

Monetary Policy Regime in Indonesia: Towards A Post-Global Financial Crisis Framework

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Introduction

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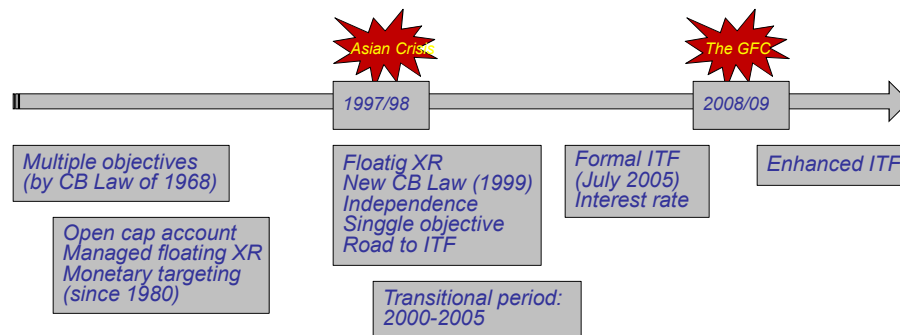
Monetary regime amid two financial crises ...

- The monetary policy regime has been significantly affected by rapid changes in macroeconomic environment, structural adjustments, and dynamic political atmosphere.
- The adjustments which were fostered by faster globalization and two major financial crises in 1997/98 and 2008/09, have had major implications on monetary management.
- Before the financial crisis of 1997/98 monetary policy was characterized by a shift from one regime to another regime:
 - The credit and interest rate control policy, coupled with the exchange rate and capital flow management that were relatively restrained in the 1970s.
 - Monetary targeting was sequentially implemented in the era of financial sector deregulation, with a more market-mechanism based monetary management from the early 1980s until the first half of 1990s.
- The period after the financial crisis of 1997/98 was a period in which the monetary policy regime was directed to the implementation of Inflation Targeting Framework (ITF).

Introduction

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Monetary regime amid two financial crises ...



Introduction

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- The GFC has significantly affected, not only domestic financial systems and macroeconomic developments in the region, but also how monetary policy to be implemented.
 - The policies taken were not only conventional, but also some unconventional measures. A loose monetary policy was taken in the form of reducing policy rates to extremely low levels; subsequently followed by quantitative easing.
 - Amidst high uncertainty, global excess liquidity drives persistent inundation of foreign capital flows into emerging markets.
- **There is a tendency to move away from corner solution. But, Q: how to optimally transform the impossible trinity into a possible trinity?**
- Part of response: in Post-GFC, the dynamic of the exchange rate is not completely influenced by market forces, but also strongly influenced by domestic monetary policy.

Table 1. Comovement between Exchange Rate with Capital Inflows and Interest Rate Differential

Comovement with Exchange Rate	1997.08 – 2000.12 1997/98 Crisis	2001.01 – 2005.12 Transition of ITF	2006.01 – 2008.10 ITF Pre The GFC	2008.11 – 2010.12 The GFC	2011.1 – 2012.6 Post GFC
Capital Inflows (NFA)	0.86	0.74	0.56	0.54	0.56
Interest Rate Differential	0.14	0.26	0.44	0.46	0.44

Source: Juhro (2010), updated

Introduction

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- **Indonesian Monetary Policy Trilemma Index:** in the midst of high degree of integration of Indonesian financial markets and the independence of monetary policy, exchange rate developments tend to be more stable.

Table 2. Monetary Policy Trilemma Index

Trilemma Index	1997 – 2000 Asian Crisis	2001 – 2005 Transition of ITF	2006 – 2008 ITF pre The GFC	2008 – 2011 The GFC – Post GFC
Exchange rate stability	0.11	0.27	0.25	0.38
Monetary policy independence	0.45	0.30	0.50	0.52
Financial market integration	0.74	0.69	0.69	0.69

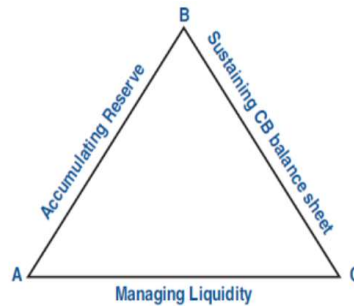
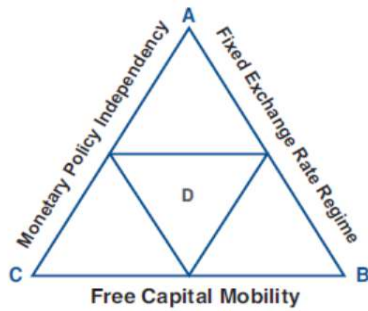
Source: Juhro (2010), updated

- In a small open economy, like Indonesia, the multiple challenges imply that the monetary authorities should employ multiple instruments. **Coordinated implementation of a policy instrument mix** is ultimately part of an important strategy.
- The capacity of ITF to address existing problems? A proposed design of **Flexible ITF** to overcome the most salient challenges.

