

Financial System and Monetary Policy Transmission Mechanism: *How to Address the Increasing Risk Perception*

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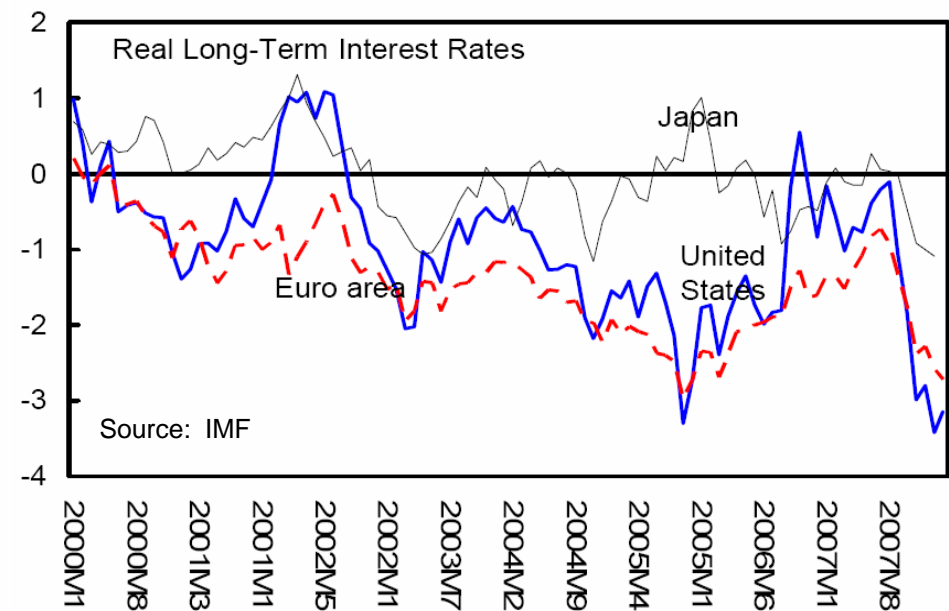
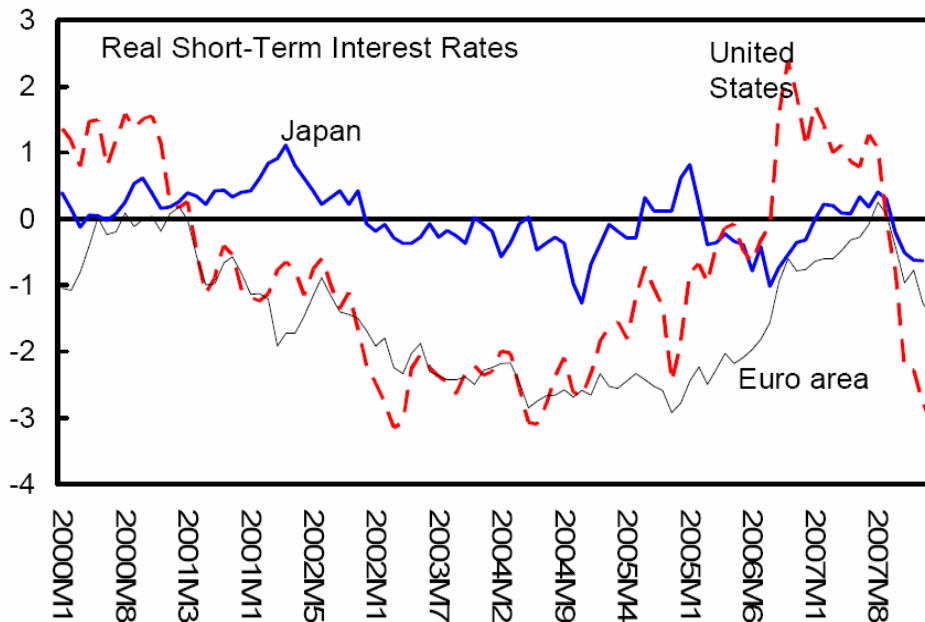
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the Role of Risk Perception**
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- **Rapid and deep propagation of the impact of the current financial crisis**
 - The considerable change of global economic environment compared to the brazen confidence of the 1990s
 - The rapidly changing financial system coupled with its innovative development as the main engine
- **Increasing the complexity of monetary policy management**
- **Reorientation of the central bank policy ...**
 - not only expands the scope of existing policy, but also
 - enables a shift in policy paradigm to adjust to the changes in the economic environment

