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Capital Market Integration and Macroeconomic Stability

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After the establishment of the Banking Union, the European Commission is working on measures to foster capital market deepening in Europe. Key goals for a European Capital Markets Union are to provide firms with alternative funding sources to bank credit and to make economies more resilient to local shocks through better international risk sharing. While open capital markets can improve portfolio diversification, growth and welfare, the recent financial crisis was a reminder that capital market integration also carries risks in terms of economic stability. This article summarizes pros and cons of capital market openness and discusses stability implications of different forms of capital market integration.

In recent years various studies, among them Lane and Milesi-Ferretti (2011), have identified the excessive growth in credit, frequently fueled by foreign investors' involvement, as having been at the heart of the financial crisis. Due to its heavy reliance on credit and more generally on debt, the structure of the European financial system has become subject to growing debate (Buch et al. 2015, European Commission 2015a, Financial Stability Board 2015).

Bank bias and stability implications from credit market integration

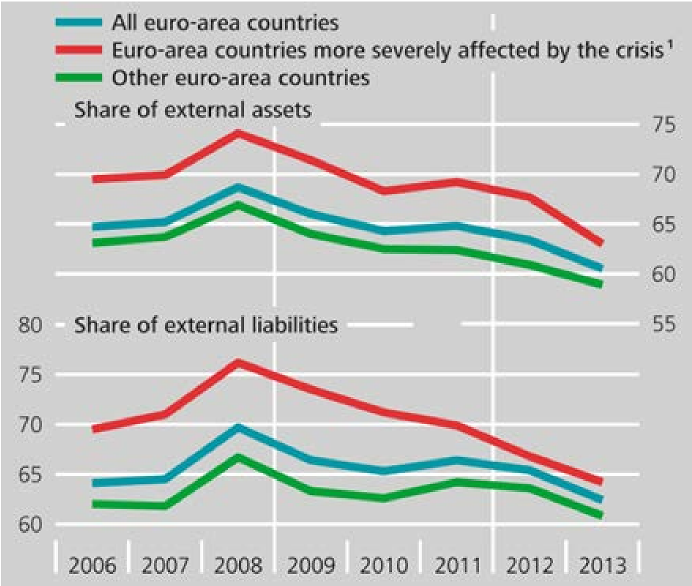
Inherently linked to the dominant role of debt is a peculiarity of the European financial system, its so-called bank bias. Langfield and Pagano (2016) find the bank-to-market ratio in Europe to be consistently and substantially higher than that in both the US and Japan. Due to the important role of banks in Europe, financial market integration has taken place to a large extent via banks' cross-border credit business (Bley and Weber 2017) – which has been shown to be relatively volatile, especially in times of market stress.

Agénor (2001) points to another cost of banking sector integration: The prevalence of large financial institutions in Europe could be the result of domestic banks joining forces to cope with competitive pressure created by foreign bank entry. If these large banks receive implicit bailout guarantees from the public sector ("too-big-to-fail"), and thus take on higher risks than they would normally do, systemic risk rises. Related to this argument, Lane (2013) points out that globally-active banks growing in both size and complexity rendered national bank regulation inadequate and thus encouraged high-risk financial activities. In order for financial integration to positively affect risk diversification and capital allocation, these studies call for adequate banking supervision, also at an international level.

Stability implications from international debt and equity market integration

Regarding the stability implications of capital market integration more generally, *Figure 1* illustrates that especially those euro area countries hit most severely by the crisis showed a comparatively high share of debt in both external assets and liabilities.

Figure 1: Debt capital's share of external positions



Source: Bundesbank (2015).

Of course, this descriptive observation does not allow for concluding that a high share of external debt causes more severe crises (Balli, F. et al. 2013). Yet, several studies indeed emphasise that portfolio equity investment is less volatile, less pro-cyclical and less prone to runs or sudden reversals compared to debt finance (Albuquerque 2003, European Central Bank 2016 and 2017, Lane and McQuade 2014, Milesi-Ferretti and Tille 2011, Forbes and Warnock 2014). The negative link between a strong focus on external debt and a country's resilience to shocks supports an opinion regularly voiced by official EU institutions such as the European Commission (2015), namely that funding provided in the form of equity has a better shock absorbing capacity.

Based on this evidence, different observers promote a change in the composition of financial market integration in Europe. According to Demary (2017), to increase financial and real stability, capital market integration should be fostered via equity instruments and less through debt. Buch (2015) argues that equity, generally, is a more stable financial instrument promoting economies' resilience to shocks. Equity contracts imply gains for stock owners in good times, but losses in bad times (Bundesbank 2015), whereas debt contracts are characterized by fixed payments from debtors to creditors, and risk sharing only takes place in the case of insolvency.

