## PRESS POINTS FOR CHAPTER 3:

Towards Operationalizing Macroprudential Policies: When to Act?
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## **Key Points**

- Employing macroprudential policies correctly will require improved understanding of the source of shocks leading to systemic risk buildup. Good leading indicators of systemic risk buildup should help decipher good shocks (like productivity gains) from bad shocks (such as asset price bubbles).
- Credit growth, at the heart of buildup in systemic risks, needs to be accompanied by other indicators, such as increases in asset prices and foreign bank liabilities as well as real exchange rate appreciations, to tell apart the two types of shocks.
- One good indicator of credit growth is the change in the ratio of credit-to-GDP. Using a sample of 36 countries, our model finds that when the credit-to-GDP ratio increases by more than 5 percentage points per year and is accompanied by equity price rises by 15 percent or more, the probability of a financial crisis within the next two years is one-in-five.
- High-frequency market-based indicators are best at indicating when systemic risk is about to materialize within a few months. An indicator that builds on the LIBOR-OIS spread and the yield curve is shown to be effective in such a task.
- There are a number of tools policymakers can use to lessen the chances of a financial crisis. The chapter tests one of them, countercyclical capital requirements, and shows that it can be useful to lessen the variability of business cycles and the likelihood of financial distress.
- Macroprudential and monetary policymakers need to coordinate in at least two
  areas: understanding the basic source of shocks and their policies in managed
  exchange rate regimes with widespread foreign currency lending.

Macroprudential policy seeks to reduce the risk of severe disruption to system-wide financial services, or "systemic risk," which could have serious adverse effects on the real economy. Operationalizing macroprudential policies is a multifaceted task, and the analysis in this chapter takes concrete steps along several paths to reach this goal. It exploits a model of macroeconomic-financial linkages to explore how different indicators behave in response to various sources of shocks to the economy. Empirical exercises bolster support for the types of additional information needed to best flag the buildup of risk. Furthermore, the analysis suggests a set of high-frequency indicators that could alert policymakers to the

imminent arrival of financial distress. We find, using model-based analytical insights, that one popular macroprudential tool—countercyclical capital requirements—would work under different exchange rate regimes.

Effective monitoring of systemic risk and effective policy responses depend critically on accurate identification of the sources of shocks to the economy. The chapter finds that the source of shocks drives movements in some economic data that are associated with systemic risk buildup. Differences in the financial structure of an economy change the magnitude of the effects of shocks but not their direction so the lessons can be used very broadly. Policymakers should devote resources and coordinate with each other to better understand the sources of shocks, particularly those that are cross-border.

Among slow-moving indicators of the build-up of risk, aggregated credit information is useful but needs to be complemented by other indicators. Even though credit increases with both a good shock (a healthy boost to the real economy through productivity increases) and a bad shock (such as booming asset prices and relaxed lending standards by banks), the increase and the persistence of credit and the decline in bank capitalization ratios are significantly higher in the case of the bad shocks. Other indicators accompanying credit growth form powerful signals. If credit is growing by more than 5 percentage points of GDP, and is accompanied by an increase in equity prices of 15 percent or more, this pushes the probability of a crisis to 20 percent within two years. The signal is stronger if a broader measure of credit—bank-based and direct cross-border loans to the private sector—is used. In the context of emerging economies, real exchange rate appreciation appears to be a particularly relevant factor.

## Policymakers should also examine high frequency indicators to prepare for the potential near-term materialization of a crisis and the release of built-up buffers.

Among such indicators, this chapter finds that an indicator based on the LIBOR-OIS spread and the yield curve could signal the potential materialization of stress well. Indicators that contain information about interconnectedness across financial institutions, however, did not perform well in signaling the failure of Bear Stearns and Lehman in advance, suggesting policymakers may have to rely on actual information on cross-institutional exposures to assess the potential for domino effects if a crisis were to materialize.

We find that a similar set of macroprudential tools can be effective across different types of economies, which should help to facilitate policy coordination at the international level. However, the *calibration* of policy instruments—especially those based on thresholds for different indicators—differ according to country-specific circumstances. For instance, managed exchange rates and the use of loans denominated in foreign currency amplify the effects of all shocks. Thus close coordination of exchange rate, monetary, and macroprudential policies is essential to achieve a more stable financial sector and real economy in these situations.