.2% of the total external debt of Brazilian NFCs in 2015.

The increase in external debt was even more marked for financial corporations (banks), which saw their debt increase to US\$ 155 billion in 2015. External debt of the government, in turn, has stagnated if not slightly declined over the period.⁵ Two other observations are noteworthy. First, Figure 3 also confirms the surge in intercompany loans, which overtook all other debt categories and reached more than US\$ 200 billion in 2015. Second, it shows the strong increase of foreign investors' exposure to domestic currency assets. The majority of this exposure is directed towards public bonds, which reached a high of 20% in April 2015.⁶ As highlighted by Akyüz (2013) and Kaltenbrunner and Paineira (2015), this exposure has created new forms of external vulnerability for the recipient countries due to the link between exchange rate dynamics and foreign investors' speculative operations and balance sheet fragilities.

Figure 4: Brazilian NFCs Structure of External Debt, US\$ Millions

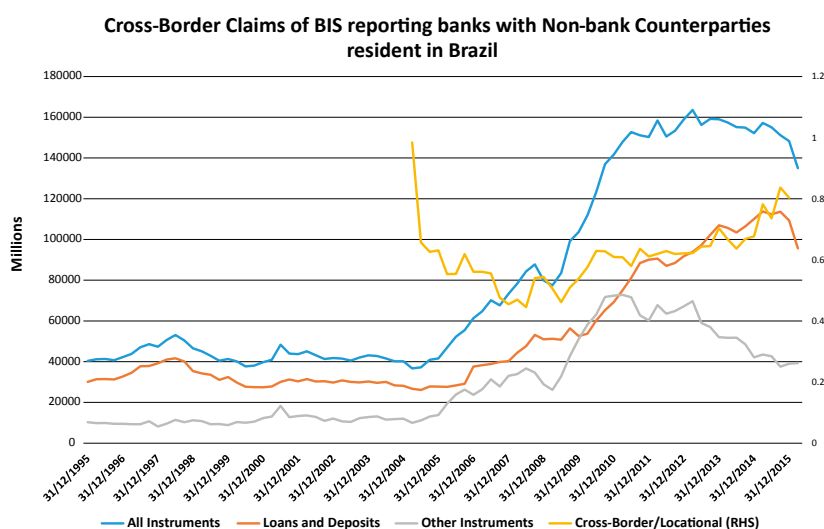
Source: BCB, Gross External Debt Statistics

External debt can be either in the form of loans, predominantly from banks, or market financing, that is debt securities. Figure 4 shows this break-down for Brazilian NFCs' long-term external debt.

Since 2008 the strongest increase and consequently dominant share of NFCs' long-term external debt was taken up by cross-border loans. Loans and commercial credit accounted for more than US\$ 80 billion of the external debt, compared to around US\$ 30 billion of debt securities. Although data is hard to come by, it is

assumed that the majority of these loans have been given by international banks.⁷ Debt securities issued onshore to non-resident holders remained relatively stable over the last decade and even declined until 2010.

The rising importance of cross-border banking loans is also confirmed by the international banking data from the BIS. Figure 5 shows the cross-border claims of BIS reporting banks to the non-bank private sector resident in Brazil.⁸

Figure 5: Cross-border Bank Flows, US\$ Millions

Source: BIS

Notes: Data on local positions only from the beginning of 2005

Cross-border loans by foreign banks recorded by the BIS to the Brazilian non-bank sector started to rise roughly at the same time as NFCs' external loans and commercial credit in the BCB data. However, the value is somewhat higher (nearly 120 US\$ billion in 2015). This could be due to two reasons. First, BIS statistics seem to be generally higher than BCB ones (Itau BBB 2016; see also footnote 9). Second, the discrepancy between the borrowing of the NFC and the non-bank private sector could reflect the importance of Brazilian non-bank financial institutions in contracting external borrowing. This in turn can include everything from local hedge funds to the financial arms of domestic companies. The discrepancy is particularly high for other instruments (mainly debt securities) at least until 2013. Similar to the BCB data, the holding of debt securities by BIS reporting banks increased until around 2010, then stagnated and started to decline.⁹

Finally, Figure 5 shows the ratio between local lending of foreign banks and cross-border lending. It indicates how much foreign banks lent through local subsidiaries based in Brazil in contrast to cross-border flows. This is important because whereas the majority of local lending is in domestic currency, more than 80% of cross-border lending is denominated in foreign currency (primarily the US\$). Whilst falling until the global financial crisis of 2008, the share of cross-border operation has increased again since then. By the end of 2015, cross-border banking flows reached nearly 80% of the money lent by banks locally. This is consistent with the declining importance of bank lending in the domestic market. While the Brazilian banking market has been traditionally difficult

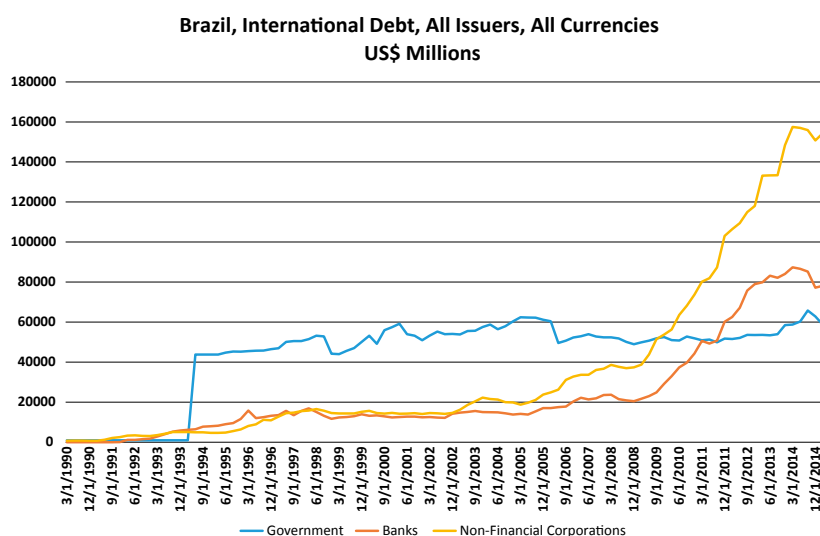
to penetrate by foreign firms, this also indicates a rising reluctance by international banks to take on the country risk, bringing with it substantial risks for Brazilian NFCs. It is also interesting to note that this trajectory seems to go against the global trend of more local lending observed after the 2008 crisis (IMF 2015).

In sum, the previous discussion has shown that whereas in the domestic financial system, market financing seems to have become somewhat more important than bank lending, the rise in external debt, based on the residency concept (that is Brazilian residents borrowing from non-residents), has been dominated by cross-border bank lending (which itself has replaced the local lending of foreign banks). These data, however, do not take into account the rising importance of offshore financial markets for Brazilian NFCs.

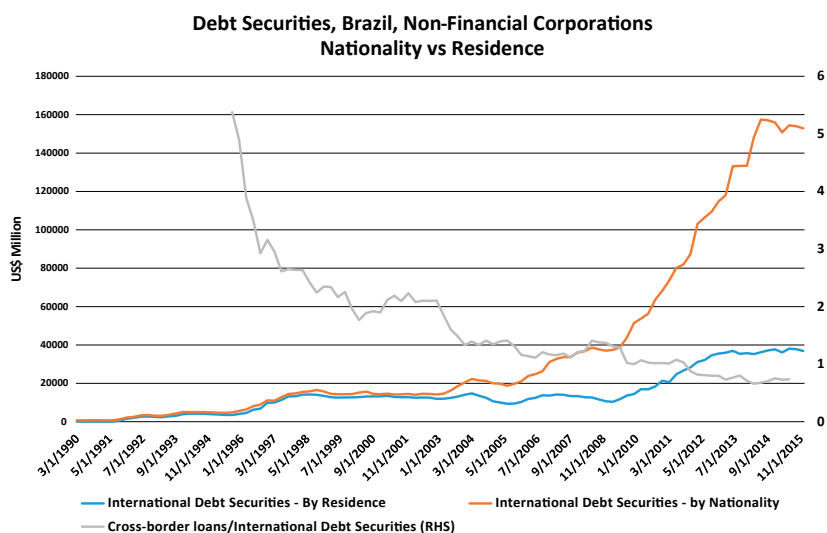
This importance is illustrated in Figure 6, which shows the issuance of international bonds by Brazilian nationals on international financial markets.

It shows the phenomenal rise of debt issued by Brazilian NFCs on offshore financial markets (mainly in financial centres such as London and New York) since 2003 and in particular since the global financial crisis of 2008. In 2014 this debt reached nearly US\$ 160 billion (compared to just around US\$ 30 billion issued onshore to non-residents). That of banks also increased, though to a lower extent. In line with the external debt data shown above, international debt issuance of the Brazilian government, on the other hand, stagnated.

Figure 6: International Debt Securities by Issuer, US\$ Millions



Source: Bank for International Settlements

Figure 7: International Debt Issuance by Nationality and Residence, US\$ Millions

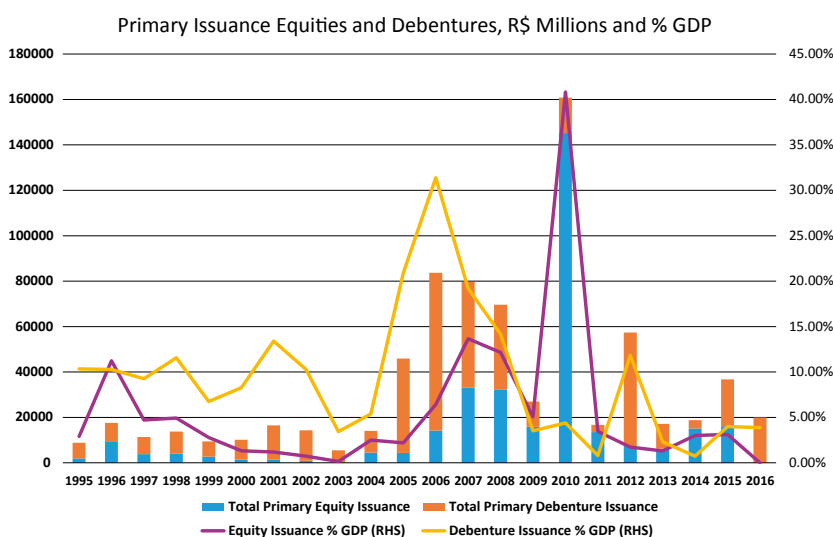
Source: Bank for International Settlements

The relative importance of international bond markets is also shown in Figure 7. It confirms the substantial gap between international debt securities issued by Brazilian nationals (on offshore markets) and Brazilian residents (on onshore national financial markets).

In 2015 this gap amounted to nearly US\$ 120 billion. According to data by the BIS, in December 2015 88% of the international debt issued by Brazilian nationals on offshore markets was denominated in US Dollar (the only other currency of significance was the Euro). Moreover it was of a relatively long maturity (at least compared to onshore issuance).

To further illustrate this rising importance of international bond market financing, compared to international bank lending, Figure 7 also shows the ratio between banks' cross-border loans and deposits (from Figure 5) and international debt securities. One can observe the continuous decline in this ratio which fell from more than 5 to 1 in 1996 to below one at the end of 2015.

Finally, Figure 8 shows firms' primary issuance¹⁰ of stocks and debentures on domestic capital markets. Data are presented in annual totals (in domestic currency) and as a % GDP.

Figure 8: Firm Financing through Stocks and Debentures, R\$ Millions and % GDP

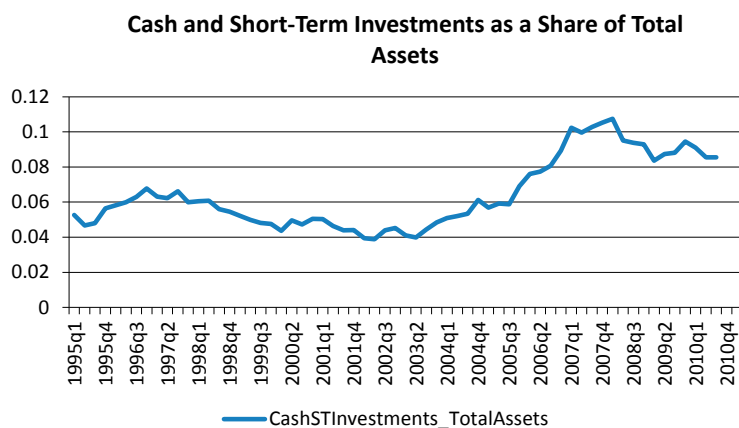
Source: BCB

One can observe the still relatively small contribution of stock market financing to firms' external finance.¹¹ Compared to external debt, which amounted to nearly 14% of GDP in 2015, primary stock issuance stood just above 3%.¹² Moreover, equity finance remains highly concentrated in a few sectors (basic materials and energy) and dominated by a few firms. The share of the top 10 companies in market capitalization has remained over 50% in recent years (Park 2012). The number of firms listed on the exchange has fallen from 550 at the end of 1996 to 353 in June 2016 (BCB, time series). At the same time, foreign participation in the stock market is very high. In 2015, nearly 70% of public offerings were taken up by foreign investors (Anbima 2016). At the same time, the issuance of American Depositary Receipts (ADRs) of Brazilian companies remains very small, in particular when compared with the rising importance of international debt financing discussed above (Anbima 2016). Finally, in line with discussion above, Figure 8 shows the relative importance of debentures over this period.¹³

B. THE ASSET SIDE OF NFCs' BALANCE SHEETS

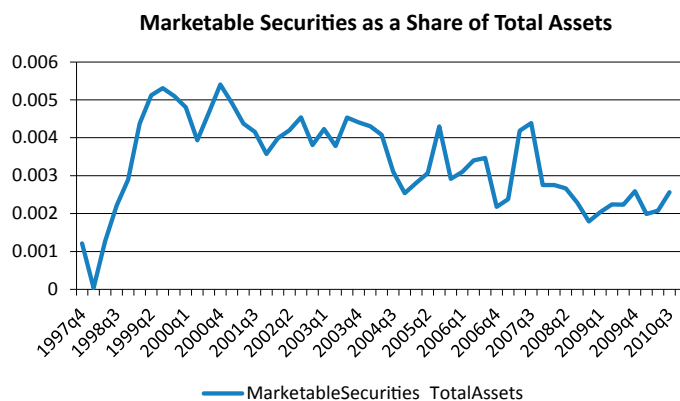
Above section has illustrated the changes in the liability side of Brazilian NFCs' balance sheets. It has shown that their funding has become more international and more market-based. Another important aspect of NFCs financialisation highlighted in the literature is the increased holding of short-term financial assets and revenue from financial income (rather than real investment and the associated profits). These data are hard to obtain on the national, aggregate level for Brazil. Below discussion is thus based on balance sheet data of Brazil's main listed companies collected and published by the data company Economática.¹⁴ Thus, the data presented below are not directly comparable to those in the previous section. This having been said, above discussion has also shown that the aggregate data were dominated by a few large companies which allows us to make some comparisons about general trends in the NFCs sector.