- **Three factors precipitate shifts in the global financial system:**
 1. innovative development of information and technology
 2. deregulation of supporting financial systems
 3. conducive global macroeconomic conditions, including low real interest rate

Real Interest Rate



- **The shifts in the global financial system have not been independent from the financial system characteristics that tend to be pro-cyclical**

2. Behavioral Changes in the Global Financial System

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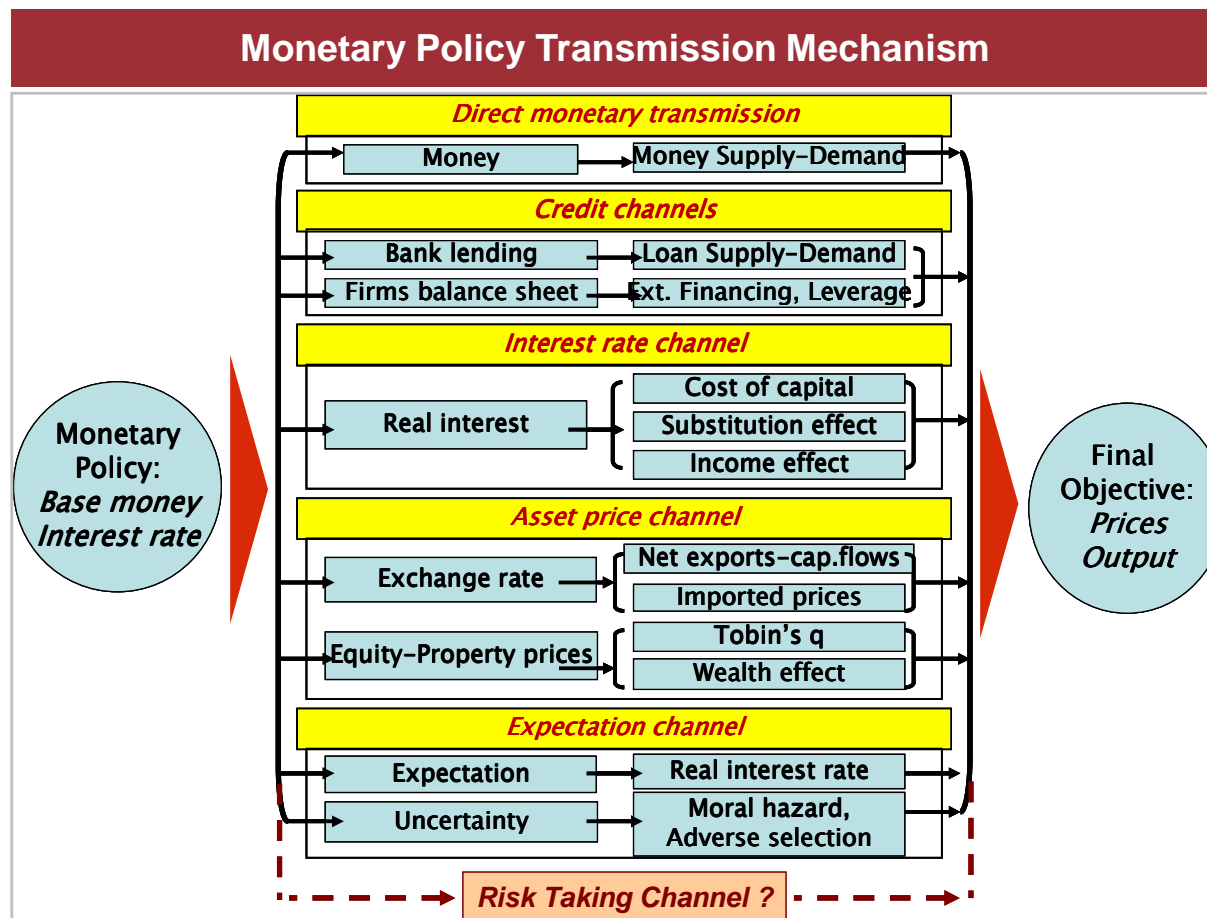
Changes	Features
Risk Management	<ul style="list-style-type: none">• The preference to hedge and diversify risk, as well as transfer risk to other financial institutions more rapidly• The ability to manage risk relates to the decline in liquidity risk along with more liquid financial institutions• The ability to manage risk is developing in line with the rise in financial product innovation that can accommodate risk diversification such as credit derivative products
Operational Activity	<ul style="list-style-type: none">• The ability to accumulate and distribute funds increased rapidly<ul style="list-style-type: none">- Due to the fact that the capacity of financial institutions to expand their businesses is less constraint from using available funds• Differs entirely from the old characteristics of financial institutions where fund distribution was highly influenced by the actual funds available

