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BANK VERSUS NON-BANK CREDIT IN THE UNITED STATES, EUROPE AND CHINA

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Highlights

- In the wake of recent crisis developments in the US and Europe, non-bank credit channels have often been portrayed as 'shadow banking' and have been considered primarily through the lens of the risks they may pose to financial stability. However, the debate about financial system structures remains immature, in large part due to lack of reliable and comparable data.

- The available evidence actually points towards a correlation between the development of non-bank credit and higher resilience against systemic risk, at least in developed economies. Policy should aim at better statistical information, and at strengthening the infrastructure for the gradual development of sustainable non-bank credit provision.

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1 INTRODUCTION

One clear lesson from the US financial crisis of 2007-09 and the European financial crisis since 2007[1] has been the lack of adequate understanding of the linkages between the financial system and the economy as a whole, hence the generalised emphasis in the past few years on 'macro-prudential' policy and 'macro-financial' modeling and research (Galati and Moessner, 2011; Roger and Vlcek, 2012). Economists and policymakers have gradually realised the extent of the gaps in their analysis of the economic role of the financial system, which were almost systematically overlooked in macroeconomic models. Filling these gaps is now broadly understood as a policy objective, not least as an analytical underpinning of better regulation of the financial system (Hanson, Kashyap and Stein, 2011). But advances in understanding and modeling are slow and still at a far too-early stage to provide a basis for policy (Goodhart *et al*, 2012).

In this context, renewed attention is being paid to structures of the financial system(s) and how such structures interact with the broader economy (Tarullo, 2012). Broadly speaking, there have been three main aspects to this debate. The first aspect, on which this paper is focused, is the respective roles and mutual interaction of bank and non-bank financial intermediation within a given financial system, including the existence of non-bank structures involving bank-like risks often captured by the term 'shadow banking' (McCullen, 2007; Gorton, 2009; Pozsar *et al*, 2010; Adrian and Ashcraft, 2012). The second aspect is structures within the banking segment of the broader financial system, including the debate about so-called too-big-to-fail banks and the question of legal, operational and/or accounting separation between different sub-segments of banking activity (Independent Commission on Banking, 2011; Goldstein and Véron, 2011). The third aspect is the cross-border integration of the financial system and its relationship with both financial stability and growth, a topic that before the crisis tended to be studied more in-depth in the context of emerging economies than advanced ones (Edison *et al*, 2002; Rodrik and Subramanian, 2009) but which has gained attention since the crisis as 'financial fragmentation' both at global level (McKinsey Global Institute, 2013) and particularly in the euro-area context (IMF, 2012).

The debate about the respective roles and mutual interactions of bank and non-bank financial intermediation has tended in the past few years to be focused primarily on concerns about shadow banking, which is framed as a list of specific financial stability challenges that may be addressed by targeted regulatory policy initiatives. These include the risks associated with specific segments such as special investment vehicles, asset-backed commercial paper conduits and other types of securitisation products, repurchase (repo) markets, securities lending, money market mutual funds, and country-specific issues such as the market for wealth management products in China (European Commission, 2012; IIF, 2012; FSB, 2012a and 2012b). However, there has often been an implicit or explicit assumption that all non-bank credit intermediation may constitute a form of shadow banking – most visible in FSB (2012a) which offers non-bank, non-insurance credit intermediation as a 'proxy' for shadow banking in an international comparative perspective.

'One clear lesson from the US financial crisis of 2007-09 and the European financial crisis since 2007 has been the lack of adequate understanding of the linkages between the financial system and the economy as a whole.'

1. The often-quoted expression 'global financial crisis' is avoided here because it fails to describe accurately both the vastly different degrees of financial disruption experienced by different parts of the world, and the fact that the crisis was largely resolved in the US after less than two years, while it remains unresolved in Europe.

Against this backdrop, the preliminary thoughts presented in this paper are intended as a contribution to a research effort that may more clearly distinguish between shadow banking and non-bank credit, and would focus on the broader features of financial systems and frame the assessment of new policy initiatives within this more holistic approach.

CROSS-REGIONAL COMPARISON CHALLENGES

Differences in regulatory and statistical frameworks make it notoriously difficult to make quantitative cross-border comparisons of financial systems beyond the bluntest of indicators. Figure 1, which shows the evolution of stocks of bank loans to non-financial corporations and non-financial corporate bonds in the world's three largest economic regions, provides a broad-brush indication of both the overall credit development trend and the relative importance of bank credit.

