financial institution's funding, as suggested by the IMF (2010). This levy could be varied over the the life of the cycle.

Restraints on bank lending such as loan-to-value (LTV) or debt service-to-income (DTI) guidelines could usefully complement traditional tools of bank regulation, such as capital requirements. Capital requirements can themselves consist of a core of long-dated equity or equity-like instruments supplemented with an additional buffer of contingent capital instruments.

The interaction between these prudential measures, as well as their cumulative costs, need to be carefully considered while rolling them out, with a view to adjusting measures based on experience. And governments should guard against the temptation to use such levies as just a revenue-generating mechanism rather than a tool to promote financial stability.

Some measures (e.g., capital requirements) are likely to have implications for cross-border competition between financial institutions and therefore may need to be harmonized across countries. This will make it harder to tie them to local economic conditions, for such harmonization will have to be done in an objective and mutually agreeable way across countries. Others like LTV or DTI guidance need not be harmonized across countries and could vary substantially with the domestic cycle. The systemic levy is a form of capital charge, making harmonization important for countries with many cross-border banks, something that will admittedly make it more difficult to tie it to the cycle.

The Cross-sectional Dimension in Macroprudential Supervision

In terms of the cross-sectional dimension, policy should focus on systemically important financial institutions (SIFIs). Better resolution regimes to deal with failing financial institutions could reduce the need for reliance on ex ante buffers such as capital. Following the near collapse of Northern Rock, the United Kingdom was among the first to enact a resolution regime that provides supervisors extensive authority to stabilize a failing institution.[8] Germany enacted a similar law in January 2011 and the United States is in the process of empowering regulatory agencies to deal with future insolvencies of systemically relevant institutions. An important complication is that many systemically relevant institutions are active across geographical and product borders. These new laws have not been coordinated, and they are unlikely to be adequate for dealing with a large cross-border or cross-market failure. The new resolution regimes consequently do not solve the moral hazard problem implicit in "too big to fail" (TBTF). It follows that the implicit public subsidy for TBTF institutions remains intact; hence the need for ex ante measures.

Macroprudential tools could be used to reduce this incentive to become too big to fail. They could include a systemic risk tax as suggested by the IMF (2010). Efforts to quantify systemic risk exposure for the purposes of regulation are now underway, but much else remains to be worked out, including who would impose this tax, on whom, and under what circumstances.

Alternatively, surcharges on capital requirements that vary with the systemic risk they create could be applied to SIFIs. The Swiss government commission on TBTF institutions has shown how this could be done. In addition to increasing capital buffers to nearly double the level of Basel III, the Swiss proposal makes the surcharge sensitive to systemic risk, calculated as a function of the balance sheet size and the market share of the institution.

Proposals have also been mooted to eliminate certain activities of SIFIs (e.g., proprietary trading),

[8] Japan enacted an emergency resolution mechanism in 1998, following the banking crisis of 1997. When the emergency term ended, the government set up a permanent resolution mechanism.