Improved the ability of the financial institutions to separate the two primary functions of bank: the origination and holding of credit risk

The change also occurred in the type of financial institution integration ...

Type of Integration	Features
Horizontal Integration	<ul style="list-style-type: none">• Integration between the stock and bonds markets• Facilitated greater capital mobility between countries
Vertical Integration	<ul style="list-style-type: none">• Integration between the role and the function of financial institutions• Involved a blurring of the boundaries of the financial services offered by each type of financial institution• Products offered by banks, insurance companies, the money market and the capital market shared similar characteristics and were often difficult to differentiate
Diagonal Integration	<ul style="list-style-type: none">• Integration between the financial and commodity markets• In line with financial product innovation involving activities in the commodity market• The value of commodity derivatives has skyrocketed in the last 10 years, from USD400 billion in 1998 to USD9 trillion at the end of 2007 (Jenkison et al, 2008)

- **Significant changes in the financial system affected the understanding of the policy transmission channel and monetary policy management**
 - The role of risk perception increased and dominate monetary policy transmission
 - Monetary policy management become more complex both in terms of the increasing role of risk perception and also due to the unusual financial market integration process



3. Risk Perception and Monetary Transmission Mechanism

- **Borio and Zhu (2008) called “the risk-taking channel”**

Risk Taking Channel in Monetary Policy Transmission Mechanism




Source: Borio and Zhu (2008)

- **Three mechanisms of risk-taking channel (Borio and Zhu, 2008) :**
 1. Relates to valuation factors, income and cash flows
 2. The correlation between the interest rate & the nominal rates of return
 3. Positive effect of transparency from central banks
- **Empirical studies support the argument the role of a risk-taking channel**
 - Loannidou et al, (2007) show in Bolivia that banks tend to take more risk when monetary policy is loose
 - Amato (2005) showed monetary policy stance affects the pricing of credit risk and influences credit approval patterns by financial institutions

The behavioral change in financial system has increased the challenges of monetary policy management in Indonesia ...

**The behavioral
change of financial
system**



1

The role of the exchange rate in monetary policy along with the effect of horizontal financial market integration

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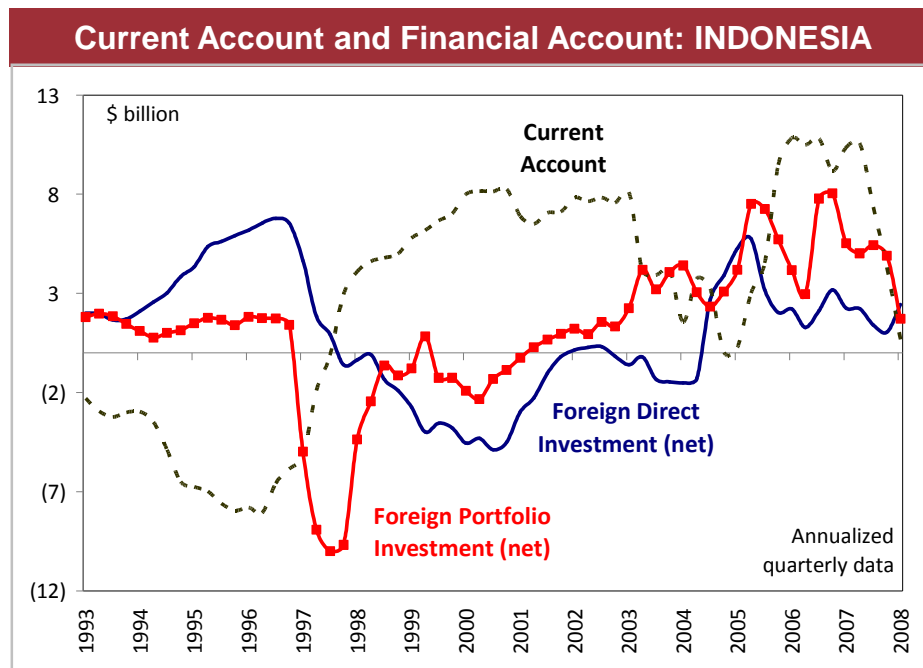
Greater difficulty in accurately identifying future inflation risk