Figure 9: Cash and Short-term Investments as a Share of Total Assets

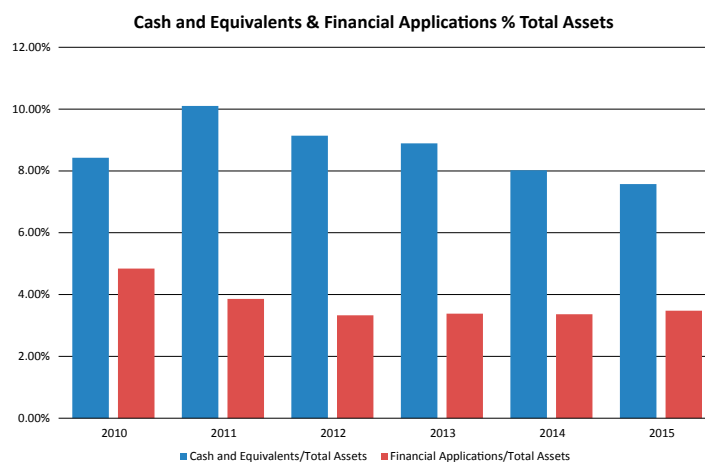


Source: Economática

Figure 10: Marketable Securities as a Share of Total Assets



Source: Economática

Figure 11: Cash & Cash Equivalents and Financial Applications as a Share of total Assets

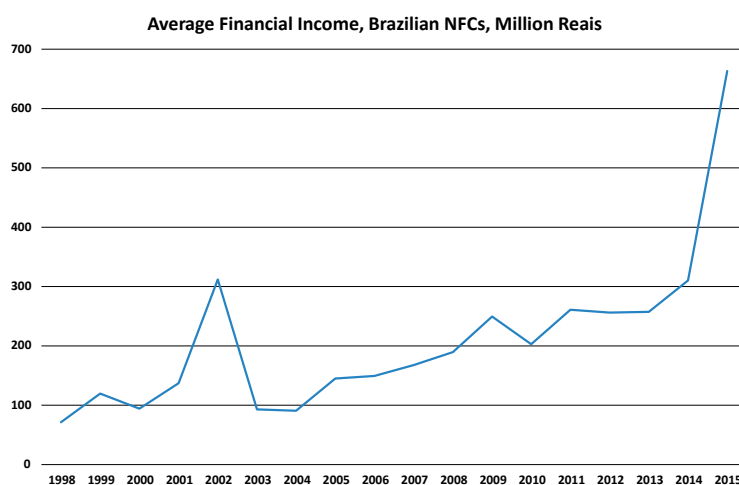
Source: *Economática*

Figures 9 and 10 show the holding of cash and other short-term investments and that of marketable securities as a share of total assets of Brazil's largest listed companies from 1995 to the end of 2010.¹⁵

One can observe the continuous increase of very short-term financial asset/cash holdings on Brazilian firms' balance sheets. Its share of total assets rose from around 5% at the beginning of 1995 to around 8% at the end of 2010. Marketable securities, in turn, have continued to decline since the early 2000s and reached a share of only 0.2% in 2010.¹⁶

Due to accounting changes, above data are only available until the end of 2010 (see also footnote 16). Figure 11 shows the new, most comparable, balance sheet items since then based on IFRS accounting standards.

It shows that while firms' cash holdings appeared to have increased further until 2011 (up to more than 10% of total assets), they have started to decline again over recent years (still standing at higher levels though than at the beginning of the decade). Financial applications started to decline in 2010 and have remained relatively stable between 3-4% since (Almeida, Novais et al. 2016 also show firms' increased holding of financial assets often at the expense of long-term investment). Among the most prominent financial applications in the Brazilian market are public debt securities.¹⁷ According to data by the Brazilian central bank, the share of NFCs in total public debt holdings increased from around 8% in the early 2000s to more than 10% in 2009. That said, it had fallen back to 8% by the end of December 2015. As a share of total assets, public debt securities stood just above 3% (after

Figure 12: Average Financial Income, R\$ Millions

Source: *Economática*

having dipped below 3% in previous years) at the end of December 2015.¹⁸

Finally, Figure 12 shows the average financial income, Brazilian NFCs have earned from their financial holdings.

It shows the continuous increase of financial revenues for Brazilian companies. Interestingly, despite stagnant (or even marginally falling) holding of stocks, revenues continued to increase over recent years, spiking in 2015.¹⁹

In sum, the above discussion has shown the rising involvement of Brazilian NFCs with financial markets, both on the liability side of their balance sheets (through an increase in their debt levels) and on the asset side (through a rise in liquid and short-term financial assets). Moreover, we have observed some of the phenomena akin to those related to financialisation in developed country NFCs. In particular, Brazilian NFCs, at least the largest of them, have increasingly substituted market for bank lending. In contrast to developed country NFCs though, this borrowing has taken place primarily on offshore international financial markets and in foreign currency.²⁰ Domestic market borrowing has been dominated by short-term debentures largely held by banks which have substituted them for bank lending. At the same time, whilst domestic bank borrowing (including local lending by foreign banks) stagnated, international cross-border bank loans have surged (though their importance relative to international debt borrowing has declined in line with the general increase in the importance of market funding). On the asset side of their balance sheets, Brazilian NFCs have registered an increase in their holdings of liquid assets. In contrast to developed NFCs, however, this increase seems to have been dominated by cash and near-cash holdings rather than financial assets *per se*. Moreover, existing literature shows the substantial importance of (short-term) derivatives for Brazilian NFCs, both for hedging and speculative purposes.

III. THE DETERMINANTS OF NFCs FINANCIALISATION IN EMES: SUBORDINATED INTERNATIONALISATION

The analysis of financialisation in developed countries has traditionally taken place within the canvas of the nation state.²¹ This applies both to the characteristic elements of financialisation and the factors which have given rise to them. As to the former, there is surprisingly little analysis of the international aspect of financialisation, which is most frequently associated with financial globalization (which in turn is equated to a rise in international cross-border flows

(Stockhammer 2010)). As to the latter, the sources of financialisation have generally been located in national economic developments – either in the stagnation of late capitalism, the falling rate of profit and the consequent contraction of demand, which required a series of financial activities for the continuance of the system (Magdoff and Sweezy 1972, Magdoff and Sweezy 1987, Arrighi 1994, Brenner 2004, Foster and Magdoff 2008) – or deregulatory government actions which have unleashed the forces of finance and led to an unprecedented increase in financial markets and financial actors (Boyer 2000, Aglietta and Breton 2001, Duménil and Lévy 2004, Stockhammer 2004, Crotty 2005, Orhangazi 2008).

This chapter argues that in ECEs financialisation is fundamentally shaped by their integration in the world economy. On the one hand, many ECEs, including Brazil, have undergone a continuous financial liberalisation and integration trend. As a result, private (short-term) capital flows have reached unprecedented levels. At the same time, financial liberalisation has facilitated NFCs' access to international financial markets either to gain access to international banks or set up (financial) subsidiaries on offshore markets themselves (BIS Serfati 2008, 2015). This financial integration has created new risks and opportunities. For example, the increase in corporate bond issuances has led to a rise in debt-equity and corporate leverage ratios and currency mismatches, creating the need to hedge against adverse interest rate and exchange rate dynamics. At the same time, financial liberalisation has increased the range of opportunities for NFCs to take advantage of financial returns.

On the other hand, the financialisation phenomena observed above are intimately linked to the internationalisation of production of ECE/Brazilian NFCs (Kaltenbrunner and Karacimen 2016).²² Large Brazilian NFCs have become increasingly internationalised and integrated into global value chains and/or have become global players themselves (Cintra and da Silva Filho 2013, Hiratuka and da Rocha 2015). Internationalisation requires, and indeed enables, NFCs to operate in different financial markets and currencies to obtain funding, hedge currency and operational risks, and invest in financial assets. For example, one representative from a large Brazilian company in the consumer industry explained that opening subsidiaries in the US, and in particular Germany, allowed them to access far cheaper and flexible bank credit. At the same time, exposure to different currencies increases the need to hedge the currency and potentially also the interest rate risk. These new risks and opportunities require increased financial sophistication and tie NFCs' operations to (international) financial markets.

More than that, in an increasingly financialised world, financial access and sophistication have become important factors for determining international “competitiveness”.²³ Hiratuka and Sarti (2011) argue that a rising number of Brazilian outward foreign direct investment is motivated by an active strategy to explore and increase productive, commercial and indeed financial capacities rather than a passive strategy as a result of a shrinking domestic market. Moreover, they show that large part of outward foreign direct investment by Brazilian firms was in the form of M&A. This in turn requires large amounts of resources which (a) reinforces the importance of external financing and (b) encourages substantial cash holdings to take quick advantage of opportunities and/or fend off hostile takeovers. In a similar vein, Randøy, Oxelheim et al. (2001) show for 12 Nordic firms that obtaining a low cost of capital is a crucial issue for aspiring global firms. This is so because in increasingly competitive and open product markets, producers cannot pass on higher cost of capital to customers. Moreover, the authors argue that “the global wave of mergers and acquisitions makes it important for companies to boost stock price in order to maintain influence after a potential merger and protect themselves from being taken over” (p. 667). Firms need to establish long-term confidence with major institutional investors to acquire large enough funds for their international success. This also means that they to be financially savvy in order to gain the trust of these investors. In this sense, financialisation arguably becomes a precondition for internationalisation, in particular for EME firms which enter the international markets as latecomers.

At the same time, internationalisation becomes part and parcel of a more financially oriented firm strategy. Hiratuka and Sarti (2011) show that in several cases the internationalisation strategies of Brazilian firms were aimed explicitly at becoming global players to boost their shareholder value and ability to leverage.²⁴ Internationalisation was used as a strategy to create “value” on international financial markets and increase share prices.²⁵ Internationalisation might also allow increase firm leverage through offering a “natural” hedge for foreign currency borrowing.²⁶ In this vein, Palpacuer, Perez et al. (2006) show for large French agribusinesses that once exposed to international financial markets, further internationalisation became an important element of “financial success”. According to their results, large international (institutional) investors want global players which can diversify their assets and income streams and are powerful actors in the market. Moreover, financial

investors require regular growth for firms to meet their financial targets.²⁷

In sum, above discussion has argued that internationalisation and financialisation are intimately related process where one stimulates and feeds into the other (Palpacuer, Perez et al. 2006, Millberg 2008). This also shows the symbiotic relationship between production and finance which influence and shape each other persistently. It is companies’ increased access to international product markets which requires higher involvement with financial markets to access funding and hedge risk. On the other hand, it is precisely this rising financial involvement which further fosters financialisation through, for example, creating new risks and fragilities and exerting shareholder pressures. Moreover, firm’s ‘productive’ role will fundamentally determine and shape their interaction with financial markets. Soener (2015) shows that not only does financialisation lead to the restructuring of production, but firms’ position in the production process and their specialized roles and productive capacities have important implications for the extent and nature of their financialisation.

Whereas the link between internationalisation and financialisation holds for all companies, it is arguably more acute for EMEs given their smaller domestic markets, both real and financial. Moreover, for EMEs, this link is fundamentally shaped by their peculiar, subordinated, integration in the world economy (Painceira 2011, Powell 2013, Lapavistas 2014, Kaltenbrunner and Painceira 2016).

As seen above, the largest portion of Brazilian NFCs’ rise in external funding has been in foreign currency and sourced from international financial markets.²⁸ The former makes those companies very vulnerable to (expected) exchange rate changes. The need to hedge this risk, e.g. through FX derivatives, ties them even closer to financial markets, in particular on the asset side of their balance sheets. As Brazil’s recent experience shows, these hedging operations can also turn speculative with potentially large open positions on firms’ balance sheets (Farhi and Borghi 2009). The interviews revealed that a large part of the firms were rather unconcerned with the exchange rate risk, given the existence of natural hedges for example in the form of foreign assets and/or foreign currency export receipts. However, as argued above, these hedges frequently boast very different maturities and temporalities than the outstanding liabilities, potentially resulting in liquidity problems.

The second dominant feature of Brazilian NFCs’ rise in external borrowing is the heavy concentration of issuance on international financial markets. Rather than

through the domestic financial markets, NFCs, and the foreign investors who buy their issuances, prefer to do so on offshore financial markets, predominantly in the financial centres New York and London. This reflects and reinforces EME NFCs' subordinated international integration. Whereas developed country NFCs can take advantage of relatively deep domestic capital markets and issue in their own currencies and jurisdictions, Brazilian companies predominantly do so in foreign jurisdictions. Brazilian domestic capital markets remain very small and dominated by short maturities (mainly debentures) and very low secondary market liquidity.²⁹ Moreover, interest rates remain far above those demanded on international financial markets.³⁰ Onshore long-term funding remains dominated by the BNDEs. As mentioned by an interviewee, this funding is increasingly less attractive given the administrative burden involved and the conditions placed upon it.³¹

This predominance of offshore operations, however, has important implications for NFCs. First, the higher share of foreign investors in their liabilities increases their vulnerability to international market conditions as buying and selling conditions might be entirely unrelated to conditions in Brazil. This higher external vulnerability requires a more sophisticated management of the resulting financial risks on the asset side of NFCs' balance sheets. Offshore issuance also means that the debt is issued under international law reducing the influence of national legal systems and hence the state. Moreover, the financial instruments involved are offered and designed by international financial investors, which consequently have an informational advantage with respect to their potential risks. Finally, one could argue that international investors are more forceful in putting shareholder value pressures on domestic NFCs. These global operators with vast international portfolios can easily adjust their positions. In Hirschman's terms, their global nature gives these institutions a higher possibility of "exit" hence putting pressure on domestic NFCs.

Two more characteristics of NFCs' financial operations are worth mentioning in relation to their subordinated international integration. First, as argued extensively by the BIS, large part of international borrowing by NFCs has been related to carry trade operations (BIS 2015, McCauley, McGuire et al. 2015). ECE companies have borrowed offshore at cheaper rates and then channelled the money onshore to take advantage of higher domestic returns. This has been particularly fuelled by record low interest rates in CCE financial markets in the wake of continuous quantitative easing. Indeed, the BCB shows that 80% of international borrowing by Brazilian companies has been transferred back into the country by the means

of intercompany loans (BCB 2015). Thus, rather than being invested in new capacity, these funds have been parked in high yielding and profitable financial assets contributing little to Brazil's economic development.³² The prevalence of these operations is arguably a direct outcome of ECEs' monetary subordination given their structurally higher interest rates and exchange rate movements, which attract yield seeking capital flows.

Second, the previous section has shown the still very small share of equity finance of Brazilian NFCs. Whereas bond finance obliges the debtor to regular interest payments and ultimately amortization, equity financing is dependent on the state of the economy and its decision to pay dividends. It thus bears a higher risk for the (foreign) investors, which they are not prepared to bear yet in the Brazilian case.

IV. CONCLUSIONS

This chapter has presented an overview of the recent changes in the financial practices and relations of Brazilian Non-financial corporations. It has shown that Brazilian companies have undergone similar transformations to those described under the heading of financialisation in developed countries. In particular, Brazil's NFCs have seen a massive increase in debt levels and a substitution of market for bank debt. In contrast to developed countries, this rise was driven by borrowing on international financial markets and largely denominated in foreign currency. Domestic market financing has also increased but still remains very low and dominated by short-term debentures held by resident banks. The foreign involvement in the domestic corporate bond market remains small. Although stock market financing has increased, mainly driven by foreign investors, it still represents a minor source of funding for Brazilian NFCs. On the asset side, Brazilian companies have seen an increase in liquid financial asset holdings, in particular of cash and cash equivalents.

This chapter then argued that these financialisation phenomena were intimately linked to the internationalisation of the Brazilian economy. Here, it particularly stressed the increased internationalisation of production of large NFCs. It argued that financialisation and internationalisation are intimately linked processes that feed into and exacerbate each other. However, it also argued that in the case of Brazil this internationalisation took place in a subordinated way, evidenced by firms' reliance on foreign currency funding sourced on offshore international financial markets.

Implicit in the discussion were the potentially important implications these processes have for Brazilian NFCs and the structure of the economy overall. On the one

hand, the increased access to international markets (both financial and product markets) opens important opportunities for EME companies. On the other hand, they create new risks and challenges. It was argued that these risks and challenges are particularly acute for EME NFCs given their subordinated position in the international economy. Increased leverage, currency exposure, and maturity mismatches can create serious financial fragilities which not only threaten the survival of a single company, but can also have important implications for government debt (if bailed out) and macroeconomic policy. For example, the currency mismatches of large Chinese NFCs act as a serious constraint on the Chinese central bank to move to a more floating exchange rate regime. More generally, the financial involvement and foreign currency debt of NFCs might lead them to favour an appreciated exchange rate, rather than a weaker one which can support export-led, industrial growth.

Moreover, the dynamics described in this chapter can have important implications for the level and in particular the structure of the domestic economy. The financialisation literature has shown that shareholder

imperatives and the increased holding of financial assets can lead to the substitution of real for financial profits, leading to a slowdown in capital accumulation and hence growth. However, even if the general level of investment and growth remains unaffected, financialisation will have crucial implications for the structure and nature of capital accumulation. As was seen in this chapter, the financialisation phenomena described have been largely concentrated in a few large companies and in particular sectors (in particular mining, energy, telecommunications and agricultural mega business). Large, well connected companies can take advantage of the opportunities offered by increased international and financial access. Smaller companies might be less able to do so. On the other hand, the risks created by increased financial liberalisation and openness, such as the volatility of the Brazilian exchange rate, are borne by all of them. Investigating these variegated and differentiated processes of financialisation, by sector, size, international integration etc., is a crucial avenue of future research to gain a comprehensive insight into the implications of these novel and dynamic processes.