State of problems

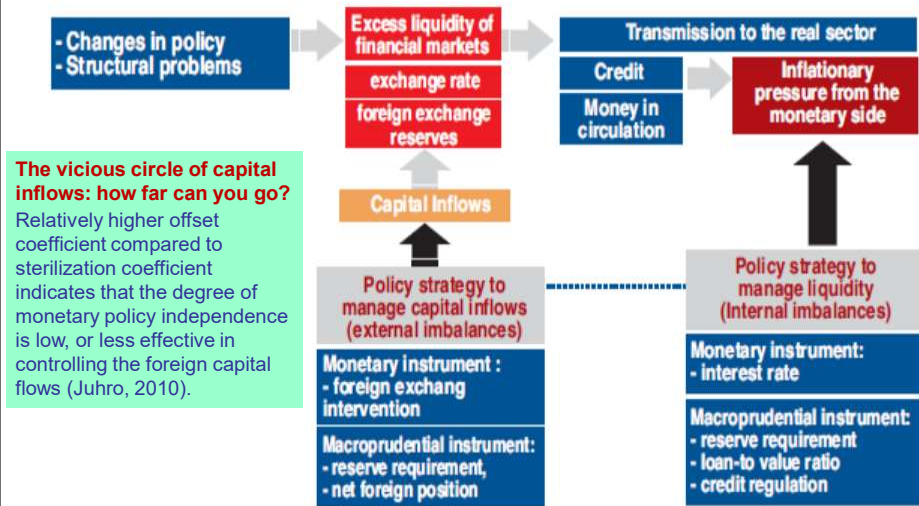
From strategic to tactical trilemma....

- Amid a deluge of foreign capital inflows, policy orientation towards managing external balances can become counterproductive to the management of internal balances.
- As some EMs, not only face policy trilemma at a strategic level, but also at a tactical level. It encourages central banks to optimize the management of foreign reserves, excess liquidity in the money market, as well as central financial performance.



State of problems

The multiple challenges imply that the monetary authorities should employ multiple instruments in a coordinated way (instrument mix)



State of problems facing the economy

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The dynamic of capital flows and exchange rate

- The deluge of foreign capital inflows has encouraged rupiah appreciation, potentially undermine purchasing power and the current account.
- A surge in foreign capital inflows compounds the complexity of challenges faced in terms of domestic monetary management. Persistent foreign capital inflows can undermine (offset) the efficacy of monetary management .

Figure 1. The Dynamic of ST Capital Flows and Exchange Rate

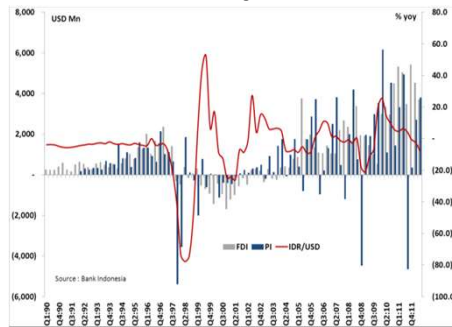
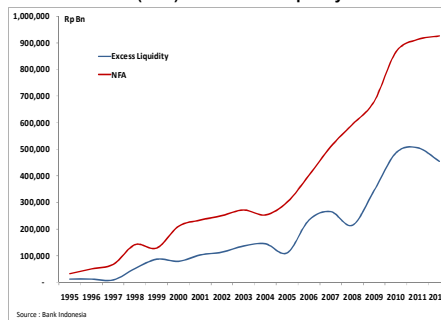


Figure 2. Comovement between Net Foreign Assets (NFA) and Excess Liquidity



State of problems facing the economy

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The dynamic of capital flows and exchange rate

- Capital flow volatility creates financial system vulnerability. Ubiquitous herding behaviour, encourage excess flows that can reverse suddenly in the event of a change in market sentiment.
- Lack of financial deepening: a significant portion of capital inflows tends toward short-term financial instruments, such as central bank certificates (SBI), government bonds (SUN).

Table 3. Financial Deepening, Instruments, and Foreign Ownership

Rp Bn	Banking Credit		Government Bond			Central Bank Certificate			Stock		
	Level	% of GDP	Level	% of GDP	% of Foreign Ownership	Level	% of GDP	% of Foreign Ownership	Level	% of GDP	% of Foreign Ownership
1990	95,704	45.4	-	-	-	-	-	-	-	-	-
1995	234,611	51.6	-	-	-	-	-	-	-	-	-
2000	269,000	19.4	-	-	-	-	-	-	-	-	-
2004	555,236	24.2	402,099	17.5	2.7	102,731	4.5	7.7	291,393	12.7	73.0
2005	698,695	25.2	399,839	14.4	7.8	72,237	2.6	20.5	342,034	12.3	73.0
2006	796,767	23.9	418,751	12.5	13.1	207,400	6.2	8.7	522,341	15.6	73.4
2007	1,004,178	25.4	470,742	11.9	16.3	267,710	6.8	10.9	790,839	20.0	66.4
2008	1,313,873	26.5	519,743	10.5	16.6	166,714	3.4	3.9	446,178	9.0	67.8
2009	1,446,808	25.8	545,525	9.7	18.9	247,787	4.4	18.6	772,572	13.8	67.1
2010	1,783,601	27.7	587,302	9.1	30.3	213,561	3.3	27.1	1,184,282	18.4	62.8
2011	2,223,685	29.9	654,718	8.8	30.5	138,010	1.9	15.5	1,251,886	16.9	59.9
2012*	2,480,029	28.9	711,262	8.3	31.4	82,178	1.0	0.8	1,354,531	15.8	59.0

