Higher capital requirements for GSIBs: systemic risk vs. lending to the real economy

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Higher capital requirements for GSIBs and Systemic risk:

a. Are capital requirements for GSIBs an effective way of reducing systemic risk in the financial markets?

b. Are there other means to effectively reduce banks' systemic risk (e.g. large recovery and resolution funds, separation of activities etc)

Reducing the "Too-Big-To-Fail" problem has been one of the top priorities on the G20 regulatory reform agenda since the unfolding of the financial crisis. Internationally active banks have become too big, too complex to be effectively managed, and too dangerous for the overall financial system. The size of their balance sheet usually represents a multiple of the GDP of their home jurisdiction and their failure might have dramatic and unbearable consequences for the economy. Higher capital requirements and systemic add-ons or buffers actually reduce the size of the implicit subsidies they are provided with, due to the propensity of governments to bail them out in case of problems, as well as excessive risk taking and moral hazard.

There are however limits to resorting only on capital requirements to prevent or mitigate systemic risk. These limits stem from the fact that too high capital requirements may at some point hurt the economy by raising the total cost of funding. There is an ongoing controversy regarding bank

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capital requirements. On the one hand, some academics like Admati or Hellewig (2013) or policy makers recommend very high capital ratios of 30%; on the other, some economists like Gorton and Pennacchi (1990) or DeAngelo and Stulz (2013) consider, in line with the main findings of the finance-growth literature, that high leverage is good for banks and is generally accompanied by economic growth. The proviso however is that bank credit effectively goes to the businesses rather than households to finance housing. Otherwise, bank credit might slow rather than boost long-term growth. As an illustration, Cournède and Denk (2015) find that a 10% of GDP increase in the stock of bank credit is associated with a 0.3 percentage point reduction in the long-term growth. Recent evidence suggests that both the negative short run and long run impact of an increase in capital requirements on bank lending and real activity is significantly larger than previously thought (De Nicolò, 2015).

An effective complement to capital is to increase the supervision of GSIBs and require them to develop and present credible recovery and resolution plans, by identifying critical activities to be maintained so as to avoid fatal disruptions in the provision of financial services. Setting up resolution and recovery funds is critical for ensuring the wider participation of the private sector in the sharing of the losses of insolvent banks. However, this should be done in a way to avoid contagion.

The separation of activities is another way to addressing the "Too-Big-to-Fail problem". Several countries have already put in place structural banking reforms and the European Commission is about to finalise its own directive. However, I am not fully convinced by such an approach. First, available evidence does not demonstrate the superiority or the optimality of a particular banking model or structure. Indeed, since the beginning of the crisis, some pure investment banks (e.g. Lehman Brothers, Bear Sterns), some pure retail banks (e.g. Spanish Cajas, Irish banks, Northern Rock) as well as some universal banks (ING) experienced significant trouble. Second, the separation of activities does not necessarily lead to less systemic risk in the system as the different components of a banking group may take on the same total amount of risks. In a recent paper with Regis Breton (2015), I argue that, from a financial stability perspective, any attempt to reform banking structures should address the following three challenges:

1. Preserve the benefits of the universal bank model, for both efficiency and financial stability considerations. In particular, risky but economically useful activities should remain within the perimeter of banks that are under strict supervision, have appropriate loss absorption capacity and are granted access to central bank facilities in times of stress.
2. Draw effective and welfare-improving lines between speculative and economically needed banking activities. In particular, market-making activities should not be separated from other financial services provided by banks to the real economy, like securities underwriting and hedging, especially in a context where the regulation fosters disintermediation and where banks will have to play a pivotal role in the transition period. This will contribute to well-functioning markets that can serve as a source of financing for European firms.
3. Finally, the regulatory reform should keep an eye on the viability of the trading entity to avoid two pitfalls: the inception of systemic trading entities; the migration of activities outside the regulated sector (i.e. to the shadow banking system). This implies that, in order to contain systemic risks, structural reforms in the banking industry must be accompanied by effective resolution regimes and tools and appropriate regulatory treatments of shadow banking activities. Otherwise, regulatory restrictions on bank activities will contribute to the migration of the too-systemic-to-fail problem to non-deposit taking financial institutions, in less visible but by no way more benign forms.

c. From the point of view of reducing systemic risk, is the TLAC proposal adequate, or is it still lacking on some critical aspects?

As stated by the Financial Stability Board, raising the total loss absorption capacity (TLAC) of systemic institution is an effective way to mitigate contagion risks and make sure there will be sufficient loss absorbing and recapitalisation capacity available in resolution to implement an orderly resolution that minimises any impact of financial stability, ensures the continuity of critical functions and avoid exposing the tax payers to loss with a high degree of confidence. Its benefits mainly come from enhancing market discipline of banks and thus containing risk taking. However, the current Financial Stability Board proposals raise several issues. A first issue is the neutrality of the TLAC