NOTES

1. These data are based on aggregate national statistics, which means they also include smaller firms. As will be shown later in the text, more disaggregated data show the relative importance of large companies in driving the dynamics observed.
 2. At the same time, GDP stagnated in 2013 and 2014 probably indicating rising leverage (CEMEC 2016). Despite this significant rise in NFC debt it is important to mention that, in particular compared to developed countries, a large part of domestic investments remain funded by retained earnings (small firms) and the Brazilian National Development Bank (BNDES; large firms) (Ernani and Macahyba 2012, Cintra and da Silva Filho 2013, Almeida, Novais et al. 2016)
 3. As will be discussed in more detail below, the rise in intercompany loans is broadly related to two phenomena. First, Brazilian companies have ratcheted up their borrowing offshore on international financial markets. Money that is brought back onshore is registered as intercompany loans. Second, this reflects on the internationalisation strategies of large Brazilian NFCs which have opened and/or acquired productive facilities abroad.
 4. Given that external debt is denominated in US\$ observed increases can be due either to rising volumes or a change in the exchange rate. In particular most recent increases have been strongly influenced by exchange rate dynamics given the substantial depreciation of the Real (Almeida, Novais et al. 2016).
 5. This substitution of public for private debt seems to be a general trend. The BIS (2015), for example, reports that the share of bank credit to the Brazilian public sector declined from 39% in 2004 to 20% in 2013, whereas the share of households and non-financial corporations increased from 24 % to 34% and 33% to 40% respectively.
 6. By June 2016 it had reduced again to just above 15%, most likely related to the continued domestic uncertainty and unfavourable exchange rate dynamics.
 7. One can observe the significant increase in commercial credit by non-resident banks just before and during the international financial crisis. One explanation could be that these banks became more important for the provision of working capital during these moments of international market turmoil. It is not clear from the data whether commercial capital dropped to zero or whether it has been merged with the loans category.
 8. These data are also based on residency (rather than nationality), which means they are compatible with the balance of payments based external debt statistics of the BCB. On the other hand, rather than publishing the exposure of foreign banks to resident NFCs, the BIS publishes the figure for the non-bank private sector. This is justified by the observation that frequently NFCs conduct their financial operations through non-bank financial subsidiaries, which means the non-bank category reflects the risks taken by NFCs more accurately (BIS (Bank for International Settlements) 2015). This also could explain the discrepancy between the BIS and BCB data with the former being slightly higher.
 9. It could be that increased uncertainty with US tapering announcements meant that investors shifted from market debt back to loans.
 10. These data do not include secondary issuances, that is renewed issuance of already listed firms. Data by Anbima show that secondary issuances are rather small compared to primary issuances.
 11. Moreover, the figure also includes financial corporations (including insurance companies) which overestimates the importance of share issuance for NFCs. In mid-2016 financials accounted for around 5% of equities (Anbima 2016).
 12. One exception is 2010 as a result of Petrobras' major listing.
 13. Although again, these data are slightly overestimated given that they also include financial corporations.
 14. I am very grateful to Marco da Rocha and Paulo dos Santos for facilitating access to these data.
 15. Another shortcoming of these data is that the account method changed from a national one to those issued by the International Accounting Standards Board (IFRS) in 2010. These means that data categories changed and are not comparable before and after 2010 (in particular on sub-items). We will here present both data in separate graphs.
 16. This is surprising given the importance of high yielding government securities for the financialisation process in Brazil (Bruno, Diawara et al. 2009). Future research will need to inquire whether these are included in the marketable securities category or included in other data categories.
 17. Brazil's high interest rates on public debt securities continue to "crowd out" the development of other financial markets and indeed real productive investment. In the face of rising economic and political uncertainty and heightened international competition, Brazilian NFCs prefer to hold high yielding and relatively secure government bonds rather than to invest.
 18. Again, these data, being based on national aggregate data, are not entirely comparable to the balance sheet data considered in this section.
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19. This could be related to recent exchange rate depreciation and rise in interest rates, although more research is needed to confirm this hypothesis. In addition, these revenues would have to be juxtaposed to financial losses to gauge firms' net financial income. Almeida, Novais et al. (2016) evidence the substantial rise in firms' financial expenditures between 2010 and 2015.
 20. Almeida, Novais et al. (2016) show that the share of foreign currency in industrial firms' total liabilities rose from below 10% in 2010 to nearly 20% in 2015.
 21. Some authors have pointed to the role of rising exchange rate volatility to spur economic agents' increased articulation into financial markets (e.g. Helleiner 1994). However, these are not embedded into a more systematic analysis of the international aspect of financialisation. One exception are recent attempts in the Monthly Review School to place their theory of financialisation within the context of the internationalisation of accumulation. Here the economic surpluses of international oligopolies find their outlet in developing countries through the integration into capitalist production of a global reserve army (Powell 2013).
 22. It is interesting to note that there is hardly any literature that investigates the link between NFCs internationalisation and financialisation. The few exceptions are Milberg (2008), Milberg and Winkler (2009), and Baud and Durand (2012), who show how outsourcing has been the result of increased shareholder pressures. To my knowledge, Palpacuer, Perez et al. (2006) is the only paper which discusses the interactive relationship between the internationalisation/globalisation and financialisation in the context of large French agro-businesses.
 23. The international business literature on transnational corporations points to the increased importance of financial advantages for international success (Graser 2010); an international advantage which is particularly one of American TNCs (Hiratuka and da Rocha 2015).
 24. According to the authors, the acquisition of Inco by Vale, the various international acquisitions of JBS-Friboi, the foreign investments by Petrobras (both greenfield and M&A), and the merger between AMBEV and Interbrew (which later bought their largest US competitor Anheuser-Busch and so became the world's largest producer of beer) are examples of this strategy.
 25. A similar phenomenon has been observed in South Africa. For example, Carmody (2002) and FESSUD (2015) point out that South African firms moved their headquarters abroad to "unlock" shareholder value. According to Carmody (2002) companies' assets became denominated in more secure hard currency, which increased asset values and consequently share prices. Moreover, the companies became part of the FTSE 100 which required tracker funds to invest in them.
 26. Here the argument is that if foreign currency borrowing is met with rising revenues in that same foreign currency (or foreign assets), the resulting currency risk should be negligible. This argument, however, overlooks that these foreign liabilities and revenues might be characterised by very different maturities and time scales potentially creating severe problems of liquidity.
 27. Needless to say that the increased exposure to international financial investors might directly increase domestic financialisation through higher shareholder value pressures. As argued below, these shareholder pressures might even be higher in the case of large and mobile international investors.
 28. This inability to borrow in domestic currency is one outcome of EMEs' subordinated position in an hierarchic and structured international monetary system. Other manifestations of this subordinated international monetary position are the need to offer higher interest rates to maintain investor demand in their currencies and their higher vulnerability to changes in international market conditions (Herr and Hübner 2005, Prates and Andrade 2013, Kaltenbrunner 2015).
 29. This is partly due to given Brazil's flat yield curve and investors' (predominantly local banks and pension funds) preference for holding rather than trading assets (Leal and Silva 2010, Park 2012).
 30. For an excellent overview of the domestic corporate bond market and the reasons for its underdevelopment see Ernani and Macahyba (2012).
 31. Moreover, given fiscal concerns BNDES lending has contracted recently (see also Figures 1 and 2) which could have also contributed to the rise in offshore bond financing.
 32. Although it is very difficult to determine what this money has been used for in the Brazilian case. The previous section has shown the increase in liquid asset holdings by Brazilian NFCs which could be related to the offshore borrowing. However, it could have also been used for domestic investments, M&A and indeed regional operations. Future research will further investigate this question.
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REFERENCES

- Akyüz, Y. (2013). *The Financial Crisis and the Global South: A Development Perspective*. London, Pluto Press
- Almeida, J. S. G. d., L. F. Novais and M. A. Rocha (2016). "A Fragilizacao Financeira das Empresas Nao Financeiras no Brasil pos-crise." *TextOS PARA DISCUSSÃO* Instituto de Economia Unicamp 281.
- Anbima (2016). "Capital Market Boletim." August 2016.
- Araujo, E., M. Bruno and D. Pimentel (2012). "Financialisation against Industrialisation: A Regulationist Approach to the Brazilian Paradox " *Revue de la Regulation*.
- Baud, C. and C. Durand (2012). "Financialization, globalization and the making of profits by leading retailers." *Socio-Economic Review* 10(2): 241-266.
- BCB (Central Bank of Brazil) (2015). "Relatórios de Inflação." Online Source. Available at: <http://www.bcb.gov.br/htms/relinf/direita.asp?idioma=P&ano=2015&acaoAno=ABRIR&mes=06&acaoMes=ABRIR> March 2015.
- BIS (Bank for International Settlements) (2015). "What do new Forms of Finance mean for EM central banks? ." *BIS Paper* 83(November 2015).
- Boyer, R. (2000). "Is a Finance-Led Growth Regime a viable Alternative to Fordism? A preliminary Analysis." *Economy and Society* 29(1): 111-145.
- Brenner, R. (2004). "New Boom or new Bubble." *New Left Review* 25: 57-102.
- Bruno, M., H. Diawara, E. Araújo, A. C. Reis and M. Rubens (2009). "Finance-Led Growth Regime no Brasil: estatuto teórico, evidências empíricas e consequências macroeconômicas." *Ipea Texto para Discussao* 1455.
- Carmody, P. (2002). "Between globalisation and (post) apartheid: the political economy of restructuring in South Africa." *Journal of Southern African Studies* 28(2): 255-275.
- CEMEC (2016). "Divida das Empresas Nao Financeiras: Evolucao recente e Impacto da Desvalorizacao Cambial " *NOTA CEMEC* 03/2016.
- Cintra, M. A. M. and E. B. da Silva Filho (2013). "Financiamento das Corporacoes: Perspectivas do Desenvolvimento Brasileiro." *Ipea Serie Economia Internacional Livro* 3.
- Cintra, M. A. M. and E. B. da Silva Filho (2013). Introduction. *Financiamento das Corporacoes: Perspectivas do Desenvolvimento Brasileiro*. M. A. M. Cintra and E. B. da Silva Filho. Brasilia, IPEA. Livro 3 9-15.
- Correa, E., G. Vidal and W. Marshall (2012). "Financialization in Mexico: Trajectory and Limits." *Journal of Post Keynesian Economics* 35(2): 255-275.
- Crotty, J. (2003). "The Neoliberal Paradox: The Impact of Destructive Product Market Competition and Impatient Finance on Non-Financial Corporations in the Neoliberal Era." *Review of Radical Political Economics* 35(3): 271-279.
- Demir, F. (2008). "Financial Liberalization, Private Investment and Portfolio Choice: Financialization of Real Sectors in Emerging Markets." *Journal of Development Economics* 88(2): 314-324.
- Demir, F. (2009). "Capital Market Imperfections and Financialisation of Real Sectors in Emerging Markets: Private Investment and Cash Flow Relationship Revisited." *World Development* 37(5): 953-964.
- Duménil, G. and D. Lévy (2004). *Capital resurgent: Roots of the Neoliberal Revolution*, Harvard University Press.
- Economia, G. G. (2016). Dívida das empresas de capital aberto brasileiras cresce 31% em 2015. *Globo*. Online Source: <http://g1.globo.com/economia/noticia/2016/04/divida-das-empresas-de-capital-aberto-brasileiras-cresce-31-em-2015.html> (Downloaded, 30th May 2016)
- Ernani, T. T. F. and L. Macahyba (2012). "O Elo Perdido: O Mercado de titulos de divida coporativa no Brasil: Avaliacao e propostas " *Instituto de Estudos para o Desenvolvimento Industrial/Instituto Talento Brasil*.
- Ertürk, I., J. Froud, S. Johal, A. Leaver and K. Williams (2008). *Financialization at Work: Key Texts and Commentary*. London, Routledge.
- Farhi, M. and R. A. Z. Borghi (2009). "Operações com Derivativos Financeiros das Corporações de Economias Emergentes no Ciclo Recente." *Estudos Avançados* 23(66): 169-188.
- FESSUD (2015). "The South African Financial System." *FESSUD Studies in Financial Systems*.
- French, S., A. Leyshon and T. Wainwright (2011). "Financializing Space, Spacing Financialization." *Progress in Human Geography* July 2011: 1-22.
- Fritz, B. and D. Prates (2013). "The new IMF Approach to Capital Account Management and its blind Spots: Lessons from Brazil and South Korea." *International Review of Applied Economics* 28(2): 210-239.

- Froud, J., C. Haslam, S. Johal and K. Williams (2000). "Shareholder value and financialization: consultancy promises, management moves." *Economy and Society* 29(1): 80-110.
- Graser, S. (2010). *Realwirtschaftliche und Finanzwirtschaftliche Internationalisierung: Die besondere Relevanz fuer Emerging Market Multinationals*. Wiesbaden, Gabler Verlag.
- Helleiner, E. (1994). *States and the Re-emergence of Global Finance*. Ithaca, Cornell University Press
- Herr, H. and K. Hübner (2005). *Währung und Unsicherheit in der globalen Ökonomie: Eine geldwirtschaftliche Theorie der Globalisierung*. Berlin, Edition Sigma.
- Hiratuka, C. and M. A. M. da Rocha (2015). "Grandes Grupos no Brasil: Estrategias e Desempenho nos anos 2000 " Ipea Texto para Discussao 2049.
- Hiratuka, C. and F. Sarti (2011). "Investimento Direto e Internacionalizacao de Empresa Brasileiras no Período Recente." Ipea Texto para Discussao 1610 (Abril 2011).
- IMF (International Monetary Fund) (2014). "Making the Transition from Liquidity to Growth driven Markets." *Global Financial Stability Report Chapter 1* (April 2014): 1-66.
- IMF (International Monetary Fund) (2015). *Corporate Leverage in Emerging Markets - A Concern? . Global Financial Stability Report*. IMF (International Monetary Fund). October 2015: 83-114.
- IMF (International Monetary Fund) (2015). "International Banking after the Crisis: Increasingly Local and Safer? ." *Global Financial Stability Report* April 2015.
- Itau BBB (2016). "Macro Vision: What is the real size of Brazil's external debt?." Online Source. 28th July 2015 (<https://www.italu.com.br/itaubba-es/analisis-economicos/publicaciones/macro-vision/what-is-the-real-size-of-brazils-external-debt>): Accessed 22nd August 2016.
- Kalinowski, T. and H. Cho (2009). "The Political Economy of Financial Liberalization in South Korea: State, Big Business, and Foreign Investors." *Asian Survey* 49(2): 221-242.
- Kaltenbrunner, A. (2015). "A Post Keynesian Framework of Exchange Rate Determination: A Minskyan Approach." *Journal of Post Keynesian Economics* 38(3): 426-448.
- Kaltenbrunner, A. and E. Karacimen (2016). *The Contested Nature of Financialization in Emerging Capitalist Economies. The Great Financial Meltdown Systemic, Conjunctural or Policy-Created? . T. Subasat*. Cheltenham, Edward Elgar.
- Kaltenbrunner, A. and J. P. Paineira (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.
- Kaltenbrunner, A. and J. P. Paineira (2016). "International and Domestic Financialisation in Middle Income Countries: The Brazilian Case." *FESSUD Working Paper 146*(Online Source. Available at: <http://fessud.eu/working-papers/#WP6>).
- Karwowski, E. (2012). *Financial Operations of South African Listed Firms: Growth and Financial Stability in an Emerging Market Setting*. iii conferencia internacional do ieSe, Mozambique September.
- King, R. G. and R. Levine (1993). "Finance, Entrepreneurship and Growth." *Journal of Monetary Economics* 32(3): 513-542.
- Krippner, G. (2005). "The Financialization of the American Economy." *Socio-Economic Review* 3(2): 173-208.
- Lapavistas, C. (2014). *Profiting Without Producing: How Finance Exploits Us All*, Verso Books.
- Lapavistas, C. and J. Powell (2013). "Financialisation varied: a comparative Analysis of Advanced Economies." *Cambridge Journal of Regions, Economy and Society*: rst019.
- Lazonick, W. and M. O'Sullivan (2000). "Maximizing Shareholder Value: A New Ideology for Corporate Governance." *Economy and Society* 29(1): 13-35.
- Leal, R. P. C. and A. L. Silva (2010). "Financiamento externo no ciclo recente da economia brasileira." *TEXTOS PARA DISCUSSÃO CEPAL • IPEA* 22.
- Levine, R. (1997). "Financial Development and Economic Growth: Views and Agenda." *Journal of Economic Literature*: 688-726.
- Levine, R. and S. Zervos (1998). "Stock Markets, Banks, and Economic Growth." *American Economic Review*: 537-558.
- Levy-Orlik, N. (2012). "Effects of financialization on the Structure of Production and Nonfinancial Private Enterprises: the Case of Mexico." *Journal of Post Keynesian Economics* 35(2): 235-254.
- McCauley, R., P. McGuire and V. Shushko (2015). "Dollar Credit to Emerging Economies." *BIS Quarterly Review* December 2015: 27-41.
- McCauley, R. N., P. McGuire and V. Sushko (2015). "Dollar credit to emerging market economies." *BIS Quarterly Review* December.
- Milberg, W. (2008). "Shifting sources and uses of profits: Sustaining US financialization with global value chains." *Economy and Society* 37(3): 420-451.
-