3

Asymmetric effect of monetary policy

The exchange rate tends to move exogenously and amplifies shocks in the economy ...

- The dynamics of rupiah exchange rate highly affected by the financial account
- The strong influence of the financial account is primarily attributable to the increasing trend of capital flows in the form of investment portfolio compared to the form of FDI
- The role of capital flows increased due to low perception of risk for investment in Indonesia and other emerging markets as reflected by the relatively low Emerging Market Global Bond Index (EMBIG) and Indonesia's Credit Default Swap (CDS)



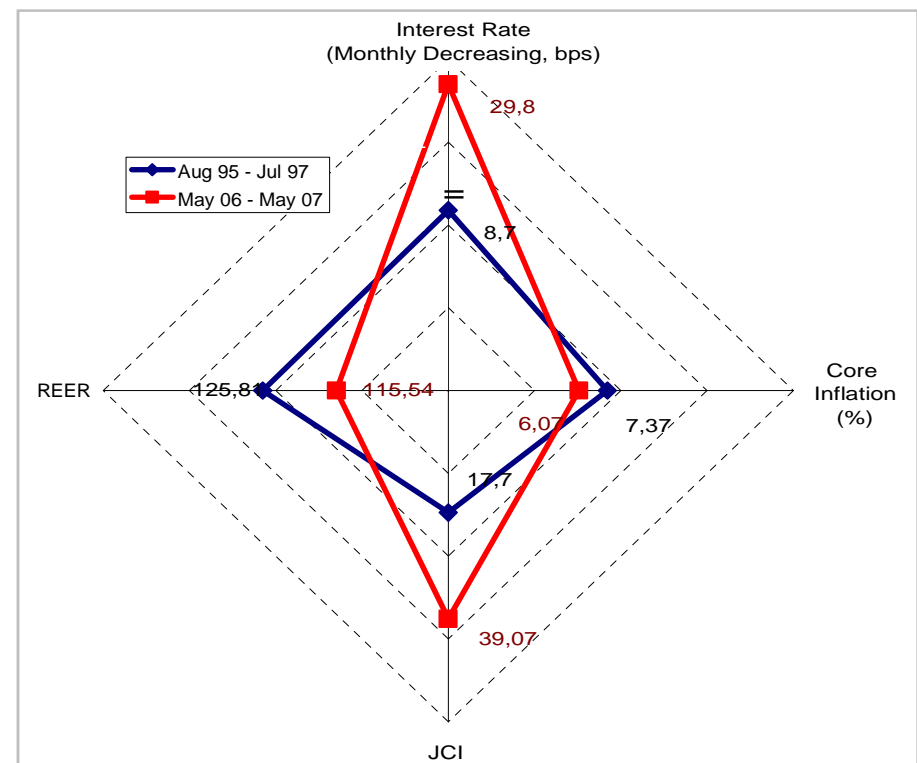
Source: Bank Indonesia and Bloomberg

- Due to increasing financial market innovation and integration with the commodity market ...
- The effects of loosening monetary policy to future inflation risk becoming hidden
 - Inflation was relatively low despite the loose monetary policy stance
 - However, the capital and commodity markets expanded indicating a bubble

Two different period of loosening monetary policy stance

- **1996-1997** (period of undeveloped financial innovation): core inflation was relatively high
- **2005-2007** (period of developed financial market): core inflationary pressure was not excessively high at around 6%
- However, the stock index witnessed strong rallies and imply to price bubbles
- Was driven by substantial foreign capital inflows triggered by lower risk perception.