In a similar vein, Furse (2014) believes that in the case of the UK financial stability would also benefit from more equity investment which tends to be a longer-term commitment capable of counterbalancing the pro-cyclicality of debt finance. She identifies more market-based financing as a vital alternative to bank credit because it enhances the diversity of financial systems – an argument that is also put forward in the action plan for establishing a European Capital Markets Union launched in 2015. The European Commission (2015) emphasises that equity funding allows for more investment, a rise in economies' resilience to shocks, and better access to finance for European SMEs without increasing the indebtedness of an economy.

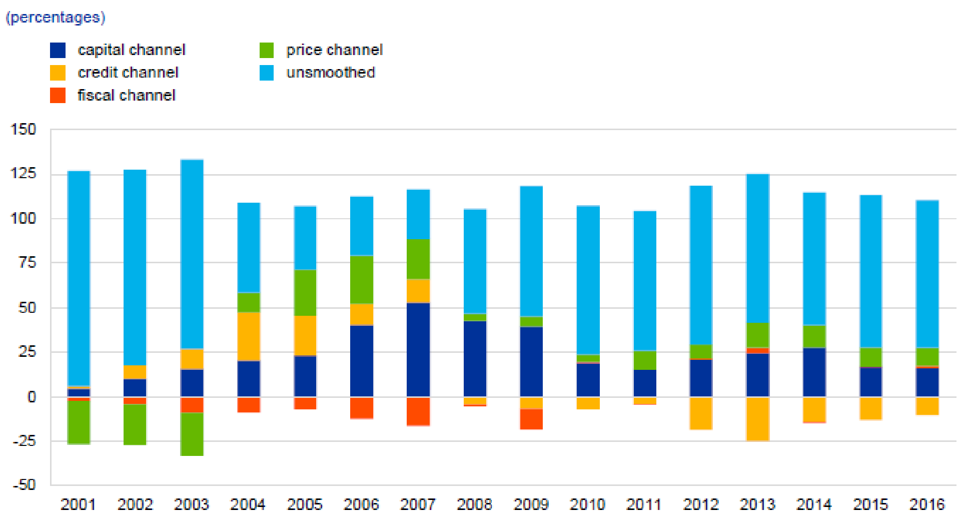
Lane (2013), in contrast, raises the point that the "long equity, short debt" strategy of advanced economies in their external positions, i.e. a high share of equity in foreign assets compared to foreign liabilities, proved risky because with the downward trend in global equity markets the net worth of domestic investors declined. The corresponding high equity component in the liabilities of foreign recipients of such investments, on the other hand, provided the latter with considerable outward risk transfer. This is why emerging countries increasingly relying on FDI and portfolio equity inflows were not hit as severely by the recent crisis. This view is supported by Balli et al. (2013) who judge return on foreign debt to be a better buffer under negative output shocks and return on foreign equity more favorable in booms.

Regarding regulation in a European Capital Markets Union, Demary (2017) considers a single supervisory institution for capital markets at the EU-level as crucial for the regulation and supervision of the non-bank sector that is not subject to the current rules of the Banking Union. Furse (2014), in contrast, posits that regulation alone cannot replace trust among market participants and, thus stresses, based on an initiative of the Financial Stability Board (FSB), the need to close data gaps relating to the non-bank financial sector so as to enable both investors and regulators to better evaluate benefits and risks of market-based finance.

Potential for more international risk sharing in Europe

An important advantage associated with better integrated capital markets, recurrent in the literature, are potential welfare benefits of cross-country risk sharing. They are, for instance, the reason for the European Central Bank (2016, 2017) to remain convinced that financial integration is imperative to greater macroeconomic stability. Better risk sharing through capital markets could alleviate issues arising from a growing prominence of region-specific shocks due to more specialisation in a monetary union like the EMU while at the same time render fiscal measures to smooth consumption less pressing.

Figure 2: Channels of consumption risk sharing in the euro area



Source: European Central Bank (2017).

The conviction of the ECB that there is still room for a much larger contribution of capital markets to risk sharing stems from a breakdown of consumption risk sharing for the euro area. In a seminal study, Asdrubali et al. (1996) found that in the US, over the 1963 – 1990 period, 39 percent of shocks were smoothed through capital markets compared to 23 percent through credit markets and only 13 percent by fiscal measures, leaving a fraction of only 25 percent unsmoothed. The authors further observe credit market smoothing to be less stable over time and rather unsuitable for states frequently suffering from shocks that are persistent. *Figure 2* illustrates that in the euro area, a much larger share of shocks remains unsmoothed, the role of capital markets for consumption risk sharing has decreased, and credit market integration did not help to smooth shocks during the last years.