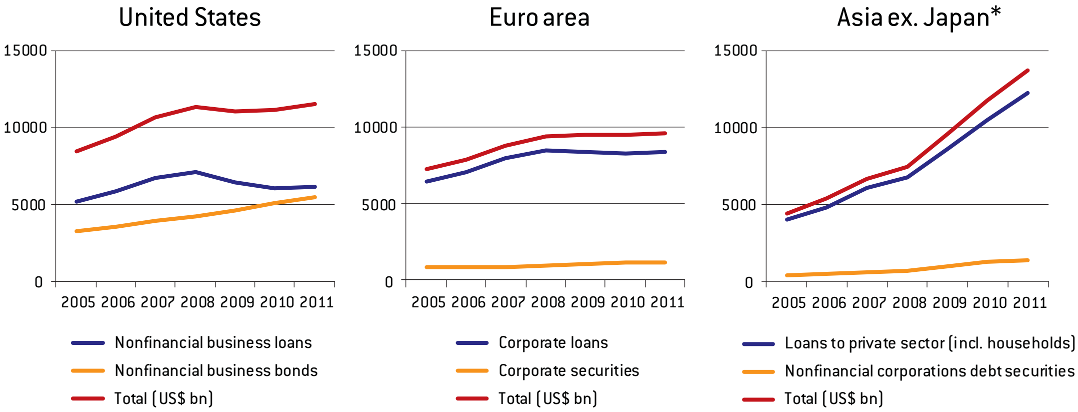
Notwithstanding the differences in quantities measured (eg loans to households are included in the Asia data), Figure 1 captures some well-known differences between the financial systems and conditions of the three regions. Bond financing is considerably more developed in the US than in comparably large economies; the financial crisis has slowed or even reversed credit expansion in the US and Europe but has barely dented it in Asia. Interestingly, the US is the only one of the three regions where the share of bond to total financing, thus measured, has increased significantly in that period (from 39 percent in 2007 to 47 percent in 2011), while it has increased only slightly (from 11 to 13 percent) in Europe and not at all (at 10 percent) in Asia.

It is even more difficult to draw quantitative comparisons between shadow banking systems, if only because the study of shadow banking is still in an embryonic phase. Some go as far as arguing that singling out the shadow banking system as a category is unhelpful and that specific activities (such as repo transactions or securities lending) should instead be observed on a case-by-case basis. The Institute of International Finance thus claims that:

> *"Starting with the term and then attempting to come up with a definitive list of 'shadow banking' activities or entities conducting these activities, or to come up with a single figure for the size of 'shadow banking' is unworkable, unnecessary, and risks being a diversion from the real focus of policy, which should be the mitigation of systemic risk. (…) the IIF believes that a single figure, derived from Flow of Funds data or other data, would be at best meaningless and at worst misleading. Indeed, there is no inherent need to have a national or global figure for 'shadow banking'. What is important is to have data at the right level on the amount of securitisation, repo, and so forth, in their own right and as part of a macroprudential overview of risks"* (IIF, 2012).

Even among those who believe a quantitative assessment of the shadow banking system as a

Figure 1: Bank versus bond financing (US$ billions)



Source: S&P (2012) based on central banks, Eurostat, IMF and Bank for International Settlements data. Note: * includes Australia, China, India, Indonesia, and Korea (in 2012 China represented 60 percent of that area's total GDP).

whole is useful and desirable, there is a keen acknowledgment of data limitation. Pozsar and Singh (2011) note that *"[t]he flow of funds accounts, as currently designed, are insufficient to adequately understand the shadow banking system."* The European Central Bank, in what it presents as the *"first investigation of the size and structure of shadow banking within the euro area"* (ECB, 2012), also acknowledges severe data limitations[2]. For China, measurement challenges are even greater given definitional variations, gaps in data availability and the uncertain boundaries between the financial system and non-financial commercial entities (Ghosh *et al*, 2012; Li and Hsu, 2012).

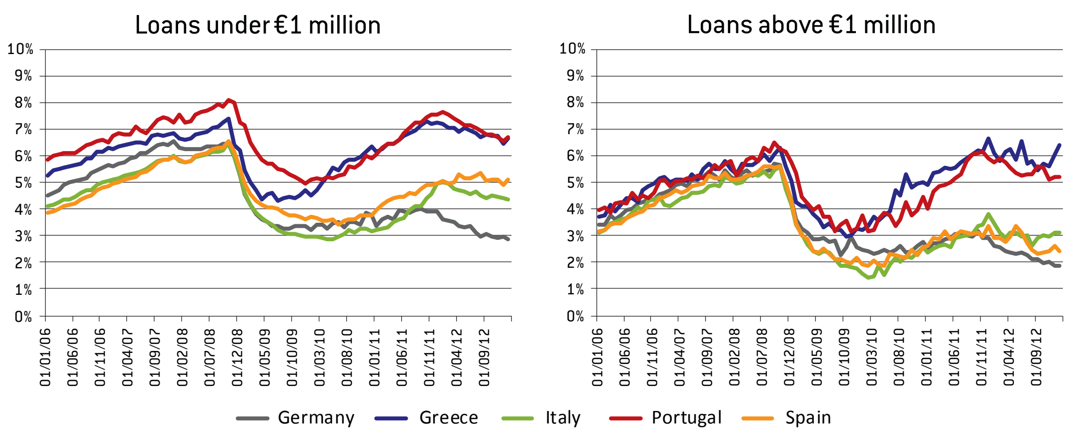
THE IMPACT OF THE CRISIS AND FUTURE PROSPECTS

Developments of the past half-decade have modified the balance between bank and non-bank credit in different ways in the US, Europe and China. This section attempts a stylised description of key trends as a basis for discussion.

