



Inflation Targeting and Related Topics in Central Banking

The Role of Central Banks in Macroeconomic and Financial Stability: The Challenges in an
Uncertain and Volatile World
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1 Monetary Policy Models

- *Inflation Targeting (IT) models provide an important guidance.*
- *Main characteristics.*
 - ✓ New Keynesian approach. Their key assumptions are rational expectations and imperfect competition.
 - ✓ They are (can be) microfounded.
 - ✓ Frictions in prices account for the lag in their adjustment .
 - ✓ They are gap models, i.e. macroeconomic variables are modeled as deviations from their steady state.
 - ✓ They are parsimonious (i.e., they have a small number of equations).
 - ✓ They are conveniently posited as a control problem, where the control variable is a short-term interest rate.

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1 Monetary Policy Models

- *IT models, due to their technical limitations, have important drawbacks.*
 - ✓ They typically rely on the linearization of first order conditions. How adequate is this for the variables' paths far from their steady state?
 - ✓ In particular, they have nicely behaved additive shocks. Does this property necessarily hold in practice?
 - ✓ Indeed, they do not capture non-linear dynamics. To what extent are these important?
 - ✓ Unable to model deflationary environments. Do we need to be concerned about this?
 - ✓ No balance sheet modeling, although the current situation begs for it.
 - ✓ No financial sector and, thus, no financial frictions. Are these only relevant in extreme situations?

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② Capital Flows Management

■ *Capital flows' externalities*

- ✓ Directly to the recipient country, byproduct of the changes in the monetary stance abroad.
- ✓ Deflections, byproduct of the neighbors' policy responses. Coordination?

■ *EM's are relatively more exposed to capital flows.*

■ *Whines? Capital flows provide ample benefits for the recipient countries. However, the perception of their risks is not misplaced. Also, favourable ToT shocks.*

■ *Pass-through has decreased in many EM's.*

■ ***There is a plethora of policy responses a country can turn to.***

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② Capital Flows Management

■ *IMF (2012) forcefully argues that experience has shown that policy responses to capital flows should be implemented in the following order.*

- i. Exchange rate appreciation
- ii. Reserve accumulation
- iii. Monetary and fiscal policy mix
- iv. Opening up sectors
- v. Prudential measures
- vi. Capital controls

} **Macroeconomic Policies**

} **Capital Flows Management Policies**

Of course, there could be complementarities among the different measures. They are also country-dependant.

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2 Capital Flows Management

■ *Research done at Banco de México suggests that:*^{1/}

- ✓ For most countries, the effects of capital controls are limited for long horizons implying that capital controls are ineffective.
- ✓ Capital controls' effects are favorable only in certain conditions, in particular, only in those days close to the measures' announcement and for some countries containing a sudden appreciation of their exchange rates.
- ✓ In countries that have implemented capital controls more aggressively tail events have become more likely, which has led to higher (expected) risk premia. In various countries, exchange rate (expected) risk premia tends to increase after the announcement of capital controls.^{2/}

1/ See Rangel et al. (2012).

2/ Rangel et al. (2012) work with risk-neutral densities, which are obtained indirectly from financial market data. Thus, the probabilistic statements referring to tail events and expectations are in terms of risk-neutral densities. In this context, heavier tails entail higher (expected) risk premia as to compensate investors.

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③ Unconventional Monetary Policy

- *Several factors have led central banks to implement unconventional monetary policy.*
 - ✓ A significant increase in counterparty risk.
 - ✓ The zero lower bound (ZLB) issue.
 - ✓ Not sufficient inside money has been created.
- *Forward guidance and quantitative easing (QE).*
 - ✓ Explicit statements of the outlook of future monetary policy.
 - ✓ Balance sheet policies affecting its size (i.e. pure QE) or its composition (e.g., operation twist).
 - ✓ These possibly have diminishing returns.

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③ Unconventional Monetary Policy

- *In advanced economies a permanent income shock to households has taken place. To what extent can monetary policy help?*
- *Central banks in emerging economies have not faced these factors. Thus, up to this point, they have not had the need to implement unconventional monetary policies. Nevertheless, if they need to:*
 - ✓ What are the implications with regards to their (constitutional?) mandates?
- *Does the accumulation of international reserves entail important vulnerabilities for central banks?*
 - ✓ An abrupt change in international reserves' valuation can significantly affect the central bank's equity, leading to important quasi-fiscal costs.

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④ Monetary Policy and Financial Policy (Svensson 2012)

- *Aiming to solve financial stability concerns with monetary policy is in general not warranted.* For instance, attempting to prick an asset price bubble by changing the interest rate would probably lead to costly output variations. In such approach trade-offs are considerable.
- *There is no strong support that a tighter monetary policy leads to financial stability.* Instead, macroprudential policy instruments are much more well-suited for financial policy endeavors, e.g. minimum capital requirements, liquidity coverage ratios, among others.
- *In sum, monetary policy and financial policy should be conducted separately in terms of objectives and instruments. Furthermore, any joint assessment would probably be futile.*

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4 Monetary Policy and Financial Policy

- *For financial regulation a general equilibrium (GE) approach is desirable.*
- *For example, Kashyap et al. (2011) in a GE model introduce as policy tools margin requirements and counter-cyclical capital requirements, finding that:*
 - ✓ Some sensible combinations of these tools once implemented can have adverse effects on the economy. Although in general they are better than no regulation.

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