For a panel of OECD countries and the 1990 – 2007 period, Balli et al. (2012) include permanent income from capital gains in the analysis and present evidence that EMU-countries increasingly relied on private capital markets as a risk-sharing device. According to an analysis by Kalemli-Ozcan et al. (2014) risk sharing has nearly entirely dried up in 2010 in those countries most hit by the European sovereign debt crisis. Thus, there seems to be a large potential for improved risk sharing in Europe through better integrated capital markets.

Yet, Bley and Weber (2017) argue that the scope of deeper and better integrated capital markets is limited in Europe as banks will remain the dominant lenders to the real economy. Moreover, they point to the high share of small firms in Europe that restricts the amount of capital marketable firms.

Given the bank-based nature of the European financial system, Demary (2017) considers a revival of securitizations as one promising way of cross-country risk sharing. Firms that do not have direct access to capital markets could thereby benefit from an increased range of investors that buy asset backed securities from banks.

Investigating low-frequency data for a set of industrialized countries, Artis and Hoffmann (2012) confirm that international risk sharing has increased substantially over the 1960–2007 period. In line with the findings on the favorable characteristics of equity discussed above, they report cross-border holdings of equity, in particular, to have reduced countries' exposure to persistent country-specific shocks. In a similar vein, Kose et al. (2009) reveal that risk sharing has improved as a result of deeper financial integration in industrialised countries and that those benefits can usually be attributed to foreign direct investment (FDI) and portfolio equity holdings. This is also identified as a possible explanation for emerging and developing countries not having been able to accrue risk-sharing gains from financial globalisation since their external liabilities have been dominated by portfolio debt rather than equity.

Focusing on the asset side of external positions, Driessen and Laeven (2007) examine whether local investors can expect utility gains from being permitted to invest internationally. They quantify such benefits as improvements in Reward-to-Variability Ratios and in expected returns and find those gains to be greater for developing countries. For all countries in their sample, the benefits of capital market openness, however, decrease over time - a development that coincides with a sharp increase in financial integration that implies a diminishing marginal utility to diversification.

The authors further show that gains from international portfolio diversification are often conditional on fundamental structural characteristics of domestic financial systems, with high-risk countries benefitting the most. This does actually go in line with a post-crisis assessment of equity-markets contagion by Baekert et al. (2011) who identify macroeconomic fundamentals, sovereign risk and poor institutions as having determined how severely an economy was hit by the 2007-09 financial crisis. Contagion from the US is regarded as having been predominantly domestic in nature.

Bank- versus market-based systems

Whether bank- or market-based systems are more beneficial for economic stability also seems to depend heavily on domestic structures. Tadesse (2002), for example, finds that both the level of development of a country's financial sector and the prevalent size of its firms play an important role. Evidence from his model suggests that in countries with less developed financial systems and highly fragmented markets, consisting of many small firms, bank-based finance appears to be the better fit whereas highly developed countries with a high concentration of large firms can gain more from market-based finance.

Baum et al. (2011) address another probable disadvantage of market-based finance, namely that it seems to restrict funding to a smaller number of entrepreneurs. This might lead to potential being lost on the account of agency problems that banks might be better able to solve. For a large international sample of 30,000 firm-year observations from 1989-2006 the authors find that a market-based environment makes access to finance for financially constrained firms more difficult. However, the authors restrict such inference to times of economic calmness.

Buch (2015) refers to the current state of an economy and its level of development as conditions for bank- or market-based finance being the better fit. She suggests that financing through stocks and bonds is more adequate in industrialised countries and to revive economies after a crisis, while bank-based systems are more effective in providing funds to firms at early stages of their development and in smoothing the impact of 'normal' business cycles.

Levine's (2002) cross-country comparison does not suggest that either of the two systems, bank-based or market-based, is better with regard to growth nor that any general systemic link between financial market structure and economic performance can be observed. Instead, his results underpin the importance of financial development. An even bigger impact, however, is attributed to legal systems and different law and enforcement strategies, which brings one back to the only point that literature can almost unanimously agree on. Namely, that supervision and an internationally more harmonised regulatory framework would help to leverage financial integration more effectively and with beneficial implications for macroeconomic stability.

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