In the US, the banking system has both expanded and shrunk as a consequence of the financial turmoil of 2007-08. Domestic non-bank broker-dealers have ceased to exist as a major category within the US financial system. Of the five firms that dominated this segment until 2007, Bear Stearns was bailed-out and purchased by JP Morgan Chase; Lehman Brothers went bankrupt and its US operations were taken over by Barclays Capital; Merrill Lynch was purchased by Bank of America; and the two independent survivors, Morgan Stanley and Goldman Sachs, both changed regulatory status by converting themselves into Bank Holding Companies. Meanwhile, about 500 banks were placed into receivership under the resolution authority of the Federal Deposit Insurance Corporation (FDIC) and more generally the banking sector has undergone significant restructuring and deleveraging as mirrored by Figure 1. However, as Figure 1 also suggests, US banks' reduced propensity to lend as a consequence of the crisis has been largely compensated for by dynamic bond issuance activity, and also by other forms of non-bank intermediation, even though securitisation has been negatively affected and still has a long way to go to recover from the 2007-08 subprime-induced shock. Among other structural trends, the tightening of bank regulation through the Dodd-Frank Act of 2010 and the forthcoming adoption of the Basel III Accord is resulting in an increasingly central position of non-bank financial firms, including large asset management companies, in core intermediation functions that were long seen as the exclusive remit of commercial and investment banks[3].

In Europe, the restructuring and deleveraging of the banking system has been much slower and more gradual and, in all likelihood and unlike in the US, much of it remains to come[4]. Equally damagingly perhaps, and also unlike in the US, bond issuance has not been much of a substitute for more limited bank lending (Darvas, 2013). This can also be seen in the United Kingdom, where

Figure 2: Euro-area financial fragmentation, interest rate on bank loans to nonfinancial corporations*



Source: European Central Bank. Note: * interest rate on new bank loans to nonfinancial corporations (loans with rate fixation period under 1 year).

2. To the author's knowledge, no comparable study exists for the entire European Union including EU member states outside of euro area.

3. See Gillian Tett, '"BlackRock envy" replaces the allure of Goldman', *Financial Times*, 15 June 2012.

4. See eg Patrick Jenkins and Brooke Masters, 'That shrinking feeling', *Financial Times*, 4 May 2012; and Michael Stothard and Mary Watkins, 'Banks must deleverage to the tune of €3.4tn', *Financial Times*, 18 March 2013.

bond finance is comparatively much more developed than in the euro area (S&P, 2012). Moreover in the euro area, the vicious circle between banks and sovereigns has led to a trend of *"financial fragmentation"* (IMF, 2012) characterised by increasingly divergent lending conditions, particularly for small- and medium-sized enterprises (SMEs), depending on the country in which they operate. Lending data collected by the ECB and presented in Figure 2 illustrates this trend.

SMEs in Europe are generally not able to access bond markets directly; moreover SME credit securitisation is not well developed in Europe and, in at least several EU member states, severe regulatory limits exist on the operations of certain types of non-bank intermediation, such as leasing outside of banking groups. If anything, aggregate lending data such as that shown in Figure 1 tends to underestimate the negative economic impact of credit scarcity for SMEs, first because anecdotal evidence suggests that banks maintain their lending relationships with larger, 'blue-chip' borrowers as a matter of priority, and second because weak banks tend to prioritise the extension of credit to ailing borrowers in order to avoid the recognition of losses that would be inevitable if such borrowers default, a phenomenon that has been variously labelled 'extend and pretend' or 'zombie banking', and which has been analysed both in the US Savings and Loan crisis of the 1980s and in the Japanese crisis of the 1990s and early 2000s (Kane, 1987; Caballero, Hoshi and Kashyap, 2008). The upshot is that significant segments of the EU economy appear to have severely restricted access to financial credit as a result of bank deleveraging, the euro crisis and the relative lack of alternative financing channels.