- Milberg, W. and D. Winkler (2009). "Financialisation and the dynamics of offshoring in the USA." *Cambridge Journal of Economics* 34(2): 275-293.
- Orhangazi, O. (2008). "Financialization and capital accumulation in the non-financial corporate sector: A theoretical and empirical investigation of the US economy, 1973-2004." *Cambridge Journal of Economics* 32: 863-886.
- Painceira, J. P. (2011). "Central Banking in Middle Income Countries in the Course of Financialisation: A Study with Special Reference to Brazil and Korea." PHD Dissertation, University of London.
- Palpacuer, F., R. Perez, S. Tozanli and J. Brabet (2006). «Financiarisation et globalisation des stratégies d'entreprise : le cas des multinationales agroalimentaires en Europe.» *Finance Contrôle Stratégie* 9(3): 165-189.
- Park, J. (2012). "Brazil's capital market: Current status and issues for further development." IMF Working Paper 224.
- Powell, J. (2013). *Subordinate Financialisation: a Study of Mexico and its Non-Financial Corporations*, SOAS, University of London.
- Prasad, E., K. Rogoff, S. Wei and M. A. Kose (2004). "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence." IMF Occasional Paper 220.
- Prates, D. M. and R. Andrade (2013). "Exchange Rate Dynamics in a Peripheral Monetary Economy." *Journal of Post Keynesian Economics* 35(3): 399-416.
- Randøy, T., L. Oxelheim and A. Stonehill (2001). "Corporate financial strategies for global competitiveness." *European Management Journal* 19(6): 659-669.
- Rossi Junior, J. L. (2011). "Hedge or Speculation? Evidence of the Use of Derivatives by Brazilian Firms during the Financial Crisis." *Inspere Working Paper* 243.
- Seo, H. J., H. S. Kim and Y. C. Kim (2012). "Financialization and the Slowdown in Korean Firms' R&D Investment." *Asian Economic Papers* 11(3): 35-49.
- Serfati, C. (2008). "Financial dimensions of transnational corporations, global value chain and technological innovation." *Journal of Innovation Economics & Management* 2: 35-61.
- Soener, M. (2015). "Why do firms financialize? Meso-level evidence from the US apparel and footwear industry, 1991–2005." *Socio-Economic Review*: mwv006.
- Stockhammer, E. (2004). "Financialisation and the Slowdown of Accumulation." *Cambridge Journal of Economics* 28(5): 719-741.
- Stockhammer, E. (2010). "Financialization and the Global Economy." *Political Economy Research Institute Working Paper* 242.
- van der Zwan, N. (2014). "Making Sense of Financialization." *Socio-Economic Review* 12(1): 99-129.
- Wheatley, J. (2015). "Brazil's debt dilemma." *Financial Times*, 23rd December, Online Source <https://www.ft.com/content/5b2b6bde-a8c7-11e5-9700-2b669a5aeb83>(Accessed 6th September 2016).
- World Bank (2007). "Global Development Finance." Washington
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CHINA'S DEBT PROBLEM AND RISING SYSTEMATIC RISKS: IMPACT OF THE GLOBAL FINANCIAL CRISIS AND STRUCTURAL PROBLEMS

YUEFEN LI

ABSTRACT

The fast expansion of China's debt, in particular corporate and local government debt, has attracted international attention and also become a major concern for China's policy makers. Even though China can tolerate a higher debt level than many other emerging and developing economies, owing to the sheer size and other special features of the Chinese economy, systemic risks for financial stability have been rising since the global financial crisis and the cushions built in the past decades to withstand a higher debt level have also been weakened. This chapter reviews the evolution of China's debt built-up and examines reasons behind this trend and factors leading to the rising systemic risks. This includes the expansion of shadow credits, increasing interlinkages between the stock and bond markets as well as the banking sector, and declining returns on investment from the corporate sector. The chapter also makes recommendations for addressing the challenges to maintaining financial stability and economic growth in China.

INTRODUCTION

In 2016, the total GDP of China was over RMB70 trillion (US\$11 trillion) – quite remarkable for a developing country which is also the second largest economy in the world. However, that total debt¹ was about 2.7 times of its GDP, which is significant and burdensome by most standards. It is thus little wonder that the Chinese central government announced in December 2016 that deleveraging would be one of the two priorities for the Chinese economy in 2017. The trajectory of the rapid increase of debt in China since 2008 not only shows the impact of the global financial crisis on China but also reflects the structural problems the Chinese economy is encountering at this stage of its economic development.

The main culprit of the global financial crisis of 2008 was over borrowing by households, the corporate and public sectors, depending on which country is being referred to. However, the most popular remedy by governments to fight against shrinking global and domestic demand was to create more debt via different policy measures and instruments. So much so that in June 2016, amid historically high levels of global debt, the Bank for International Settlements (BIS, 2016) called for the ending of the debt-fuelled growth model.

Indeed China is one of these countries whose debt level has exploded since 2008. As is the case for many emerging economies, its corporate debt has been increasing fast. Its local government debt has also been a long-standing problem. The speed of debt expansion and the size of its debt have attracted much international and domestic attention. As a result, debt accumulation is not only a top concern of the Chinese government but also an important aspect being scrutinized by international investors and commentators.

In assessing the magnitude of the systemic risks associated with debt problems in China, it would be important to avoid two pitfalls: one is to examine debt indicators out of the context of the Chinese economic fundamentals and its development stage and the other is not to give due consideration to developments in the global economy. Since the late 1990s when China had serious non-performing loan problems, there have been predictions and announcements of imminent Chinese financial collapse, economic hard landing or China's Minsky Moment almost every year. Each time, the Chinese economy managed to "muddle through" with

various reforms and the introduction of new policies and regulations. Meanwhile, the economy also has been growing in size and since 2009 it has become the world's second largest economy in nominal GDP terms. In 2010, it has become the world's largest exporter and in 2013 the largest trading nation. Its financial sector (including the banking sector, bond markets and stock exchanges) has also expanded at lightning speed, although its sophistication somewhat lagged behind. (Its bond market is the third largest in the world.) China is still a growing economy, though at a slower pace than before. However, its exploding debt problem has the potential to not only to further slowdown its economic growth but also carries significant systemic risks for the economy as a whole.

The increasing size, complexity and linkages of the financial market make China's debt problem much more tangled than in the 1990s. The global financial crisis of 2008 and the economic development in China have reduced, in a couple cases even wiped out, the effectiveness of some of the buffers China has enjoyed for decades for coping with its debt problem and other economic challenges. China is now at an important cross-road. Without some important reforms on the financial and economic fronts, the debt problem it is currently facing is much more difficult than before. However, to reform and rebalance its economy during an economic downturn with weak global demand is a very challenging task.

This chapter is organized as follows: Section I examines the size, composition and evolution of China's debt burden; Section II highlights the Achilles' heel of China's debt mountain, namely high corporate and local government debt and their changing composition; Section III explains the reasons for the growing debt burden; Section IV reviews special features of the Chinese economy that allows a developing country like China to tolerate a higher debt ratio; Section V argues that even though China's GDP growth is still decent in comparison with most other countries in the world, its economic buffers are weakening and systemic risks are rising; Section VI stresses the urgency to address rising systemic vulnerabilities, even though an imminent debt crisis is currently unlikely.

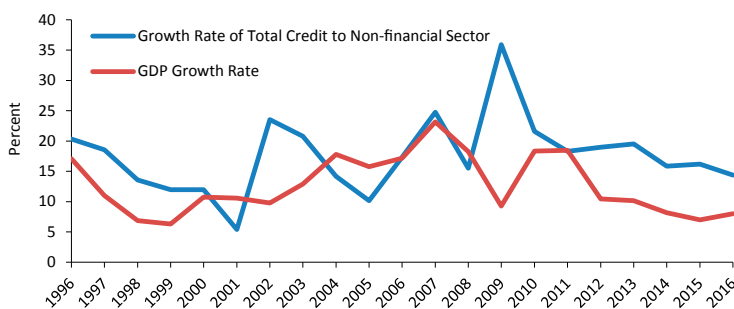
I. THE SIZE, COMPOSITION AND EVOLUTION OF CHINA'S DEBT BURDEN

China's debt situation has gone through a fascinating evolution (Figure 1). Before its opening up to the world, China pursued the policy of "self-reliance". Restrictions on external borrowing were very tight. China had almost no external debt. The period since China's opening up in the 1980s until 2004 was a golden development phase when the rate of debt increase was mostly lower than the rate of GDP growth. Though there was the non-performing loan problem in the 1990s, it was much easier to handle during this period of rapid economic growth. In addition, much of the borrowed money was invested in the manufacturing sector and contributed to the impressive and robust GDP growth which lasted for many years at double digits. Right before the global financial crisis, during the years between 2004 and 2008, debt and GDP growth were basically synchronized with some fluctuations. In this period, GDP growth was at a stable and similar pace

as the debt increase, which shows that debt had its positive impact on economic activities. Since 2008, China has entered the stage of debt explosion and slower economic growth, accompanied with much lower returns on investment, resulting in some wasteful resource allocation and increasing financial fragility. Investment in this period is more on infrastructure than manufacturing.

In 2015 the total debt of China, which includes all categories of liabilities, was at approximately 250 percent of GDP, approaching US\$30 trillion in nominal dollar terms (Figure 2). Comparatively speaking, China's debt to GDP ratio in 2014 was lower than some developed countries including Japan at 400 percent, Ireland at 390 per cent, Singapore at 382 percent, Belgium at 327 percent, Netherlands at 325 percent, Greece at 317 per cent as well as Spain, Denmark, Sweden, Italy, the United Kingdom, the United States, South Korea and Canada. However, the ratio was higher than almost all developing countries except that of Malaysia. Now

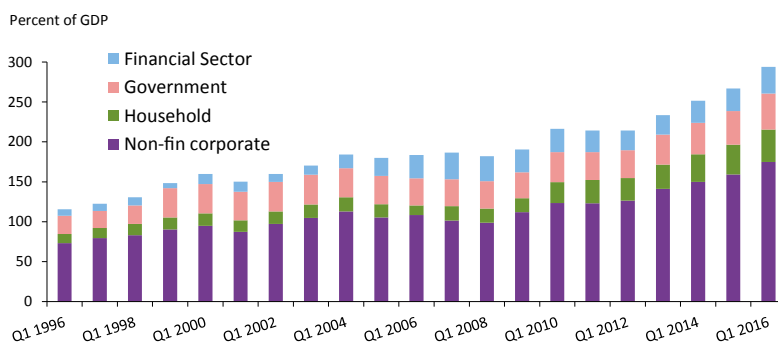
Figure 1. Total Credit to Non-financial Sector growth rate vs. Nominal GDP Growth Rate



Source: UNCTAD Secretariat's calculation based on data from China National Bureau of Statistics, Bank for International Settlements
 Note: GDP and Total Credit growth rate calculated base on value at RMB current price

Source: *Economica*

Figure 2. China's Total Debt-to-GDP - Ratio and sector distribution



Source: UNCTAD Secretariat's calculation based on data from PBOC, BIS, IMF and IIF

Source: *Economica*

with debt servicing up to 20 percent of GDP, debt is a drag on economic growth.

However, an imminent debt crisis in 2015 was not very likely. External debt denominated in foreign currencies was around 7 percent of the GDP, dwarfed by China's foreign exchange reserve as well as assets held abroad. This ratio is much lower in comparison with many developing countries including some Asian countries growing at faster rate than China. In addition, China also runs a relatively big current account surplus. Therefore, currency mismatch in debt position is not a problem for China. According to data from the BIS, general government debt was around 43 percent of GDP at the end of 2015, a manageable rate and lower than that of many advanced economies. Household debt was about 39 percent of GDP. The Achilles' heel was the non-financial corporate debt which was very high at about 162 percent of GDP (Figure 2). Corporations were by far the biggest debtors, especially state-owned enterprises. The most dangerous trend was the speed of the debt accumulation which carries systemic risks if not addressed very quickly.

II. THE ACHILLES' HEEL: HIGH CORPORATE AND LOCAL GOVERNMENT DEBT AND THEIR CHANGING COMPOSITION

The most vulnerable components of China's debt are its corporate and local government debt.

More than 60% of the corporate liabilities are owed by state-owned enterprises (SOEs) amounting to about 115% of GDP. Debt owed by firms with an interest coverage ratio less than one, a threshold considered as loans potentially at risk, has reached approximately more than 15 percent of the total commercial bank loans to corporations or about 12 percent of GDP in 2015 (IMF, 2016). Reported problem bank loans, including "special mention loans," amounted to US\$641 billion, or 6 percent of GDP, showing an important increase from the end of 2014.

The composition of corporate debt has been undergoing major shifts. With the development of China's bond market, especially with the lower cost for issuing bonds vis-à-vis bank loans and further restrictions on shadow banking, corporations have been resorting more to direct mobilization of financing from the bond market (Figure 3). One major reason was its low cost in comparison with bank loans. According to the Chinese central bank, the interest rate for bank loans in the first quarter of 2016 was 5.7 percent across all maturities while the yield on 10-year AAA-rated corporate bonds averaged only 3.8 percent in line with data from main bond clearing houses. In addition, offshore interest rates

were also considerably higher than the onshore market. With such a huge cost differential in borrowing, it is not surprising that Chinese corporates have rushed to the domestic bond market in recent years. This is one of the reasons for pushing the ranking of the Chinese bond market to the world's third largest with the current size of around US\$ 7.7 trillion, just behind the United States and Japan. As a result, the share of bond financing has increased from almost negligible before 2004 to 12 percent of the total corporate financing in 2015.

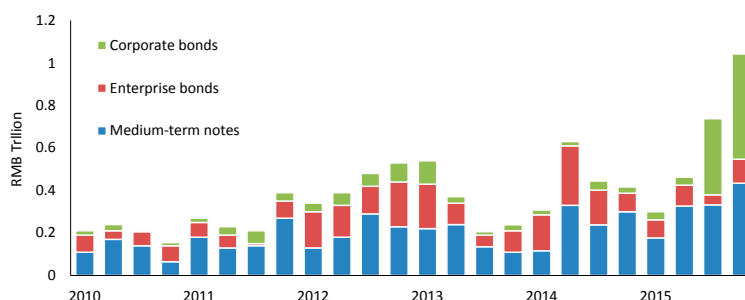
Unlike some other emerging markets where the distinction between domestic debt and foreign debt has become more blurred owing to foreign participation in domestic markets, the Chinese onshore corporate bonds are predominantly owned by domestic investors because China had tight restrictions on foreign participation in the Chinese bond market, which were only reduced in 2016. The restrictions have minimized potential exchange rate risks and capital flow reversal in times of economic downturn.

China's onshore bonds distinguish between corporate bonds and enterprise bonds. The latter are normally approved by the National Development and Reform Commission (NDRC) and the issuers are mainly large enterprises owned by the central government while the former are issued by the local governments or smaller private or public corporates. At the beginning, the majority of bonds were issued by large state-owned enterprises in the form of enterprise bonds which are normally considered as having implicit government guarantee. However there have already been some cases of default in the past couple of years – as the government is aiming at minimising the reliance of the SOEs on the government. On the whole, implicit contingent liabilities constitute a challenge for the central and local governments.

