

Macroprudential policy

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Banking and Financial Intermediation

Introduction

- The crisis has demonstrated the need to renew our approach to financial system regulation and notably to complement it with a macroprudential perspective.
- It involves adding a macroeconomic perspective to the supervision of the financial system.
- Up to the last financial crisis, it has only really been addressed from a *micro* standpoint.
- As the crisis has shown, financial stability does not depend solely on the soundness of the individual components that make up the financial system; it also depends on complex interactions and interdependencies between these components

Introduction

- Macroprudential policy is preventive.
- Its aim is precisely to prevent the formation of financial imbalances, procyclical phenomena or systemic risks.
- It is implemented by limiting excessive growth in credit, debt levels, and increasing the shock-absorbing capacity of financial institutions ex ante.
- Macroprudential policy is not designed to manage financial crises directly once they have erupted, but rather to prevent them from happening in the first place.
- Policy success depends on Governance, Identification of market failures and understanding the channels of transmission.

The Governance of Macroprudential policy

- Policy Mandate: Goal of the policy.
- Institutional Organisation: Who implements the macroprudential policy? (e.g. Central Bank? - Finance Ministry?) Keep independence: How to avoid or limit conflicts of interest between micro and macroprudential policies
- Governance of the macroprudential authority: A macroprudential tightening of regulatory requirements could prove unpopular during a period of exuberance, when economic agents are feeling the immediate benefits of a rise in asset prices.
- In Europe the main institution is the European Systemic Risk Board (ESRB)

Identifying Market Failures

- Excessive credit growth and leverage
- Excessive maturity mismatch
- Market illiquidity
- Excessive exposure concentration
- Misaligned incentives for excessive risk taking
- OTC derivatives and off-balance sheet transactions

Transmission Channels and Interactions

Interference with other policies?

- Macroprudential policy vs Monetary policy. E.g. Limit excessive credit-growth and interest rates
- Macroprudential policy vs Fiscal policy, E.g. Taxes on the systemic contribution of financial intermediaries.

When can we call a policy Macroprudential?

- A policy that uses primarily prudential tools to limit systemic or system-wide financial risk, thereby limiting the incidence of disruptions in the provision of key financial services that can have serious consequences for the real economy.
- Microprudential policies, by contrast, are aimed at ensuring the safety and soundness of specific financial institutions

Macroprudential Instruments

These instruments might be occasionally varied, or adjusted in a countercyclical manner, especially with a view to leaning against the financial cycle

- **Capital Buffers (Capital on top of minimum capital requirements).** The capital conservation buffer is a capital buffer amounting to 2.5% of a bank's total exposures. It must be made up of Common Equity Tier 1 capital. This buffer is in addition to the 4.5% minimum requirement for Common Equity Tier 1 capital. Its objective is to conserve a bank's capital. If a bank's CCoB falls below 2.5%, automatic safeguards apply which limit the amount of dividend and bonus payments the bank can make.
- Liquidity Buffers (Liquidity on top of minimum liquidity requirements)
- Interconnectedness restrictions

Instruments

Table 1
Macroprudential instruments by vulnerability and financial system component

| | | Financial system component | | | | |
|---------------|--------------------------|---|--|---|---|--|
| | | Bank or deposit-taker | | Non-bank investor | Securities market | Financial infrastructure |
| | | Balance sheet* | Lending contract | | | |
| Vulnerability | Leverage | <ul style="list-style-type: none"> capital ratio risk weights provisioning profit distribution restrictions credit growth cap | <ul style="list-style-type: none"> LTV cap debt service / income cap maturity cap | | <ul style="list-style-type: none"> margin/haicut limit | |
| | Liquidity or market risk | <ul style="list-style-type: none"> liquidity / reserve requirements FX lending restriction currency mismatch limit open FX position limit | <ul style="list-style-type: none"> valuation rules (eg. MMMFs) | <ul style="list-style-type: none"> local currency or FX reserve requirements | <ul style="list-style-type: none"> central bank balance sheet operations | <ul style="list-style-type: none"> exchange trading |
| | Interconnectedness | <ul style="list-style-type: none"> concentration limits systemic capital surcharge subsidiarisation | | | | <ul style="list-style-type: none"> central counterparties (CCP) |

* Capital and other balance sheet requirements also apply to insurers and pension funds, but we restrict our attention here to the types of institutions most relevant for credit intermediation.