Diamond Diagram



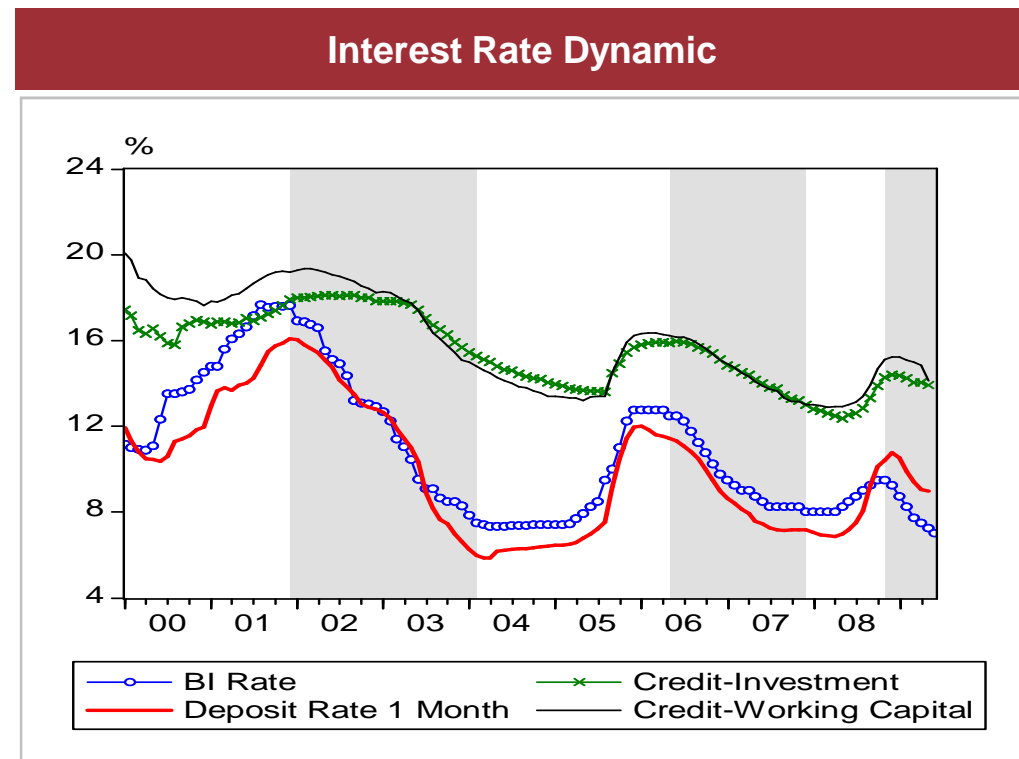
- **Related to the influence of financial system behavior that tended to be pro-cyclical coupled with the presence of the risk-taking channel**
- **Asymmetry in the sensitivity between the BI Rate and lending rate, as well as between credit rate and demand for credit (Goeltom et al., 2009)**
 - Lending rate during an expansionary economic cycle-both working capital credit and investment credit - is less sensitive in response to a hike in the BI Rate
 - Credit demand during an expansionary economic cycle is greater than contractionary economic cycle

The Asymmetric Monetary Policy Transmission Mechanism

Variable	Credit Interest Rate- Working Capital	Credit Interest Rate- Investment	Demand for Credit
BI Rate	0.104	0.058	
Credit Interest Rate	-	-	-0.076
Interest Rate Response in the Expansionary Cycle	-0.012	-0.006	0.037