Bank loans, though declining in share, continue to be important. They account for over 58 percent of total corporate financing in 2015 and 56 percent in 2016 (Figure 4). Both corporate debt in bank loans and domestic onshore bonds are predominantly denominated in Chinese currency. Offshore financing is only around 4% by end of 2015. In comparison with other emerging economies whose corporate debt on average is 62% in local currency, China's corporate debt is very low in external financing (Atradius, 2016). Bond financing for the corporate sector constitutes 12 percent and shadow credits 32 percent in 2016.

Though the size of the corporate debt is alarming, it would be misleading to assume that the government is exposed to contingent liabilities as enormous as 162% of GDP. This is because a significant number of the SOEs are financially healthy and pose no risk of needing

Figure 3. China Corporate Bonds



Source: UNCTAD Secretariat's calculation based on data from ChinaBond and Wind
 Note: Enterprise bonds are issued by state-owned enterprises often for the financing of large infrastructure projects. Corporate bonds includes listed medium-term notes and nonlisted debt.

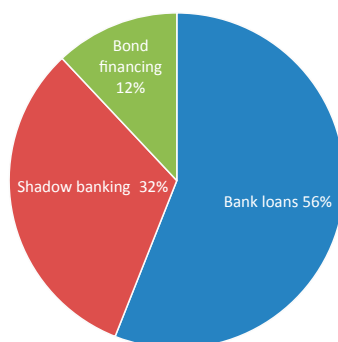
direct or indirect government support. According to Moody's, debt owed by SOEs – to about 20-25% of GDP – require restructuring (Atradius, 2016). The IMF estimated that the corporate debt could result in bank losses equal to 7 percent of GDP (James et al, 2016). The IMF data do not include all categories of debt but already indicate clearly the significant pressure on the banking sector by SOE debt build-up.

Corporate debt also highlights the need for economic structural reform especially for the sectors with

overcapacity. For instance, labour intensive textile enterprises tend to have higher levels of debt and non-performing loans (NPL). Basically, firms in the traditional sectors like mining, textiles, construction, real estate, public administration etc. borrowed the most, accounting for 64% of total loans in recent years (Lo, 2016).

Many Chinese corporates have started repaying their foreign borrowing since 2014 or even earlier. According to the Bank for International Settlements (BIS, 2016),

Figure 4. China's Corporate Sector Debt – As of 12/31/2016



an important part of the massive outflow of capital from China since June 2014 was partly a reflection of Chinese corporations repaying their foreign debt. The third quarter of 2015 alone saw Chinese firms' net repayment of foreign currency debt cross-border at US\$ 34 billion (McCauley and Shu, 2016). The deleveraging by the corporate sector in foreign debt is positive for China's financial stability as it further lowers the risk of a currency crisis.

Local government debt is also a weak link and was about 44 percent of GDP in 2016. By the end of 2016, local government bonds (LGB) stood

at around RMB 33 trillion (approximately US\$ 4.8 trillion) (Wang, 2017). This includes the quasi-fiscal expenditure on non-recognized government platforms. Central government in 2015 loosened the quota for bond sales by local governments by three times to RMB 1.5 trillion (US\$ 240 billion) to fight the increasing reliance on shadow banking by local governments. This was called "Closing the back door while opening the front door". This policy has given the local governments the opportunity to roll over their bank loans by issuing bonds. Many local governments have rushed to "swap" their bank loans for local government bonds (municipal bonds)

generally at low interest rates. It is expected that LGBs will expand exponentially. The government's plan is to have about US\$ 1.4 trillion to US\$ 1.7 trillion worth of local government bonds by the end of 2017. This is meant to improve the maturity of local government debt and avoid a "fiscal cliff" owing to closing avenues for shadow banking. However, if revenue inflow of the local governments does not improve, it really means delaying the inevitable.

III. REASONS FOR THE RAPIDLY INCREASING DEBT BURDEN

The reasons for the debt explosion in China since the global financial crisis are manifold. There are both external and internal factors, structural and cyclical reasons, as well as economic and social influences. Externalities such as the global financial crisis and the resulting low aggregate demand are some of the factors. China's deliberate self-chosen structural transition from a trade and investment driven growth model to one which relies more on domestic consumption and the service industry is another. The transition induces more investment in services as well as investment more tailored to satisfy domestic needs rather than needs for foreign markets where demand has been shrinking. Problems caused by development stages, weak institutional setup, demographic changes, economic distortions inherited from past decades are also reasons behind the debt accumulation. The following is a non-exhaustive list:

A. US\$ 590 BILLION STIMULUS PACKAGE OF 2008

As a concrete action by China to follow up the G20's determined decision to coordinate expansionary policies to boost global demand following the onset of the global financial crisis, China announced its huge fiscal stimulus package in November 2008 amounting to 4 trillion renminbi which was about US\$ 590 billion. The world welcomed this policy decision, however, by 2008 China had already had its own structural problems such as overcapacity and a real estate bubble. Cut-price competition in some traditional sectors like textile, steel, cement, etc has already been an important economic phenomenon. A sudden loosening of credit of such a huge amount could not quickly find its productive outlets without major structural reforms. Benefiting from hindsight, there were severe criticisms of the stimulus package, especially about its size. Economists questioned why China took a very strong medicine when Western countries caught a cold. After all, the global financial crisis originated from the developed countries. Much of the implementation of the stimulus package was

carried out by local governments. The desire to get highest returns quickly from the newly printed money led investors – including local governments – to put their money in real estate projects resulting in major property bubbles in some big cities. Through this process, local governments and the corporate sector have accumulated a record amount of debt, which helped fuel the GDP growth and also made a contribution to the aggregate global trade, in particular commodities. With it, China kept importing some important commodities and contributed around 30% to the global GDP growth in the years following the stimulus.

B. SHRINKING GLOBAL DEMAND

With the fiscal stimulus, China also announced its plans to rebalance its economy and shift from relying on external demand to domestic consumption, from heavy emphasis on manufacturing to more on services, from GDP growth at all costs to more sustainable and environmentally-friendly growth. Yet China's economic rebalancing has been taking place at a time of global financial crisis and substantial world economic slowdown. Had the rebalancing taken place during years of robust GDP growth it would definitely have been less painful. The expansionary policy could not immediately find good productive opportunities in the real economy as domestic consumption could not pick up immediately, thus much of the fiscal stimulus went to investment in infrastructure which has long investment cycles without quick or high returns. Bank credit also went to the real estate development and propping up loss-making firms. Property bubbles and NPL worsened as a result.

With the shrinking global demand and China's rebalancing policies towards more self-sustaining on GDP growth and less dependent on exports, its foreign trade surpluses have been narrowing for some years. The trade surplus stood at 9.9 percent in 2007, then dropped to 2.5 percent in 2012 and 1.5 percent in 2016.

C. LOWER INVESTMENT RETURNS AND A PROPERTY BUBBLE

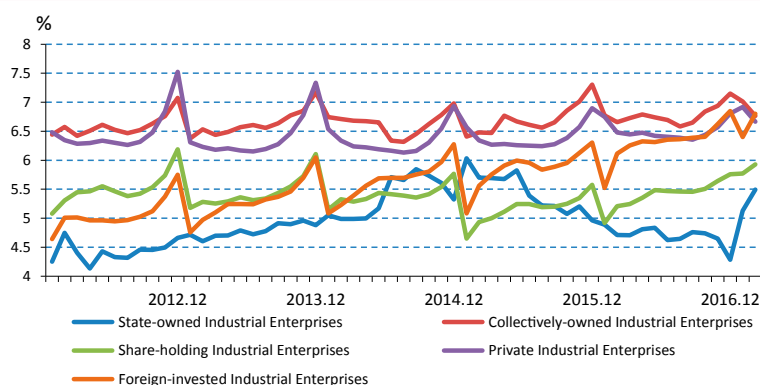
For servicing public or private debt, decent revenue or profit returns would be required. Lower investment returns, be it caused by external shocks or domestic structural weaknesses, would lead to a snowballing of debt because debtors have to borrow more to rollover old debt in order to remain viable. However, in the absence of robust external and domestic demand, and without making the enterprises more productive and competitive through reform, borrowing more now

would imply greater difficulties to service debt down the road.

While increasing debt is a world phenomenon since the global financial crisis, the use of debt has been different among countries. For some countries, the newly created debt has gone to the balance sheets of financial sector and corporates. Much of the debt either stays on the balance sheet or has been used for speculation to get some returns in an environment of low or negative interest rates. For China, much of the credit expansion has been invested in housing, infrastructure and rolling over of debt by zombie enterprises. There was a lack of good investment opportunities in the productive sector as profit returns

had already started to decline before the global financial crisis. This trend has been exacerbated since the global financial crisis (Figure 5). There are various estimates floating around about the level of investment returns in China. One estimate is that it would require four times of the amount of credit issued in 2008 to generate the same unit of output as in the period of fast economic growth. According to estimates of some experts, the average return on investment of Chinese enterprises was above 10 percent before the global crisis, but in 2016 it was about 5 percent, a drop of 50 percent (Ming, 2016). Taking into consideration the cost of raising finance, some enterprises can barely break even.

Figure 5 China Industrial Enterprises Profit Ratio from Main Operational Revenue



Source: UNCTAD Secretariat's calculation based on data from China National Bureau of Statistics

Below are some factors leading to the trend of declining returns to investment:

- a. The phasing out of China's demographic dividend and increasing costs of production

China's insertion into the global value chain and the fast economic growth period from the late 1980s to the turn of the century have benefited enormously from China's cheap, abundant and educated work force. However, China's working age population has been shrinking because of its one-child policy. Since 2010, the size of the work force has started to drop rapidly. According to China's National Bureau of Statistics, there was a reduction of 4.9 million in 2015 alone. This is unprecedented in the world. With it, are the increasing cost of labour and increasing burden of social security for the enterprises and the government. The aging of the population before getting rich has its negative impact on domestic consumption owing to the need for precautionary savings before retirement and the declining income after retirement. The costs of production beyond labour including land, electricity and production material have also been increasing by a wide margin.

- b. Overcapacity and challenges to reform SOEs

These are major reasons for the lower profit margins. Investment-driven growth has been a problem in China before 2008. The global financial crisis which led to shrinking external and domestic demand has made the overcapacity worse and more widespread. The situation is especially serious in traditional sectors like textiles, steel and mining. However, the SOEs with excess capacity have been major recipients of credit flows. Their privileged status to get credit makes them less driven to upgrade technology and to implement meaningful reform to develop capacity for rolling out new or improved products. In addition, the SOEs are also burdened by their role to assist the government in rebalancing the economy and implementing policies without causing social instability which includes avoiding firing workers. The balance between commercial interests and their social/political responsibilities is an intricate task which makes reform of the SOEs even more challenging. By 2015, the SOEs, many of them are gigantic in size, accounted for around 55% of corporate debt but only produced 22% of economic output (IMF, 2016).

Their profit margin was lower than the privately- or publicly-owned enterprises. To remove redundant loss-making enterprises including SOEs through reform would be important for strengthening viable and dynamic enterprises and improving the effectiveness of asset allocation. In this aspect, China should draw lessons from Japan in dealing with its property and stock exchange bubbles in the 1980s when Japan had a long period of deflation as a result of trying to avoid enterprise and bank closures. SOE reform would be painful but to delay the day of reckoning could result in more pain and greater cost down the road.

c. Property bubble

Because of the above reasons, when enterprises have access to credit, some would prefer channelling much of the money to the real estate sector. Property speculation has become hot in many cities. In 2016 alone, according to data from China's central bank, credit used for property development was about US\$3.88 trillion, a year-on-year increase of RMB 5.67 trillion (Kaiwei, 2017).

D. CARRY TRADE, ILLICIT FINANCIAL FLOWS AND FINANCIAL LIBERALIZATION

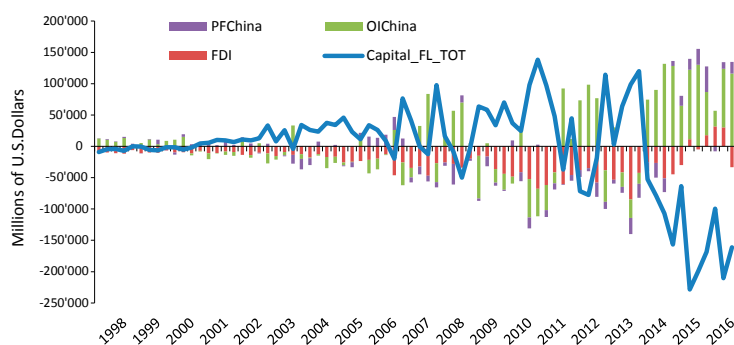
China has taken important steps to liberalize cross border financial flows since 2009, though at a much slower pace since 2016. This has been encouraged by multilateral financial institutions, and also been considered necessary for meeting the criteria for joining the Special Drawny Rights (SDR) currency basket of the IMF and for deepening its financial market. Meanwhile, institutional building including the introduction and enforcement of required rules and regulations has lagged behind. With this gap, corporations, private individuals and some players

in the financial market have engaged in activities in exchange rate and interest rate arbitrage resulting in large amounts of short term borrowing and outflow of capital.

In the period from 2012 to 2014, there was significant appreciation of the Chinese currency. The expectation in the market in those days was that the RMB would appreciate further; some people called it a one-way bet. Thus, borrowing US dollars from foreign banks, exchanging them to RMB would bring in a good return through depositing the money in Chinese banks which had much higher interest rates than countries undergoing loose monetary policy. Some would use the money to purchase Wealth Management Products (WMP) whose return would be much higher than bank deposits. Unlike other emerging market bank loans, Chinese investors borrowed loans with very short maturities with the anticipation of changes in exchange rate or interest rates. Many of the loans were in the category of trade financing, including fake trade deals. China's borrowing from foreign banks by the end of 2008 was about US\$ 200 billion. By early 2014, this number has shot up to more than US\$ 1 trillion. Claims had risen by US\$ 643 billion in 2014 and 2015 – 80% of which had maturities less than a year. When RMB started to depreciate, Chinese borrowers rushed to pay back the loans. The Bank for International Settlements (BIS, 2016) reported that foreign bank claims on China fell by US\$ 305 billion in the 18 months through June 2016.

Unreported illicit flows have also grown. Under China's capital account, "Errors and omissions" – a catch-all for cross-border transfers that have not been properly classified – reached US\$ 89 billion in the first half of 2016 (Figure 6).

Figure 6. China's Capital Flow



Source: UNCTAD Secretariat's calculation based on data from Thomson Reuters

E. FAST EXPANSION OF SHADOW BANKING ESPECIALLY WMPs

Shadow banking refers to non-bank financial intermediary activities provided outside the financial regulations. A large part of this is attributable to off-balance sheet activities provided by commercial banks through platforms like wealth management products.

Compared with many advanced countries, China's shadow banking is modest. But the speed of its expansion was extraordinary (Figure 7). Bank lending was the only source of credit and financial intermediation before China's opening up. In the early 2000s, in the absence of bond markets and developed stock exchanges, bank loans occupied a predominant share. Therefore, China's financial market was bank-centred, especially dominated by China's four largest banks for many years after its opening up. The global financial crisis dampened the shadow banking activities in many advanced countries, but in China its amount exploded since 2008 because financial institutions tried to be creative and make use of the central government's initiative to implement financial liberalization as an opportunity to circumvent regulations. With the very low interest rate environment, banks, though having plenty of liquidity, have suffered from lower operational profits. Large enterprises that have good access to credit also looked for opportunities to get higher returns. At the other end of the spectrum, private firms and smaller enterprises were hungry for credits. Sometimes, they could only get credit on time through shadow banking channels. Therefore slow economic growth and shrinking global demand as well as the fiscal stimulus have sowed the seeds for off-balance sheet financial activities.

The estimate of the size of China's shadow financing was more than 40 trillion yuan in 2015, nearly two-thirds of GDP. While bank loans seemed to have declined in the past years, shadow credit went

through a steady increase between 2006 and 2008 and a fast expansion since 2009. Adding this to the total debt has driven up China's debt to GDP ratio by an important margin.

