Monetary and Prudential Policies

ESCP Europe

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Layout

- Monetary policies
  - Friedman rule
  - Taylor rule
  - Fed vs. ECB
  - Unconventional policies
- Prudential control
  - Bank runs
  - Basel
  - Prudential indicators
  - Prudential control authorities

Definitions

Monetary policy
Controls the supply of money, availability of money, and cost of money or rate of interest to attain a set of objectives oriented towards the growth and stability of the economy, depending of the central bank statuses.

Monetary policy rule
It stipulates how much the central bank should change the nominal interest rate in response to changes in economic conditions. This contributes to the central bank's independence and commitment.

Quantitative easing
Unconventional monetary policy used by central banks to stimulate the national economy by buying financial assets to inject a pre-determined quantity of money into the economy.

Definitions

Macroprudential policy
Banking regulation and supervision policies which has to do with defining conditions which can result in financial instability and how to prevent such outcomes through public policy.
Basel
The Basel Accords refer to the banking supervision recommendations on banking regulations (Basel I, Basel II and Basel III) issued by the Basel Committee on Banking Supervision (BCBS), hosted by the BIS.
Basel III
Global regulatory standard on bank capital adequacy, stress testing and market liquidity risk agreed upon by the members of the BCBS in 2010-11

Monetary policy

- Contractionary

$\Downarrow$ money supply or $\Uparrow$ interest rate

- Expansionary

$\Uparrow$ money supply or $\Downarrow$ interest rate

- Accommodative

$\Uparrow$ economic growth

- Neutral

$\sim$ economic growth and $\sim$ inflation

- Tight

$\Downarrow$ inflation

Monetary policies

- Open market operations
- Communication
- Moral suasion
- Commitment vs. discretionary
- Optimality

Friedman rule

- The opportunity cost of holding money faced by private agents should equal the social cost of creating additional fiat money.

$\Rightarrow$ Thus nominal rates of interest should be zero.

- Assumption: the marginal cost of creating additional money is almost nil.

$\Rightarrow$ Those who hold money do not suffer any loss in the value of that money due to inflation.

- The rule is motivated by long-run efficiency considerations.

Taylor rule

- Starting point: loss function of the central bank (Taylor, 1979).
- How much the central bank should change the nominal interest rate in response to changes in inflation, output, or other economic conditions ?
- Original Taylor rule (Taylor, 1993)

$$i_t = \pi_t + r_t^* + a_\pi \left(\pi_t - \pi^*\right) + a_y \left(y_t - \bar{y}_t\right) \quad (1)$$

- Smoothed Taylor-type rule (Svensson, 1997; Woodford, 2003)

$$i_t = \left(1 - \lambda_i\right) \left(\lambda_\pi \left(\pi_t - \pi^*\right) + \lambda_y \left(y_t - y_t^f\right)\right) + \lambda_i i_{t-1} \quad (2)$$

Fed

- Promote stable prices (main goal)
- Sustainable economic growth (main goal)
- Maximize employment
- Independent

ECB

- Maintain price stability (main goal)
- Support general economic policies of the EU states
- Ensure an open-market economy
- Independent

Fed versus ECB

- History
- Structures
- Statuses
- Goals
- Flexibility

An unconventional policy

Quantitative easing

- Purchasing financial assets from banks and other private sector businesses with new electronically created money.

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Quantitative easing

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- This action increases the excess reserves of the banks, and also raises the prices of the financial assets bought, which lowers their yield.
- To distinguish from the more usual policy of buying or selling government bonds to keep market interest rates at a specified target value.

Unconventional policies

- Credit policy: influence interbank market conditions

Modification of the discount window facility, exceptional long-term operations, broadening of eligible collateral or counterparties, inter-central bank FX swap lines, introduction or easing of conditions for securities lending

- Credit policy: influence nonbank credit market

CP (commercial paper) or ABS (asset-backed security) or CB (corporate bond) funding/purchase/collateral eligibility, purchase of other securities.