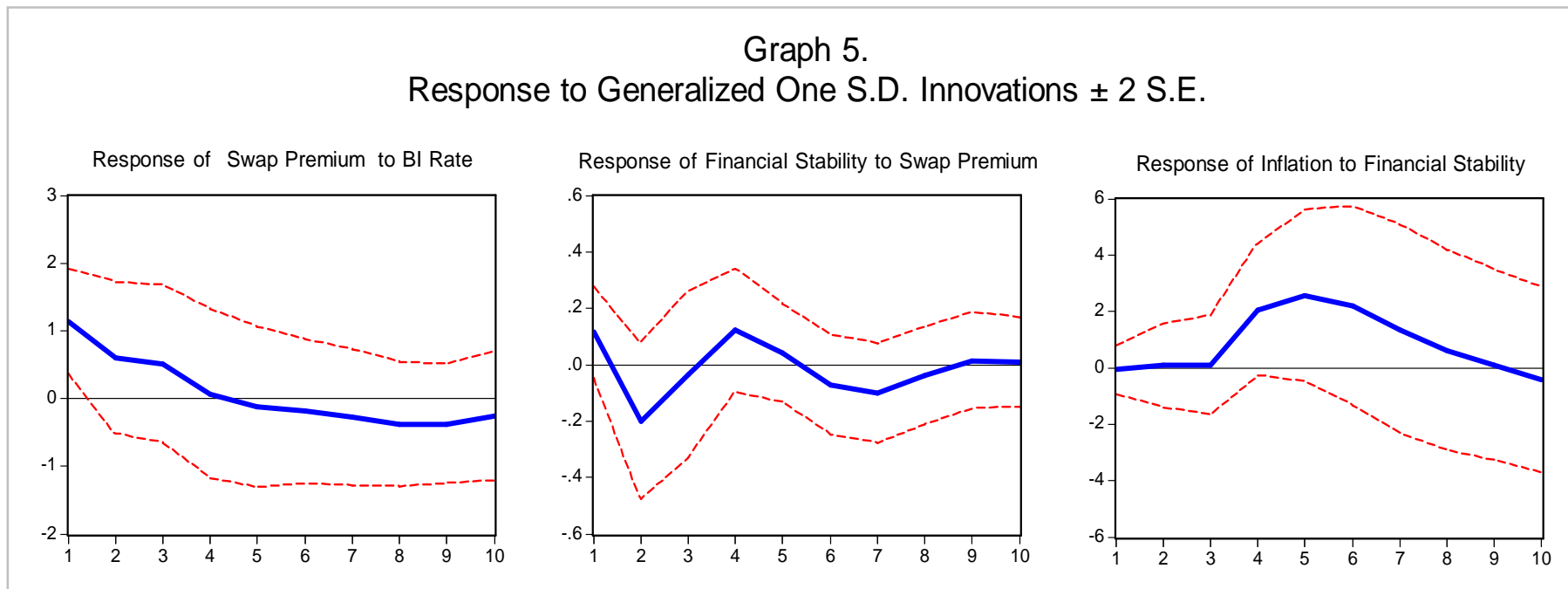
Source: Goeltom et. al (2009)

- **Asymmetry was also clearly evident during the current crisis period when loosening monetary policy by Bank Indonesia was responded slowly by the banks**
- **The bank slow response corresponded to the risk perception ...**
 - Increasing business risk: the slow response was attributable to the high perception of business risk during the crisis period, which was offset by the high interest rate
 - Increasing legal risk:
 - Bankers from state-owned banks (BUMN) felt exposed to legal risk in the event of non-performing loans
 - ... may consider that a loss originating from a BUMN bank as a national loss



Source: Bank Indonesia

- **Preliminary observations show that the role risk perception plays in monetary policy transmission can be explained by the model (Goeltom et al., 2009)**
 - A tight monetary policy stance designed to provide clear signals of future inflation control will positively affect public risk perception and therefore lower premium risk
 - Subsequently this will positively affect financial sector stability, which in this case tends to be asymptotic in the long term
 - Eventually, stable financial sector conditions would positively contribute towards achieving lower inflation



Source: Goeltom et. al (2009)

The achievement of macroeconomic stability, which not only relates to price stability but also interacts with financial stability