Wealth Management Products (WMP) are the main instrument for shadow banking. WMPs are debt-like instruments offered at interest rates higher than those of the normal bank loans. Most importantly, in many cases they could be repackaged so that they would not be shown in the issuers and owners' balance sheets as WMPs would not appear as regular loans but as investment and categorised as "investment receivables". This way WMPs can avoid being accounted for when calculating bank reserve requirements. For instance, if a bank sells WMPs to another bank, then purchases it at the interbank market, the WMP sold even one day earlier could be qualified as bank asset instead of a liability. The banks could win on three fronts, i.e. higher operational profits, higher capital adequacy ratios and lower capital requirements. Typically WMPs are of short maturity. The reason for their fast increase is mainly due to the urge of banks and investors including household bank depositors to search for higher returns in a low interest rate environment since the global financial crisis. It is an important way for banks to circumvent the capped interest rates which the central bank introduced to avoid interest rate wars among banks. It is a creative way for banks to maintain decent returns and market share during the period of loose monetary policy pursued by the government because of slowing global and domestic economic growth. The interest rate in China was around 2 percent over this time. Instead of interest rate wars, banks – in particular small and medium-sized banks – have been using shadow banking as an effective weapon to attract customers with the promise of higher yields (around 5 percent, thus 2-3 percent higher than bank deposits).

Figure 7. The Rise of Shadow Credit in China

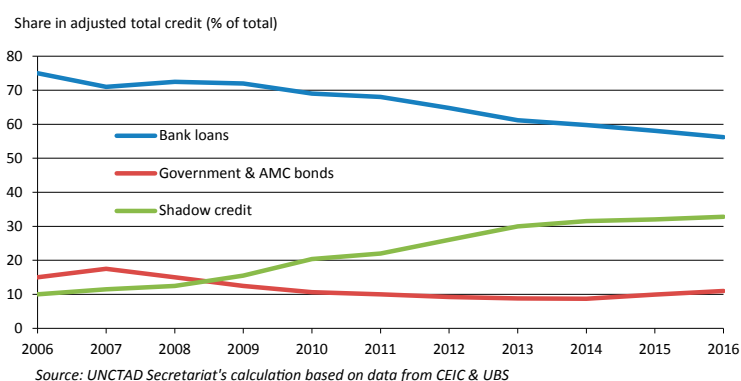
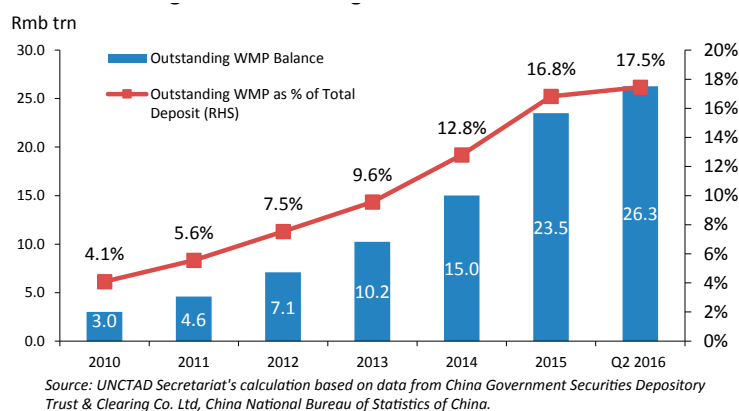


Figure 8. Outstanding WMP Balance vs. Total

WMPs have rocketed from 4.1 percent of the total bank deposits in 2010 to 17.5 percent in the second quarter of 2016, amounting to RMB 26.3 trillion according to China Government Securities Depository Trust & Clearing Co. Ltd, China (Figure 8).

Seeing the potential risks of WMPs, the central bank tried at first to rein in the large banks. Since 2015, large banks have been restricted in issuing WMPs as they are requested to show them on their balance sheet. However, small and medium sized banks in various provinces continued to increase issuing WMPs aggressively.

In January 2016, the Ministry of Finance announced its plan to include WMPs in the measuring of credit growth which means WMPs will be required to be reported in banks' balance sheets. From the first quarter of 2017, China's central bank, PBoC, started to include assets behind WMPs in its Macro-Prudential Assessment (MPA). Thus, WMPs are being included in assessing bank risks. The China Banking Regulatory Commission will require banks to set aside capital for provisioning for WMPs. It is expected that more stringent regulations and accounting standards will put the brake on the expansion of WMPs as further issuing will have to satisfy the newly introduced measures. However, funds and securities firms will also have to be kept under the radar to check the expansion of WMPs as they have already overtaken banks as the largest drivers for the WMP issuance in 2016.

IV. SPECIAL FEATURES OF THE CHINESE ECONOMY TO TOLERATE A HIGH DEBT RATIO

Some special features of the Chinese economy have allowed it to withstand a higher debt to GDP ratio than many other emerging and developing economies.

A. A LARGE, DIVERSIFIED AND GROWING ECONOMY WITH A STRONG STATE ROLE

China ranks as the second largest economy in the world. The size of its GDP in 2016 has surpassed RMB 70 trillion. By territorial area, China is the fourth largest country in the world. Within this large country, economic development stages are quite varied, ranging from the first world to the third world with coastal regions and Beijing being much more advanced in all aspects of economic development while the northwest and other regions are still relatively undeveloped. This gives the possibility of utilizing the "flying geese" economic model within the country. For instance, some of the more advanced regions have been trying to search for development opportunities in less advanced regions. In addition, the economy is quite diversified with manufacturing industries, service sector and agriculture all contributing to the GDP growth. For instance, the service industry has been enjoying healthy growth. At 6.7 percent in 2016, China's GDP growth rate is still decent, especially in the current world environment. Though China's growth has been investment-driven or fueled by debt for many years, some new dynamic economic sectors have been emerging including services, green energy-related products and so on. The IMF recently revised the GDP growth outlook upward for 2017 by 0.3 percentage points to 6.5 percent while it lowered GDP growth forecast for other countries (IMF, 2017).

The size of the economy, its diversified economic structure and attempts to make variation in economic development within the country as an opportunity for the "flying geese" model, give China stronger capacity to absorb external and domestic economic shocks and more room for manoeuvre to tackle emerging economic challenges. Compared with small countries and economies with heavy reliance on one or two

commodities, China does enjoy greater flexibility in withstanding higher levels of debt.

In addition, the role of the state is still important as some large corporations and banks are state owned, though the role of the market has begun to take prominent role in commercial activities. When the largest lenders and the largest borrowers are all under the supervision of the central government whose debt and budget deficit are low, the government has the capacity and policy space in time of need to raise new capital to support troubled banks and corporations as well as shore up depositors' confidence in the financial sector if it is really called for. The government is also in a position to take a leading role in coordinating and initiating debt restructurings or relatively milder mitigating actions to avoid disorderly bankruptcies or disruptive credit events that would negatively affect financial stability.

B. DEBT IS PREDOMINANTLY DOMESTIC AND EXTERNAL DEBT IS LOW

According to Moody's, China's domestic debt is at 196.8 percent of GDP and external debt was 8.6 percent of GDP in 2014 and 7 percent in 2015. External debt is much lower compared to many emerging and developing economies. Thus, China does not have difficulties in servicing its external debt. The IMF's latest regional report stated that foreign bank claims on China accounted for US\$ 1 trillion with varied maturities. Foreign direct investment and portfolio equity together account for 70 percent of China's external liabilities (Prasad, 2016), a much safer structure of liabilities than debt dominated in foreign currency. Though such kind of investments could also move out of the country if investors wish to do so, China's currency intervention, massive at times, and capital controls could offset such movements to some extent. Its net international investment position is about 1.6 trillion or 15% of GDP, hence China is still a net creditor.

C. LOW CENTRAL GOVERNMENT DEBT

China's public debt has risen markedly, to 40.6% of GDP at the end of 2015, according to Moody's estimates, from 32.5% in 2012. The central government debt was at 17 percent of GDP in 2015. This ratio is still below the public debt to GDP ratios of major advanced economies. When using the IMF's augmented way of calculating public debt, which covers all types of local government debt including bank loans and bonds, this would be about 60 percent of GDP for

2015 (Atradius, 2016). The central government debt is lower than in many developing and developed countries. The corporate and local government debts are predominantly domestic. Therefore, the probability of a currency crisis is low. If needed, the central government is in a position to stimulate the economy by increasing central government debt.

D. CREDIT MAINLY COMING FROM THE BANKING SECTOR

While stock and bond markets have been growing fast, banks are still the main conduits for credit. The banking system is not highly leveraged. In 2015, 58 percent of the corporate debt came from bank lending while direct financing from bonds and credit from shadow banking are of relatively less importance. The banking system is liquid and mainly financed by deposits. Bank deposits amount to more than 200% of GDP, though precise data on the amount of WMP is difficult to obtain. Even though the fast developments in China's financial market have been changing the landscape, the financial system still lacks the sophistication of the advanced economies where securitization is much more prevalent than in China. An economist from Fitch rating agency commented on this unique feature of the Chinese financial system and stated that "China's financial system is dominated by banks and funded overwhelmingly by retail deposits. Both the banks and borrowers are either state-owned or heavily state-influenced. These factors suggest that the kind of collapse of confidence among creditors that might precipitate a financial crisis is unlikely in China" (Tan, 2016).

E. HIGH SAVINGS RATE ESPECIALLY FROM HOUSEHOLDS

China's gross savings are close to 50% of GDP (Johnson, 2016). Household debt is relatively low and savings are high, which is an important cushioning factor. The analysis from the IMF also confirms that there is a healthy risk-sharing across households and corporations. Countries that save more can afford to borrow more. Households now have debt equal to 38% of GDP. Much of the debt is concentrated in household mortgages which are considered as high quality collateral, particularly when the government does not seem to want to see the property bubble burst as it would definitely have a very negative impact on social stability. The probability of defaulting on mortgages is low. Savings by households are high, their total liquid assets in the Chinese banking system amounted to 80% of GDP in 2015. With the aging population peaking in the coming years and the lack of a

good social security system, the trend of high precautionary saving in Chinese households still prevails. Household savings is mainly intermediated by the banking sector. The relatively low household debt and high savings rate is a good anchor for the financial system. It minimizes the risk of fast reduction of consumption which can have negative impact on growth, employment and investment. This risk-sharing across households and corporates, meaning households save and the corporates borrow, is an important reason for China's low external debt.

F. CAPITAL CONTROL AND GOVERNMENT INFLUENCE

Though reforms have been underway, China's capital account has not yet been fully liberalized and the government remains cautious on this front. Transfers of funds abroad have to go through screening. More strict capital controls and other corrective measures would normally be imposed during times of a big upsurge of outflows of money. The government has significant influence over state-owned banks and SOEs, which allows corrective measures to be taken more quickly than other economies. Even though capital controls always have leakages through

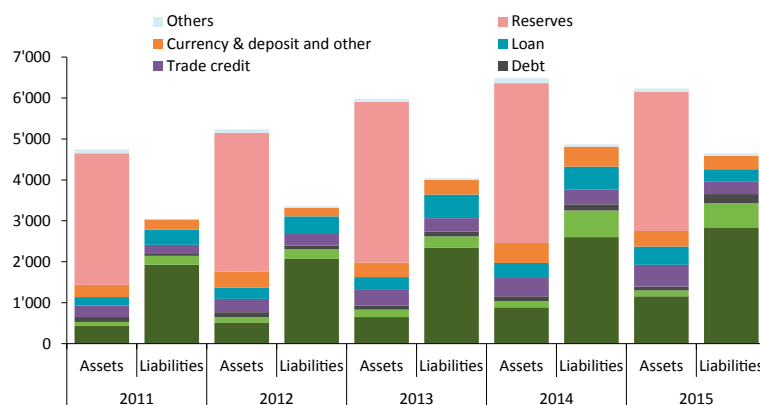
various channels, it can play an important role in keeping liquidity at home.

G. LARGE FOREIGN EXCHANGE RESERVES AND SIGNIFICANT LIQUID ASSETS

China has a high liquidity buffer against financial crisis. At the central government level, the foreign reserves are less than before but are still the largest in the world at around US\$ 3 trillion by the end of 2016 (Figure 9). Moreover, external debt is low. Even though the trade surplus has been shrinking, the current account surplus is still healthy. Banks are still relatively liquid.

Though China's corporate debt is high, amounting to approximately 160 percent of GDP, its total assets are around 180 percent of GDP, which is higher than that of other emerging economies (IMF, 2016). Since China has had few cases of bankruptcy and there is no available information on the quality of corporate assets, it is difficult to assess whether in times of crisis the fair value of assets could be maintained and liquidation of assets could normally be carried out smoothly.

Figure 9. China's Assets and Liabilities (Billions of U.S. dollars)



Source: UNCTAD Secretariat's calculation based on data from IMF, World Bank and CEIC.

V. WEAKENING OF BUFFERS AND INCREASING SYSTEMIC RISKS

Despite the size and composition of China's debt, as well as the economic fundamentals and financial positions of China not supporting the prediction of an imminent debt crisis, the underlying systemic financial and economic risks and vulnerabilities are rising. In

addition, some cushioning factors such as the high savings rate and high foreign reserves have been weakened and eroded especially since the global financial crisis. The effectiveness of government policies and oversight has been compromised to some extent by shadow banking. Given these reasons, the probabilities of systemic financial crisis to be triggered by certain domestic and external sudden changes have been elevated.

A. BREATHTAKING SPEED OF DEBT INCREASE AND DIMINISHING RETURNS

Economists have often used such adjectives as “neck-breaking” and “breathtaking” to describe the fast economic growth of China in the 1980s and 1990s. Right now, the same two words could be borrowed to describe the increase of the Chinese debt burden. At the onset of the global financial crisis in 2008, China’s debt to GDP was approximately between 164% and 170% according to different data sources. Compared with the current 260% of debt to GDP ratio, the past seven years have witnessed a tremendously dangerous debt built up. However, this fast increase of debt also exposes some distortions and systemic risks. Increase in central government debt was moderate but the corporate debt increase was huge. Lending by the shadow banking sector and bonds increased rapidly. The alarming phenomenon is that the already fast credit increase has picked up speed in 2016. Credit growth in the first quarter of 2016 was reported to be up 58% over the same quarter in 2015 to 7.8 trillion Chinese yuan (Bryan and Fink, 2016). The first round of expansionary credit policy in response to the global financial crisis in 2008 had some positive effects to counter the negative effects of the global financial crisis by expanding aggregate demand. However, now the marginal efficiency of credit growth has been diminishing as an increase in each unit of credit in China is generating less and less GDP. Some economists have been debating whether this is a result of wasteful investment, including lending to the so called “zombie enterprises” – enterprises which are not efficient or with overcapacity – to keep them afloat. It may also be the case that money borrowed has been kept on the balance sheets of enterprises without being invested in productive sectors (Wang, 2017). Therefore, it is high time for a close examination of credit utilization and lending policies. To use expansionary policies to stimulate the economy without looking into the absorbing power and efficiency could be counterproductive and create bubbles and wasteful investments.

B. NON-PERFORMING LOANS FROM THE CORPORATE SECTOR AND LOCAL GOVERNMENTS POSE A THREAT TO THE BANKING SECTOR

It is not surprising that with sluggish global demand, domestic overcapacity and increasing credit risks by the alarming expansion of shadow banking, NPL loans would be on the rise. However, to estimate the size is a difficult task as data are difficult to obtain.

To make things more complicated, the definition of NPL in China is broader and looser than that of the IMF.

The Chinese official in charge of supervising major state-owned financial institutions from the China Banking Regulatory Commission stated in 2016 that NPL pressure is the worst in 2015 since 2004 when the major banks were recapitalized.

The IMF’s April 2016 Global Financial Stability Report estimates that 15.5 percent of total commercial banks’ loans to corporates, or US\$ 1.3 trillion (12 percent of GDP) are potentially at risk of being turned into non-performing loans as the profit earnings of the enterprises do not show the ability to service their debt. In addition, it is doubtful that local governments have the capacity to service the debt mountain amounting US\$ 4 trillion. In May 2014, China released the national audit outcome of local government finances which found that 40% of the loans are being repaid through land sales (MIT, 2016). This shows that the local governments do not possess reliable and sustainable sources of revenue for servicing their debt. In addition, the audit also showed that already 20% of new borrowing had been used to repay old debt. Though servicing old debt with new borrowing is a frequently used strategy by borrowers, the two findings pointed to increasing risks of more non-performing loans at local government level.