What Measures have low adjustment costs?

- Preannounced measures distributed over time, such as a countercyclical buffer policy.

Empirical Evidence of the impact of Macroprudential policies

- Banking crises are recurrent phenomena that generally come after periods of strong credit growth.
- Their damaging real effects have generated a broad agreement among academics and policymakers that financial regulation needs to get a macroprudential dimension that aims to lessen the negative externalities from the financial to the macro real sector, as in a credit crunch caused by the weakening in banks's balance-sheets.
- Time-varying macroprudential policy tools can be used to address these cyclical vulnerabilities in systemic risk. Under the new international regulatory framework for banks - Basel III - regulators agreed to vary minimum capital requirements over the cycle, by instituting countercyclical bank capital buffers (i.e., procyclical capital requirements), which aim to achieve two macroprudential objectives at once.

Empirical Evidence

- First, boosting equity or provisioning requirements in booms provides additional (countercyclical) buffers in downturns that can help mitigate credit crunches.
- Second, higher requirements on bank own funds can cool credit-led booms, either due to the higher cost of bank capital or because banks internalize more of the potential social costs of credit defaults (via lower moral hazard by having more skin in the game)
- Countercyclical buffers could hence lessen the excessive procyclicality of credit, i.e., those credit cycles that find their root causes in banks' agency frictions

Empirical Analysis

What is the impact of macroprudential policies into the real economy? (Jimenez, Ongena, Peydró and Saurina, 2013)

- Pioneering policy experiments with dynamic provisioning in Spain.
- From its introduction in 2000: Q3, and change in 2005:Q1 during good times, to its later performance when a severe (mostly unforeseen) crisis shock struck thus allowing to test the countercyclical nature of the policy, and also the changes in bad times (two reductions in 2008:Q4 and in 2009:Q4, and an ad hoc increase in provisions in 2012:Q1 and Q2).
- These shocks coupled with unique bank-, firm-, and loan-level (and loan application) data allow for identification

Dynamic provisions

- Dynamic provisions - called dynamic as they vary over the cycle and statistical or generic as a formula is mandating their calculation - are forward looking. Before any credit loss is recognised on an individual loan, a buffer (the dynamic provision fund) is built up from retained profits in good times to cover the realized losses in bad times.
- The dynamic provision fund has a regulatory ceiling and floor. The required provisioning in good times is over and above the specific loan loss provisions and there is a regulatory reduction of this provisioning in bad times, when bank profits are low and new shareholders funds are costly to obtain.
- Dynamic provision funds are now Tier-2 regulatory capital. Hence, dynamic provisions are pro-cyclical, thus constituting counter-cyclical capital buffers to be used in crisis times

The Spanish experience with countercyclical provisioning

- In response to extraordinary credit growth, Spanish authorities introduced a capital adjustment program based on the prescient principle that predictable credit losses need to be provisioned even before they have to be recognised.
- Careful empirical work suggests that the program did create some temporary risk absorption capacity at the beginning of the crisis.
- With hindsight, however, the program was too limited in scale, and the buffers proved quite insufficient. The provisioning rule was weakened under industry pressure in 2004, at a critical juncture.
- The evidence suggests that the program was circumvented as credit growth was reallocated via less constrained banks, while affected banks moved towards riskier borrowers.
- Yet markets were reassured by the provisioning program, which helped to ensure abundant foreign funding for the credit boom.
- What are the lessons offered by this experience? Even a well conceived program faces the risk of inadequate scale, and the temptation of complacency