- Quasi-debt management policy: purchase of government bond
- Bank reserves policy: target for bank reserves
- Exchange rate policy: purchase foreign currency securities

Objectives

- The G20 decided in April 2009 to strengthen the supervision of financial risks at the international level by creating the Financial Stability Board (FSB).
- The main goals of prudential control authorities: protect the consumers and increase the financial stability.
- The chief reason for prudential controls over the financial system is to maintain confidence in that system and to ensure, as far as possible, that banks can be relied upon to meet depositors' requests for withdrawals when required.
- Collapse in confidence in the banking system $\Rightarrow$ economic activity $\Downarrow$ and unemployment $\Uparrow\Uparrow$.

A bank run

- Occurs when a large number of bank customers withdraw their deposits because they believe the bank is, or might become, insolvent.
- As a bank run progresses, it generates its own momentum, in a kind of self-fulfilling prophecy.
- Diamond–Dybvig (1983)
- Policy implication: *Too big to fail*

- Basel 1 (1988)

Minimum capital requirements for banks.

- Basel 2 (2004)

Recommendations on banking laws and regulations.

- Basel 3 (2010)

Global regulatory standard on bank capital adequacy, stress testing and market liquidity risk.

McDonough ratio

- An estimated minimum capital that banks must have in order to mitigate the risks on their assets, such as financial instruments and loans granted, which generally should be greater than 8%.
- Used to determine how much capital is required to be maintained by the bank in case of unexpected losses.
- Improvement over the previous version of the Cooke ratio, which did not include weights associated to its loans and financial instruments. This flaw has been eliminated in the new version.

McDonough ratio

- Calculated as follows:

$$\frac{\textbf{Regulatory Capital}}{\textbf{Credit Risk + Market Risk + Operational Risk}} \geq 8\%$$

where:

- Regulatory Capital = capital and retained earnings of individual company.
- Credit risk = risk that the borrower may default. It can be calculated by weighting the total amount of the loan by the quality of the borrower.
- Market Risk = risk undertaken due to changes in market conditions, applicable to interest-rate products, equities, currencies and commodities.
- Operational Risk = risk evolving out of internal company management, such as failed processes, people and systems.

Core set of indicators

- Regulatory capital to risk-weighted assets
- Regulatory Tier 1 capital to risk-weighted assets
- Nonperforming loans net of provisions to capital
- Nonperforming loans to total gross loans
- Sectoral distribution of loans to total loans
- Return on assets
- Return on equity
- Interest margin to gross income
- Noninterest expenses to gross income
- Liquid assets to total assets
- Liquid assets to short-term liabilities
- Net open position in foreign exchange to capital

A French example

The French prudential control authority, ACP, was formed through the merger of existing licensing and supervisory authorities:

- bank and insurance industries (banking commission)
- insurance and mutual insurance societies supervisory authority
- credit institutions and investment firms committee
- insurance companies committe

To be sure that financial institutions are **solid** and **sustainable** and controlling marketing methods applied, or even marketed products, in order to better **protect consumers**.

ACP

The ACP seeks to improve the French supervision system around three objectives:

- Protecting the consumers of banking and financial products

Srengthens the cooperation between the ACP and the AMF (French financial market regulator) that must pool means and resources to supervise the marketing of banking, savings and insurance products.

- Increasing financial stability

Supervise the whole financial sector – limited however to the bank and insurance industries since the reform does not apply to financial markets

- Enhancing France's influence

Represent France in international forums of banking and insurance supervisory authorities.

	Macroprudential	Microprudential
Proximate objective	limit financial system-wide distress	limit distress of individual institutions
Ultimate objective	avoid macroeconomic costs / financial instability	consumer (investor/depositor) protection
Characterisation of Risk	dependent on collective behavior	independent of individual agents' behavior
Correlation across institutions	Important	Irrelevant
Calibration of prudential controls	system-wide risk	risks of individual institutions

Thank you for your attention