With the current efforts to reduce leverage by local governments, and the corporate sector cutting overcapacity as well, there is increasing risk of default on borrowing in different forms, both loans and bonds. Defaults and bankruptcies will definitely negatively affect the banking sector and increase the stock of NPLs. In view of the potential systemic threat of non-performing loans from the corporate sector and the local governments on the banking sector, the central government has allowed corporations to swap their debt in exchange for equity, named debt-for-equity swap. This kind of technique was used by other countries as well as China in the past. In times of good economic growth, it could be quite effective as with time the size of debt would decrease to a very manageable amount. It happened to China in the late 1990s. However, at times of slower economic growth, as it is now, its effectiveness could be reduced and could even worsen the burden on the banking system as banks would forfeit the business opportunity to receive interest and principal payments and also lose the ability to sell the equity to the central bank or other banks. The IMF published a paper in April 2016 to alert that the maturity and liquidity transformation through the debt-for-equity swap may just “kick the can down the road” and would not address the problem of NPL

fundamentally (James et al, 2016). Meanwhile, it could worsen the banks' asset quality. The IMF paper pointed out that although corporate debt is currently at a manageable level, it needs to be addressed with urgency in order to avoid serious problems. Similarly, local governments will be allowed to swap 1 trillion yuan (\$160 billion) of their existing high-interest debts for lower-cost bonds. In view of the outcome of the 2014 audit of local government debt, it seems that such a swap should also be accompanied by policies to increase local government revenue and promote the efficiency of their investment. Debt to equity swaps (D/E swaps) can cushion the deteriorating bank asset quality. It is a good decision that the guidelines issued by the State Council of China in October 2016 aiming at reducing debt burden explicitly forbids banks to hold equities from D/E swaps. Otherwise, such a swap would carry the risk of turning corporate and local government debt to bank debt with a longer maturity. The speed of deleveraging would be important as any drastic deleveraging and destocking of houses could lead to higher levels of NPL and the potential of bankrupting the banking sector as direct financing through bonds and other financial instruments are still much less important than that of bank loans.

High levels of NPL in the banking sector would also damage the confidence of households who are important asset holders of the banks. Negative impact on their confidence in the banking sector would lead to greater capital outflows.

C. SYSTEMIC RISKS POSED BY SHADOW BANKING ESPECIALLY WMPs

Shadow banking has increasingly become a major risk for the financial stability and the health of the banking sector owing to its fast expansion, its involvement in wholesale funding and its distraction of quality bank assets. WMPs have become more popular and their expansion has become increasingly worrisome.

Because of the opaqueness of WMPs, a lack of reliable data has hampered a comprehensive understanding of the actual risks they pose. Lately more vigorous tracking of WMPs by some institutions have given more information on the investment pattern and magnitude of WMPs and thus deeper understanding of the risks they pose to the stability of the banking sector if not properly regulated. WMPs have the following risks:

- a. **Maturity mismatches:** WMPs are typically of short maturities. In 2015, more than half of the WMPs had maturity of less than 90 days and 13 percent had maturity shorter than 30 days

(IMF, 2016). Bearing in mind that WMP funds are not just used for interbank lending which is very often short term, they are also funding corporate bonds. Therefore, maturity mismatches are obvious. Should there be any market event and investors all rush to sell WMPs, there would be a huge liquidity problem for banks and other investors.

- b. **Difficulty to control credit growth:** The lack of transparency for shadow banking would mean it is more difficult to control credit growth. Many WMPs are not shown in the banks' balance sheets. Structured WMPs which are composed of multiple tranches with different risk levels and correspondingly higher yields are even more opaque and it is difficult to calculate their leverage.
- c. **Credit risks:** the lack of proper or light screening of loans and investors by shadow banking, especially WMPs, have worsened the quality of assets of the banking sector and could result in future credit risks. For small and medium sized banks they may have viability problems because of their large exposure to problem investors. WMPs are responsible for much of the wasteful investment or misallocation of resources as they channel credit to those who are not qualified for normal bank loans. WMPs provide access to credits to industrial sectors already suffering from overcapacity, to property developers in regions where there is an oversupply of houses, and to local government. Normally WMPs do not have guarantee for returns. However, losses are very rare as banks do not want to lose their customers.
- d. **Distracting quality assets from the banking sector:** Household bank deposits are an example. Household savings are very important to the financial stability of China and the robustness of household balance sheets has been vital to the health of the banking sector. In the past, households had no other options but to deposit their savings in the banks. In 2008, China's listed banks got about 70 percent of their funds from deposits; households occupied a large share. With financial liberalization and deepening of the financial market, households are no longer satisfied with the return on bank deposits. They have become more sophisticated than before. They are

important players for WMPs. According to Credit Suisse, households' exposure to bank WMPs increased from RMB 0.9 trillion in 2009 to RMB 12 trillion in 2014 (Wang et al, 2015). Banking deposits still occupy 54 percent of households' financial assets in 2014 but the WMPs already accounted for 13 percent of household assets. The 2014 households' asset mix shows two major characteristics and trends. Firstly, China's household wealth is more illiquid, especially comparing with late 1980s and early 1990s when household wealth was predominantly bank deposits, and its non-financial asset level is higher than that of many developed countries. Thus the increasing share of WMPs would mean an even smaller share of good quality banking deposits in the households asset portfolio. Therefore, the ease of using household savings as a cushion for corporate and local government debt is becoming more challenging than before. Secondly, though bank deposits were still the main financial investment for households, other more opaque and more leveraged financial instruments and equities which could be used as collateral for further borrowing are becoming more popular. In 2015 and 2016, there was significant increase of WMPs purchased by households.

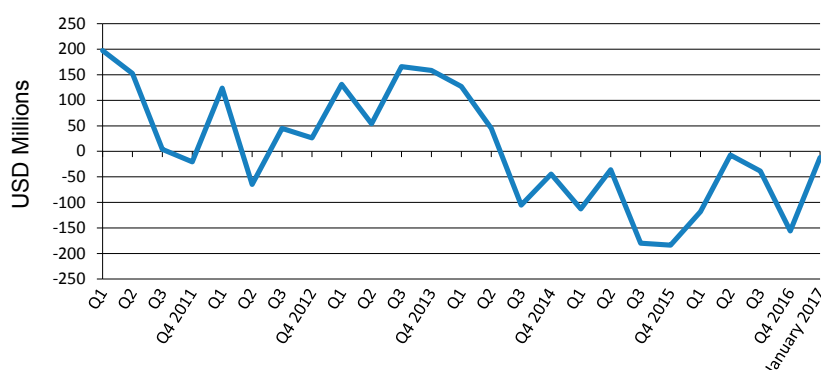
D. SHRINKING FOREIGN EXCHANGE RESERVES

For years, China enjoyed both current account and capital account surpluses. As a result, its foreign exchange reserves have piled up, reaching more than US\$ 3 trillion since 2011.

Since the financial crisis, its current account surpluses have become narrower. However, the capital account plunged to deficit in 2012, the first time since 2000. It improved somewhat in 2013. But the deficit in the capital account has been getting bigger since the depreciation of the RMB in 2014. Up to the end of 2016, there were at least 9 quarters when the capital account was in the negative territory. In January 2017, for the first time in 6 years, China's foreign reserves fell below US\$ 3 trillion. The main reasons have been capital outflow in different forms and the open market intervention to maintain levels of exchange rates of RMB through selling foreign currencies and buying yuan by the central bank of China. The depreciation of the RMB and capital flows have fed on each other. Namely, before 2012, there was widespread expectation of strong appreciation of RMB. There was the belief that it was a one way bet. This led to increased borrowing of dollars abroad by Chinese enterprises as well as inflows of hot money from foreign sources. The depreciation expectations triggered outflows of capital through repayment of debt denominated in dollars as well as an outflow of hot money. The outflow of capital weakened the market confidence in the RMB and led to more selling of RMB, thus further increasing the depreciation pressure.

The foreign exchange reserves of a country is an important buffer for its debt problem. But it does not mean that the bigger the reserves the better for the economy. Too large a reserve incurs cost. For instance, holding of US treasury gets very small returns. Meanwhile, for many years there was the fear of debasement of dollar in the past, though currently the strong dollar makes the Chinese central bankers much at ease on this front. However, a fast reduction of around US\$ 1 trillion of foreign reserves over a period of slightly over a year is also worrisome (Figure 10).

Figure 10. FX Reserve Quarterly



Source: UNCTAD Secretariat's calculation based on data from China National Bureau of Statistics

E. PERSISTENT CAPITAL OUTFLOWS IS A SYSTEMIC RISK WHILE SUDDEN LARGE OUTFLOWS COULD TRIGGER A CRISIS

Certain external factors could lead to a renewed surge in the outflow of capital. The promised continued hikes of the benchmark interest rate by the US Federal Reserve would be one such important factor. When yields on US Treasuries rise above equivalent bonds in China, the attractiveness of holding such bonds would be minimized, causing more pressure on capital outflows. In the same vein, expectations of further depreciation of RMB will also make it difficult to keep liquidity at home.

An important gauge of the magnitude of the outflow of capital is the size of the errors and omissions in the capital account. This item includes various creative ways of getting capital outside of the country including over-invoicing trade transactions. Over the past few years, errors and omissions have been increasing fast, reaching an amount of US\$ 75 billion in the third quarter of 2016 and US\$ 58 billion in the fourth quarter the same year.

Another source of capital outflows comes from the household side. Sending children abroad for their education and tourism abroad have been fueling this trend. These two items have seen a fast increase amounting to approximately US\$ 100 billion in 2015. As the Chinese population gets richer and the real estate prices in major cities get higher, a rush to buy properties abroad has emerged. Chinese property buyers have constituted the largest group of foreign real estate investors in a few countries like the United States, the United Kingdom, Australia and New Zealand, pushing property prices in these countries to an unprecedented level. In the United States alone, there has been an inflow of US\$ 110 billion from Chinese investors between 2010 and 2015 (Yang, 2016). Last year, Chinese authorities tightened capital controls and the results are already evident.

With the increasing tempo of interest rate hikes by the United States Federal Reserve and depreciation pressure on the Chinese currency, the probability of another round of capital outflows can not be ruled out. Persistent and large outflows of capital would weaken China's liquidity cushion built up over the past decades. It is even more important to prevent large and sudden outflows of capital which could trigger a systemic crisis through undermining the confidence in the banking sector and the national currency. Capital controls have various leakages and may not be able to effectively prevent tidal outflows of capital.

F. RISKS FOR CHINA'S LARGE AND INTERCONNECTED FINANCIAL SECTOR

With financial liberalization, the landscape of China's financial sector has changed. The banking sector, bond markets and stock exchanges have all expanded at a rapid pace in the past decade. By mid-2016, China's banking sector had an asset of about US \$30 trillion, ranking first in the world. Its bond market is the third largest with the size of about US \$9 trillion in the first half of 2017, while the stock markets are worth around US\$ 6 trillion, the second largest in the world. Though the author does not have data for the current total financial assets of China, it has been estimated that this figure reached US\$ 35 trillion in 2013, equivalent to 371 percent of China's GDP of the same year (Liao et al, 2016). In terms of this measure, China is second only to the United States and occupies 13 percent of the global total. While there is sharp competition between different financial markets, their interlinkages have also grown. The WMP discussion shows how intertwined the banking sector is with markets through collateralization and repackaging. The risk is that vulnerabilities of one market would cause contagion effects in other markets. The increasingly interconnected Chinese financial sector faces greater systemic risks.

There has been increasing reliance on wholesale funding by financial institutions. This would mean in times of market volatility, the contagion effects would be faster and larger than before. It also means that deposits are becoming a smaller share of the asset of the banking sector. This makes the prevention of a systemic crisis even more important. Even though the banking sector has not been providing guarantees to some financial instruments, the implicit contingent liability is very much there. In times of crisis, the credit risks would fall on the banks.

WMPs have further connected various financial instruments and institutions through cross-purchasing and cross-use of collateral assets and most importantly through the interbank market. As a result, risks of contagion among and between institutions have been amplified (IMF, 2016). In order to be in a position to offer higher yields for WMPs, banks have been investing the proceeds from WMPs in corporate bonds or stock markets, sometimes through trust funds or asset management corporations' subsidiaries or brokerage firms and other avenues. According to the New York Times (Bradsher, 2016), the bond holdings of wealth management funds more than doubled over the 18 months through June 2016. Some estimates put WMP funds' holding of outstanding Chinese

corporate bonds at the level of more than 50 percent of the total stock. WMPs also channel funds to the stock markets. The multi-layer intermediation of funds could increase risks and costs. Instead of deposits, banks, especially smaller banks, increasingly rely on wholesale funding such as trust firms, targeted asset management corporations and asset management corporations for asset. With their increasing share in total bank assets, they could become market movers and shakers, which constitute a challenge to maintain financial stability if not managed well. In August 2016, Moody's warned that significantly higher dependence on wholesale funds in China's financial market means higher systemic risk for China's banking sector. The IMF also highlighted this risk in its latest two issues of the Global Financial Stability Report. With the expansion of shadow banking activities, there has been an increasing share of wholesale and repo funding provided by non-bank investors and third party funds associated with financial products like WMPs. These products have stronger bias of risk aversion than bank deposits. In addition, because of the opaque nature of these financial instruments, their flight to safety could not be quantified and regulated as effectively as bank deposits. Therefore there is the tendency to amplify the market volatility during times of market turmoil.

Corporate and local government debt is no longer just a mirror image of bank assets. Even though bank loans continue to dominate, they are of less importance compared with the level at the beginning of the millennium. With the increasing share of corporate bonds and other financial instruments in the composition of debt for corporations and local governments since 2008, transmission of financial shocks is becoming faster and more significant (IMF, 2016).

G. DRASTIC AND PROLONGED DECLINE OF INVESTMENT RETURNS

Debt financing for investment in the productive sector would lead to a virtuous circle if it could produce returns higher than break-even point (i.e. more than debt servicing needs for the principal and interest plus tax, depreciation, amortization and production cost). If debt could not produce this kind of outcome and is being used to support wasteful investment or luxurious consumption, then debt would become unsustainable. The Return on investment (ROI) in China has been declining for years. According to the Chief Economist of the National Information Centre of China, ROI was slightly above 15 percent in 1993, then declined to around 8 to 10 percent between

2000 and 2008. It suffered a drastic drop since the global financial crisis, and was at 2.7 percent in 2014 (Jianping, 2016).

Naturally, ROI has not plunged across the board. New drivers of growth like health care, information technology, telecommunication-service enterprises generate much higher returns than the traditional sectors like mining and steel. Private companies' ROI are much higher than that of SOEs. The SOEs accounted for around 55% of corporate debt but only produced 22% of economic output (IMF, 2016). Take steel for example: According to the National Statistical Bureau of China, the steel sector alone carried debt amounting to RMB 4.37 trillion by the end of 2015.

a. Nation-wide price-cutting competition:

With declining profit return and overcapacity, many enterprises have resorted to cutting prices to defend their market shares. When all enterprises start to use the same strategy, it triggers a race to the bottom and further diminishes returns. With paper thin profits, many enterprises have been operating at break-even levels thus not in a position to spend money on research and development for new products or technology upgrading, which gives them even fewer opportunities for higher profit margins in the future. This is a vicious circle.

b. Property bubble

Because of the difficulties of maintaining decent profit margins in face of intense price competition and increasing production costs, many enterprises have channelled much of the bank credits to the real estate sector. Property speculation has become hot in many cities. Declining returns and property bubbles show that pump-priming has its limits. By printing more money without being backed up by real capital accumulation, credit expansion uses the savings of the private sector including households on low return, wasteful investments or property bubbles. This kind of misallocation of resources would eventually further depress productivity and negatively impact on long term economic growth. The credits channelled to such investment would most likely be turned into bad debt owing to the lack of capacity of the investors to generate meaningful returns. To keep afloat, enterprises survive on inflows of credit instead of creating more value added resulting in fast accumulation of debt. Not to stop this kind of spiralling down to the bottom would lead to systemic problems for the financial system. The increasing debt would be mirrored by a worsening of the financial status of the Chinese banking system as bank credit is

still the main channel of financing. Pressured by the desire of investors to seek higher returns and compounded by the development of the financial market, lower ROI would also lead to outflows of capital. This in return would worsen expectations for currency depreciation thus leading to further capital outflows and weakening investors' confidence in the economy.

VI. IMMINENT DEBT CRISIS UNLIKELY BUT HIGH TIME TO ADDRESS RISING SYSTEMIC VULNERABILITIES

Despite some commentaries in the mass media about an imminent debt crisis in China, a look at the asset and liability position, its economic fundamentals and buffers shows that, barring seismic global financial volatility, a debt crisis is unlikely in the short term. The facts point to worrisome debt trends and problems, in particular with the corporate sector, local governments and the fast credit expansion, but would not support the current gloom and doom predictions. There have been increasing vulnerabilities in the financial sector and erosion of buffers. However, debt at the central government and household levels are relatively healthy. On the whole, China has a significant amount of highly liquid assets.