In China, there has been a dynamic expansion in recent years of both the bond markets and non-bank financial intermediaries such as trust companies, which have been reported as significantly outpacing the growth of banks, most of which are state-owned. According to such reports, in the second half of 2012 non-bank credit provision was even as large as bank financing for the first time[5]. In the Financial Times' estimate, assets managed by trust companies reached RMB 6.3 trillion in late September 2012 from only RMB 4.1 trillion by end-2011, and 'wealth management products' were expected to reach RMB 20 trillion by the end of 2012 from RMB 800 billion five years earlier[6]. The extraordinary expansion of China's financial sector over the past decade or so has occurred without major financial disruption so far, even though concerns have been aired repeatedly about the sustainability of the Chinese financial system's current structures (eg Walter and Howie, 2011) and have been fed more recently by sustained investor demand for emerging market securities more generally[7]. Even though assessment is made difficult by the lack of comparable data, available information suggests that the role of non-bank credit is now greater in China than in Europe in the financing of the economy, though probably not as large as in the US.

The trends are not only at regional or national level. The deleveraging of European banks has led them to sharply reduce their exposures to specific global market segments, such as the financing of infrastructure, commodities trading, or purchases of aircraft or ships. While some of this activity has been picked up by banks from other parts of the world (particularly from Japan), part of the substitution has been not by banks but rather by non-bank financial players including pension funds and insurance companies[8]. More generally, trends including regulatory initiatives such as Basel III, the rigidity of many banks' corporate culture and the increasing difficulties they experience to attract the best financial talent, and new data, technologies and tools that enable smaller non-bank actors to assess credit as effectively as incumbent banks, might be contributing to a shift of activity from banks to non-banks on a global basis[9].

POLICY IMPLICATIONS

This brief overview suggests that while the development of non-bank credit has occasionally been spurred by regulatory arbitrage or excessive reliance on perceived public guarantees (such as for US Money Market Mutual Funds), it has generally had rather beneficial economic consequences (or its absence has been detrimental) in the three regions observed:

- In the US, non-bank credit channels have been major contributors to the mitigation of the neg-

5. Simon Rabinovitch, 'Risk increases in alternative finance sector', *Financial Times*, 12 December 2012.

6. Simon Rabinovitch, 'Uncertain foundations', *Financial Times*, 3 December 2012.

7. See eg Vivianne Rodrigues and Stephen Foley, 'Concerns over high demand for EM bonds', *Financial Times*, 28 March 2013.

8. See David Oakley, 'Shadow banks fill infrastructure debt void', *Financial Times*, 1 February 2013.

9. See John Dizard, 'How banking will and must change', *Financial Times*, 28 July 2012.

ative impact of bank deleveraging and restructuring following the financial shock of 2007-08, and have protected the US economy from the risk of a prolonged credit crunch;
- In Europe, conversely, the dominance of banks has tied credit conditions to the fiscal situation of the local sovereign and has thus contributed to poor economic growth, without bringing any benefits in terms of systemic stability;
- In China, while it remains too early to assess the financial stability impact of the rapid expansion of non-bank credit in the past half-decade, there is evidence that it has contributed to economic growth so far by providing financing to enterprises whose access to credit from state-owned banks was constrained.

This suggests three broad implications for public policy.

First, policymakers should consider the removal of obstacles to the development of sustainable non-bank credit intermediation. One key aspect of this effort, which goes far beyond the scope of this paper, concerns strengthening the 'intangible infrastructure' of financial disclosure on which credit assessments by non-banks are typically based. This agenda includes the quality and comparability of accounting and risk disclosure standards, effective enforcement of accounting and risk disclosure requirements, and a regulatory environment that fosters audit quality. This challenge is particularly prominent in emerging economies where this intangible infrastructure is often particularly weak, but is also relevant to varying degrees in developed economies, in which the quality of public financial information can never be entirely taken for granted.

Second, ongoing efforts to address possible systemic risks created by specific shadow banking activity segments, called for by the G-20 and coordinated at the global level by the FSB, should not result in a generally repressive approach to non-bank credit intermediation. Policymakers would be wise to keep in mind that aggressive balance sheet (and off-balance-sheet) expansion and poor risk assessment by the banks themselves, combined with lax or absent supervision, have been at the root of most recent episodes of financial instability, particularly in Europe. The development of non-bank intermediaries that can partially compensate for the banks' current retrenchment should not be prevented by unnecessary regulatory requirements[10].

Third, significant resources should be allocated by central banks and other public authorities to radically improve the quality and comparability of statistical information on financial systems, including financing activities that escape traditional bank intermediation. The thick statistical fog that currently exists in this area, compounded by the lack of comparability of categories and definitions in different jurisdictions, is one of the greatest obstacles to sound, evidence-based policymaking that would ensure the proper regulation of non-bank credit channels while reaping the potentially large economic benefits of their continued development.

10. See eg Michael Stothard, 'Funds fill gap by lending direct to Eurozone groups', *Financial Times*, 13 March 2013.

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