requirements vis-à-vis the bank business model. While the Key attributes for the effective resolution of systemic institutions designed by the FSB in 2010 where neutral vis-à-vis the bank business models, the TLAC proposal is clearly tailored for banking groups organised as bank holding companies, a model which is common in Anglo-Saxon countries but less developed in Continental Europe. This model effectively embeds structural subordination put forward as the silver bullet in the TLAC proposal. This already raises a level playing field issue. It explains why some European GSIBs, like UBS or Deutsche Bank are changing their legal structures and why the European regulators are scratching their heads to accommodate the Bank Resolution and Recovery Directive with the TLAC proposals or try to introduce some form of subordination within senior debt like in Germany. A second issue is related to the calibration of the TLAC requirements. The proposed calibration amounts to doubling Basel III requirements. This seems relatively large compared to the historical losses and the public recapitalisation needs for systemically important institutions that failed or received public support, in a context where precisely efficient tools for orderly resolutions where not in place. Empirical evidence suggests that the losses and recapitalisation together have been in a 4 to 6 percent range of total assets in average. While it is necessary to ensure that, after the resolution transaction, the entity or the group of entities emerging from resolution must meet the necessary conditions for authorization and be sufficiently well capitalized to command market confidence, it is questionable to require this entity or this group of entities rebuilt all its loss absorption capacity, including buffers as resolution is not resurrection. In addition, the calibration is not backed by any meaningful quantitative assessment, measuring its likely impact on the real economy. This suggests that doubling capital requirements can be done at no or minimal economic costs. A third issue is related to the capacity of the market to effectively absorb the capital shortfall resulting from the TLAC requirements. This shortfall is likely to be large, in particular for continental European banks. The current size of the market for bail-inable debt is around EUR 100 billion whereas the total shortfall is estimated around EUR 500 billion for European systematically important banks only and above EUR 1,000 billion for all the GSIBs. While is it likely that the market size will increase to partly accommodate for the supply, it is not clear that it will do so as to match with the total financing needs without

triggering another round of mergers and acquisitions that may result in even bigger systemic institutions. A fourth issue is related to who will hold these instruments. In order to limit contagion risk, it is desirable to strongly disincentivise internationally active banks from holding TLAC instruments issued by other GSIBs. But, what about the other institutional investors? Should authorities allow insurance companies or pension funds to hold such bonds? At a time where the business models of these institutional investors are already challenged in the very low interest rate environment, authorities should be cautious towards encouraging additional risk taking. One reason is that the ability of authorities to bail in these investors, in particular pension funds, might be limited and prove politically difficult in the wake of a financial crisis. Finally, the ability of such a debt market to effectively function during a systemic event still needs to be assessed. Would the central banks have to step in if such a market suddenly freezes or its investor base suddenly vanishes when systemic institutions precisely need to expand their loss absorption capacity? These are some of the challenges that need to be addressed before making a final decision on the TLAC requirements.

Bank capital requirements and lending to the real economy

a. Will the requirement of increased levels of loss absorption capacity cause a reduction in aggregate bank lending?

The impact assessment of the TLAC proposals on aggregate bank lending is currently underway. As far as I know, the calculation of this impact on bank lending and on GDP is based on the estimated increases in lending rates and the multipliers derived from the Macro assessment group exercise (MAG, 2010). This is not satisfactory as the MAG results, which showed benign impacts of Basel III requirements on economic activity, need to be updated. The MAG multipliers are heavily dependent on the initial conditions and the baseline scenario designed in 2010 by the IMF. The world has changed since 2010. The balance sheets of both private and public institutions have generally deteriorated, leverage have increased in the households, corporates and public sectors and central banks have massively intervened on the financial markets, helping banks to fulfil the Basel III requirements with limited impact on the

real economy and the funding costs. Doubling now the requirements, as contemplated by the regulators with the TLAC proposals, would have a far more pronounced impact. This is already evidenced by a bunch of papers showing that both the short term and long term costs of higher capital requirements would be much higher than those initially estimated in the MAG exercise. Recent advances in dynamic general equilibrium models, which encapsulate a proper banking sector by contrast with most of the models used in the MAG exercise, find an inverted U-shaped relationship between bank lending and capital requirements, which translates into an inverted U –shaped relationship between welfare and capital requirements (see for instance De Nicolo et al., 2012; Begenau, 2015 or Clerc et al., 2014). This means that there exists an optimal capital requirement above which additional units of capital have detrimental effects on the real economic activity. There are some variations regarding this optimal level of regulatory capital, which may vary according to the estimates in the range of 8 to 14% of risk weighted assets (RWA). But this is already significantly below the current TLAC proposals, which are comprised in the range of 16 to 20% of RWA, and which can pile up to 24% accounting for all the buffers. In Clerc et al. (2014), we show that high capital requirements insulate the economy from the bank net worth channel and prevent excessive volatility due to banks' excessive lending and excessive failure risk. But the negative effects on economic activity coming from the reduction in the supply of credit to the economy dominate when capital requirements are set too high (actually at levels in which banks' default rate is virtually zero).

b. In case of a reduction in bank lending, would this be replaced by alternative and perhaps less regulated sources of finance?

Tight bank regulation can effectively have the effect of shifting risks and the supply of financing to the other compartments of the financial system, and in particular to the "shadows". This is not necessarily a problem and this is in a way what is intended with initiatives like the Capital Market Union. The CMU is aiming at developing a more balanced financing model in Europe, with a greater role for direct or market-based finance. This may increase risk sharing, in particular with those investors more willing and more able to absorb and take on risks. And this may have the advantage of developing equity finance over debt finance. However, this may become an issue in the following

two cases: 1/ if the market is not willing to take on these risks at reasonable prices: this may indeed be the case for long term finance or for the financing of Small and Medium enterprises: in both cases, the presence of high fixed costs and asymmetric information have led banks, which are better equipped to deal with these issues, to take over the business; 2/ if the part of the financial system benefiting from this transfer is less or even not regulated and in turn become systemic and threaten financial stability. The effects of additional capital requirements may therefore be more pronounced in jurisdictions where banks tend to play a greater role in the financing of the economy. The sign and size of the impact is however less clear cut in the long run where bank credit to the private sector generally tends to be correlated with slow economic growth, in particular compared with stock markets, and slows economic growth more than bonds (OECD, 2015).

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