Even in the worst scenario when corporate debt and local government debt turns into non-performing loans en masse, which does not seem likely at this moment, the Chinese central government would still have tools and resources to deal with the problem including gradually restructuring its underlying assets to help the economy avoid a serious liquidity/credit crunch. Firstly, the government has the fiscal space as its fiscal deficit is only around 3% of GDP. During the past and current financial crisis, socialization of debt has been repeatedly used even though it has been widely criticized. In times of need, China has policy space to do the same. It should be relatively less painful for China as much of the corporate debt is owed by SOEs and some large banks are state-owned and have good liquidity positions. The government can rely on banks to step in at a scale much larger than the current swaps if the situation warrants such kind of intervention. The debt/equity (D/E) swap is actually a government-led domestic debt restructuring which is relatively gradual and will take some time, but a sudden systemic crisis resulting from a liquidity squeeze does not seem to be on the horizon.

However, it is high time for China to address its rising systemic risks. Following are some suggestions that could be considered:

Slow down the fast credit expansion and enhance investment quality: Increasing debt and lower economic growth is a legacy of the global financial crisis. Further financialisation of the world economy since the 1980s owing to financial liberalization, financial engineering and the increasingly broader coverage of the internet, has made borrowing by governments and other economic entities easier, more tempting, more difficult to track, easier to securitize, easier to be highly leveraged and yet more difficult to regulate.

The current credit explosion in China carries the risk of a banking crisis in coming years. The corporate and local government debt are approaching critical levels. Banks and financial intermediary institutions should enhance their capacity in pricing risks and improve the quality of lending. An important part of the credit should be spent on the productive sector to allow decent growth and debt servicing capacity. With the current debt level, credit expansion without proper design would be the same as "giving alcohol to a drunk person", which would only worsen the hangover. It is important to distinguish borrowing which creates wealth and return for servicing debt from borrowing which delays restructuring needs and prolongs the life span of entities which see no prospects of bringing back returns larger than the investment.

Not to deleverage would lead to the Japanese style chronically low or no growth for decades, as high debt servicing would be a burden for economic growth and structural reform would be pushed to the future. According to estimates by UBS Securities, 10 percent of new credit went toward servicing existing debt in 2015. Such a scenario would not be tolerable for China whose economy is still at a catching up phase and the per capita income is still low. The government also has introduced measures to monitor and reduce the amount of the issue of WMPs to make sure it should not develop into a subprime phenomenon. The China Banking Regulatory Commission noted that the provision coverage in China's banking sector had reached 180%, while the capital adequacy ratio was above 13%, positioning it well to withstand a reasonable increase in non-performing loans (Yue, 2016). In the worst case scenario when the confidence in the banking system collapses, so long as the government retains control over the capital account, liquidity will most probably flow back to the banking system.

The need to reduce credit growth has been highlighted by policy makers and experts. Nevertheless, the

reduction should be undertaken in a steady and gradual way alongside fundamental structural reforms to improve the effectiveness and efficiency of the utilization of capital.

Undertake structural reform for SOEs and taxation reform for local governments: Restructuring the SOEs is a mammoth task but essential for addressing the debt burden of the corporate sector and to make them robust and lean. International trade and the Chinese economic model have both undergone tremendous transformation over the years. To keep the SOEs afloat by pumping more credit into the companies would prolong the pain without value added to the Chinese economy and increase the debt burden.

As for local governments, a fundamental examination and reform of the taxation system may be required to allow a sustainable stream of revenue to the local governments and have a clear redistribution of financial obligations and responsibilities between the central and local governments.

The guidelines that the government issued in October 2016 to reduce the debt burden include measures such as mergers and acquisitions, bankruptcies, debt-to-equity swaps and debt securitization. However, the loss-making zombie-enterprises, especially those in traditional sectors, continue to suck in significant amount of the credit and would defeat the purpose of the ongoing deleveraging efforts. Training for new jobs and increasing the provision of social security could be strengthened to prepare for the winding down of these redundant enterprises. Mergers of enterprises suffering from severe overcapacity without dismantling the unproductive capacities and without a demonstrated reduction in credit needs may not be a contribution to the government encouraged supply-side reforms. Similarly with equity swaps, the securitization of NPLs without real restructuring and reform would not reduce the impaired assets held by banks nor it would revive the zombie enterprises especially when global demand is not robust.

To restructure or remove redundant loss making enterprises would be important for strengthening the viable enterprises in dynamic sectors. If operating profits or earnings before interest and taxes (EBIT) are equivalent to the interest payments for debt, and the sector is not new with potential to grow, the firms should be closed. This is what the Japanese government failed to do in the 1980s and China should not repeat this history.

Maintain appropriate levels of economic growth: The best way to solve the debt problem would be maintaining and enhancing economic growth. Yet,

it is a complicated and multidisciplinary task. It is abundantly clear that to rely solely on credit expansion without decent return defeats the purpose. Maintaining economic growth at appropriate level does not mean that China can grow out of its current debt problem in an organic way. The magnitude of debt is too big to be solved in such a painless way. But for China's economic structure, to have a drastically low economic growth would also be disastrous as there is no good social security system in place and the population has not been prepared for it. A sudden decline of GDP growth would lead to an outflow of capital and reduce the confidence in the banking sector, which is not good for the financial stability of the country.

Live with appropriate level of debt: Excess debt in some sectors may continue to be present for some years. Yet, it should be pointed out that as China is still a developing country at the stage of catching up, it would need to live with some debt. There is a trade off in paying down domestic and external debt. Very often, imposing high taxation or following austerity measures would be needed to cut down expenditure and reduce debt, which can stifle economic growth and distort income distribution sometimes. Therefore, if the fiscal position is comfortable and no debt crisis is looming, to maintain some level of debt would be healthy. Organic economic growth with no debt could forego chances of faster economic growth. With China's high savings rate, it seems that China can afford to have relatively high debt levels. However, it is not easy to determine what a comfortable or optimal level of debt is – this is an art rather than science.

Strengthen deposit insurance: Deposit insurance could increase confidence in the banking system and is considered as an option against bank run risk. Apparently, the Chinese population has confidence in the banking sector. China has introduced deposit insurance in 2015 at the level of RMB 500,000. In view of the fast increase of household wealth in China, consideration could be given to increase this threshold.

Maintain capital control: Large and sudden capital outflow carries the risk of a systemic crisis and this particular risk is a major one that China is facing in the current global economic environment and the particular development stage of China. The fast expansion of China's middle class and increasing corporate assets make capital outflows for purpose of earning higher yields through interest rates, currency exchange rates and regulation arbitrages tempting during times of volatility. These outflows could disrupt a country's economic development and contribute to leading the economy to the middle-income trap because hard-won liquidities which could stay at home for further economic development and reduce

financial risks, have flown to destinations outside the country for higher earnings or speculation. Capital outflows could lead to a financial crisis which could roll back economic development by decades and incur tremendous human suffering for the population.

Continue with the current deleveraging policy measures and put a brake on shadow banking:

Current debt swaps for corporate and local government debt are not unique policy measures. China has used it before, as well as other governments. It would be important to undertake empirical studies and examine ways to make them more effective.

China's debt dynamics is an excellent case to demonstrate that assessing debt sustainability and tracking debt vulnerabilities is a complicated task. The macroeconomic structure, savings pattern, characteristics of the banking system, economic policies, liquidity provision and a host of other factors interact with each other. For emerging and developing economies whose domestic financial markets are neither mature nor deep, it would be necessary to strengthen capacity for effective asset and liability management in national debt management. Good data collection and reporting as well as analytical capacity to assess the assets and liabilities of

the public sector including the risks of contingent liabilities arising from the local governments and public enterprises are important. This would assist the efficient management of the risk exposure and allow timely reduction and elimination of mismatches between funding sources and spending needs and thus reduce the probability of debt crises. Addressing problems before they overwhelm would reduce the costs and increase creditworthiness of these economies and most importantly minimize the probability of a debt crisis. To look at one indicator and pronounce the coming of a debt crisis is not beneficial as there is the risk of a self-fulfilling crisis. Confidence management is an important task of the central banks and sovereign governments nowadays as with globalization and modern technology, capital flows can be extremely volatile and can react quickly on news and unprocessed information without solid analysis and verification. A way to reduce shadow banking could be for China's central bank and the large state owned banks to reduce their bias in giving preference and priority to SOEs in their lending and allocate more credit to smaller banks. This would reduce the need and urge to get funds at all costs including higher cost credit from shadow banking.

NOTES

1. Reuters, 'China GDP beats expectations but debt risks loom', 20 January 2017. Available from <http://www.reuters.com/article/us-china-economy-gdp-idUSKBN15406C>.
 2. BNP Paribas Asset Management, 'Why Hasn't China's Credit Crisis Exploded?' 6 April 2017. Available from <http://institutional.bnpparibas-am.com/hasnt-chinas-credit-crisis-exploded/#acceptLicense>
 3. Ditto.
 4. Financial Times, 'China securities houses on track for record bond fees', 16 May 2016. Available from <https://www.ft.com/content/0793e206-18d1-11e6-b197-a4af20d5575e?mhq5j=e2>.
 5. The Economist, Special Report, Finance in China, 7 May 2016.
 6. IMF, Global Financial Stability Report, October 2016.
 7. Global Credit Research, Moody's changes outlook on China's Aa3 government bond rating to negative from stable; affirms Aa3 rating, 02 Mar 2016. Available from https://www.moody's.com/research/Moodys-changes-outlook-on-Chinas-Aa3-government-bond-rating-to--PR_343931.
 8. IMF, Regional Economic Outlook, Asia and Pacific, April 2016, Box 2.3. China Opening Up: The Evolution of Financial Linkages.
 9. Global Credit Research, Moody's changes outlook on China's Aa3 government bond rating to negative from stable; affirms Aa3 rating, 02 Mar 2016. Available from https://www.moody's.com/research/Moodys-changes-outlook-on-Chinas-Aa3-government-bond-rating-to--PR_343931.
 10. The Wall Street Journal, China's economic slowdown: *Deleveraging could be healthy if private firms are allowed to grow*, 14 August 2016. Available from <https://www.wsj.com/articles/chinas-economic-slowdown-1471194066>.
 11. Bloomberg, Digging Into China's Growing Mountain of Debt, 28 Aug. 2016. Available from <http://www.bloomberg.com/news/articles/2016-08-28/digging-into-china-s-growing-mountain-of-debt>.
 12. Source of data: State Administration of Foreign Exchange (SAFE) of China, <http://www.safe.gov.cn/>. Balance of payments data.
 13. The Economist, Special Report, Finance in China, 7 May 2016.
 14. <https://www.bloomberg.com/news/articles/2017-02-15/ubs-says-9-trillion-china-bond-market-to-come-of-age-this-year>
 15. Bloomberg, China's \$3.8 Trillion Wealth Products Reel Amid Bond Rout, January 10, 2017. Available from <https://www.bloomberg.com/news/articles/2017-01-10/china-s-3-8-trillion-wealth-products-reel-as-bond-binge-unwound>.
 16. Global Credit Research, Moody's: China's banking system faces systemic risk from significantly higher dependence on wholesale funds, 29 Aug. 2016. Available from https://www.moody's.com/research/Moodys-Chinas-banking-system-faces-systemic-risk-from-significantly-higher--PR_354245.
-

REFERENCES

- Atradius, A closer look at corporate debt in EMEs, 5 May 2016. Available from <https://group.atradius.com/publications/economic-research-corporate-debt-in-EMEs-may-2016.html>, Bank for International Settlements, 86th Annual Report 1 April 2015–31 March 2016, 26 June 2016. Bank for International Settlements, *BIS Quarterly Review, March 2016*, pages 26-27.
- Bloomberg, Digging Into China's Growing Mountain of Debt, 28 Aug. 2016. Available from <http://www.bloomberg.com/news/articles/2016-08-28/digging-into-china-s-growing-mountain-of-debt>.
- Bloomberg, China's \$3.8 Trillion Wealth Products Reel Amid Bond Rout, January 10, 2017. Available from <https://www.bloomberg.com/news/articles/2017-01-10/china-s-3-8-trillion-wealth-products-reel-as-bond-binge-unwound>.
- BNP Paribas Asset Management, 'Why Hasn't China's Credit Crisis Exploded?' 6 April 2017. Available from <http://institutional.bnpparibas-am.com/hasnt-chinas-credit-crisis-exploded/#acceptLicense>
- Bob Bryan, and Larry Fink: There's a '20% chance' China's debt bubble bursts, Business Insider, 27 April 2016. Available from <http://uk.businessinsider.com/fink-20-chance-china-debt-bubble-bursts-2016-4?r=US&IR=T>.
- Chi Lo, China's Debt Crisis Fears Are Overplayed, 26 April 2016. Available from http://www.barrons.com/articles/chinas-debt-crisis-fears-are-overplayed-1461658925#:pa_ALwnEBblCtAlMF, Global Financial Stability Report (GFSR), April 2016.
- D. James, J. Garrido, and M. Moretti, Debt-Equity Conversion and NPL Securitization in China: Some Initial Considerations, IMF Technical Notes and Manuals No. 2016/5, April 2016.
- Fang Jianping, Chief Economist of the National Information Centre of China, 26 May 2016. Available from <http://futures.hexun.com/2016-05-26/184070005.html>.
- Global Credit Research, Moody's: China's banking system faces systemic risk from significantly higher dependence on wholesale funds, 29 Aug. 2016. Available from https://www.moody's.com/research/Moodys-Chinas-banking-system-faces-systemic-risk-from-significantly-higher-PR_354245.
- IMF, Global Financial Stability Report, October 2016
- IMF, The People's Republic of China: 2016 Article IV Consultation, Country Report 16/270, August 2016
- Jillian Yue, Is China's Debt Level Reaching Crisis Level?, China Money Network, 06 April 2016. Available from <http://www.chinamoneynetwork.com/2016/04/06/is-chinas-debt-level-reaching-crisis-level>.
- Keith Bradsher, To Problems With China's Financial System, Add the Bond Market, The New York Times, 20 Dec. 2016. Available from https://www.nytimes.com/2016/12/20/business/dealbook/china-bonds-fall-rates.html?_r=0.
- Min Liao, Tao Sun, Jinfan Zhang, China's Financial Interlinkages and Implications For Inter-Agency Coordination, IMF Working Paper No. 16/181, August 26, 2016.
- MIT Center for Finance and Policy, 'China's Growing Local Government Debt Levels', 2016. Available from <http://gcfp.mit.edu/wp-content/uploads/2013/08/China-Local-Govt-Debt-CFP-policy-brief-final.pdf>.
- Mo Kaiwei, 'The meaning of a neutral and stable monetary policy', *China Net*, 23 Feb. 2017. Available from http://opinion.china.com.cn/opinion_63_158163.html.
- Robert Neil McCauley and Chang Shu, Dollars and renminbi flowed out of China, 6 March 2016. Available from http://www.bis.org/publ/qtrpdf/r_qt1603u.htm.
- Zhang Ming, 2016. Available from <https://www.ishuo.cn/doc/jlhonfqf.html>
- Tao Wang, *China's debt problem - Understand China's Economy (Part II)*. (translated from Chinese). Available from <http://bond.10jqka.com.cn/20170221/c596541713.shtml>. 21 Feb 2017.
- The Economist, Special Report, Finance in China, 7 May 2016.
- The Wall Street Journal, *CHINA'S ECONOMIC SLOWDOWN: Deleveraging could be healthy if private firms are allowed to grow*, 14 August 2016. Available from <https://www.wsj.com/articles/chinas-economic-slowdown-1471194066>.
- Victor Wang, Vincent Chan et al, Family assets allocation in 2014 and its implications, Credit Suisse, 2015.
- Yuan Yang, "Beijing Clampdown slows China spending spree on US property: Capital outflow curbs expected to ease upward pressure on real estate prices," *The Financial Times*, May 16, 2016. Uptur? Id utatquam fuga. Nam disserion nihit, con nus is cum este expland endioss imporer iaestem nus dolupta commoloreres at aut quia pa num ressundae consentur moditae stiatem re ant assit voluptatemo imus, nonecep tiumendit, eicae nulpaa alit, sumquia veriosae ne exceatet rehenimet mi, occullic to quam qui serferat.