- **Price stability in support of macroeconomic stability must be complemented with stability in the financial system**
 - Partial policy that only features price stability or financial stability will result in sub-optimal macroeconomic management in the mid-long term
- **Requirement for integrated policy encompassing monetary policy, banking policy and the policies taken by other authorities**

MP formulation should consider more the dynamics of financial system

1

- **Monetary policy needs to redefine the meaning of price stability as the overarching goal of monetary policy**
 - Price stability should not only relate to inflation risk but also a decomposition of balanced weighting of inflation risk and risk from financial system stability

2

- **Monetary policy should extend a forward-looking horizon regarding price stability risk**
 - Price stability risk can remain hidden due to its temporary absorption in the rapidly expanding financial and commodity market

...in the future, monetary policy should be more flexible

- **Combining old and new ideas to accommodate the role of financial system stability in policy formulation**
- **Considers the role of financial system stability can also relate to the role of the exchange rate**
 - Bending monetary policy rule to consider the exchange rate should be reinforced
- **Opens the possibility of reusing the ‘quantity approach’ in the monetary policy framework**
 - When the economy is in recessionary cycle coupled by a very high perception of risk can hinder the transmission of monetary policy through interest rate channel

Striking a balance between three strategic aspects

- ✓ monetary stability
- ✓ strengthening financial system stability
- ✓ aligning stimuli to maintain economic growth momentum
- **Feasibility of financial sector stability in anchoring the effect of monetary policy towards the real sector and prices**
 - Re-affirms its role as a nominal anchor of monetary policy ?
- **The lack of merit the assumption holds on the limited role the exchange rate implies the need for flexibility in implementing ITF in Indonesia**
 - There is justification for taking the role of exchange rate into account during the implementation of ITF based monetary policy in Indonesia (Goeltom, 2008)
 - ‘The bending rule’ also enables a more optimal countercyclical policy response
- **Cautious easing monetary policy response**
 - Seven time gradually decrease of BI rate in the last six months (from 9.5% in Dec ‘08 to 7.0%) limited room for further decrease
 - BI should explore different avenues with a different perspective, or beyond the conventional wisdom of monetary policy
 - However, ... should be mindful of the provisions governing the Central Bank Act

Banking system regulations are aimed at managing financial system behavior that is pro-cyclical towards the economic cycle ...

- **A couple of important elements under the principle of tighter regulations should economic expansion occur , *vice versa* (Leijonhufvud, 2009)**
 - To impose a reserve requirement on banks and financial institutions that hold public funds, including money market funds
 - To increase capital deposits for all players in the financial market as a whole by emphasizing core capital (Tier 1) availability
- **Regulations is complemented by a wider view of the banking system as a whole**
 - When responding to pressures stemming from a crisis, the actions of individual banks can precipitate a rise in systemic risk
 - Bank response, which individually may be optimal, collectively may weaken the banking system (*fallacy of composition phenomenon*)
- **Financial intermediaries should return to basics**
 - A clear separation between the role of commercial banks and investment banks should be reaffirmed, monitored and regulated by the relevant authorities

Directed towards safeguarding the bank intermediation function

- **Continues to institute a variety of policies that strengthen bank resilience in order to support financial system stability**
 - Under the auspices of both the Basel II framework as well as Indonesian Banking Architecture
- **The Financial Stability Wing also actively reinforces its two main functions:**
 - Financial supervision: development of the Payment System and clearing of securities which are closely correlated and carry very high systemic risk.
 - Supervision of systemic banks: in line with counter-cyclical measures, the current buzzword is “capital strengthening”, especially Tier-1 capital, so that banks are able to maintain an adequate first-line of defense against shocks in the financial sector

- **Central banks should be more flexible and creative ...**
 - Policy flexibility is crucial in the short term so that the policy response instituted does not undermine the actions taken to maintain macroeconomic stability
 - Policy guidelines must be adjusted to anticipate risk that may arise and could disrupt macroeconomic stability
- **Future policy must be integrated from all authorities and strongly supported by political will ...**
 - Comprehensive crisis resolution requires complete information and a broad authoritative scope
 - Can only be obtained if all authorities and officials maintain strong relationships to eliminate the problems of coordination

Thank you...