Note: *) Data until July 2012

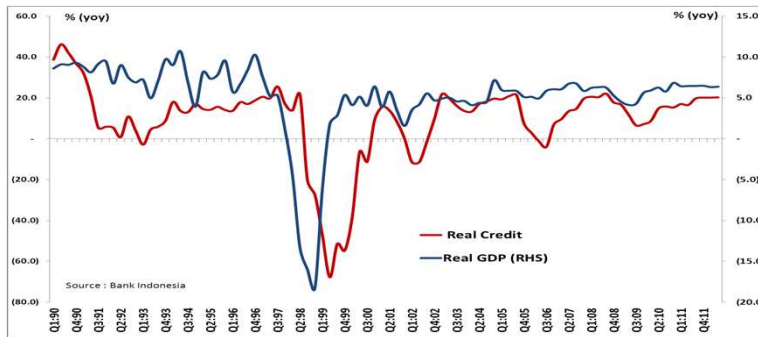
Source: Bank Indonesia

State of problems facing the economy

The changes in financial sector behavior and procyclicality

- The procyclical behaviour of the financial sector as well as the surge in capital flows has magnified complications to monetary policy management.
- Reflected by the performance of bank credit during expansionary and contractory phases. During the period of optimism banks tended to underestimate risk
- Risk behaviour (perception) also contributes to procyclicality in the financial sector, thus affects monetary policy transmission (Satria and Juhro, 2011).

Figure 2. The Procyclicality of Bank Loans



The Work of Monetary Policy Transmission

INTEREST RATE & EXPECTATION CHANNELS

- Under the ITF era monetary policy transmission mechanism through interest rate channel generally works. However, during a crisis period the lending rate response to BI Rate cut tends to be rigid.
- BI's monetary policy predictability is quite good. the level of financial market participants predicting correctly monetary policy stance was 83 percent. The existence of the BI Rate is sufficiently credible as an anchor of future inflation expectations.

Figure 4. BI Rate and Interest Rate Developments

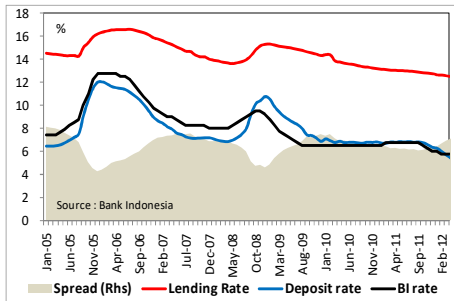
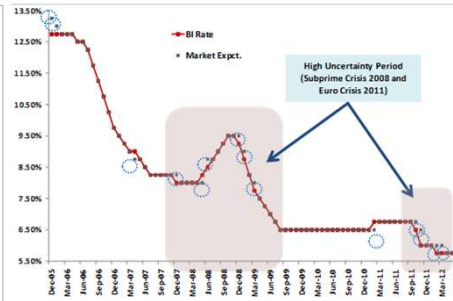


Figure 5. The Predictability of Monetary Policy Stance



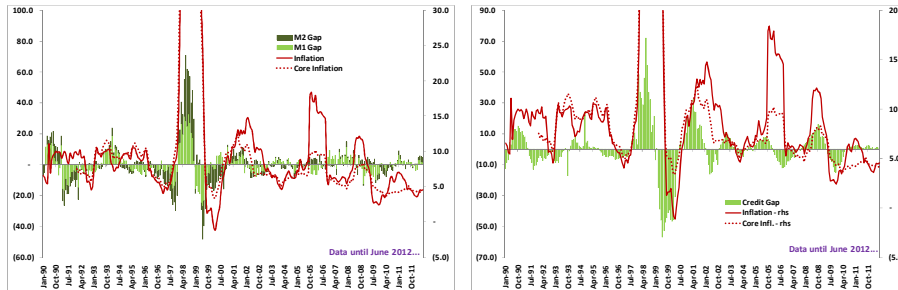
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MONEY AND CREDIT CHANNELS

- Although monetary targeting framework is not formally in place since the early 2000s, empirical observations indicate that money and credit matter in the period of ITF.
- The behavior of credit and M1 (currency and demand deposits) growth preceding that of inflation. The average lead of M1 growth to inflation is around 5-6 quarter, while the average lead of credit growth to inflation is about 3 months (Juhro, 2010).

Figure 6. Money, Credit, and Inflation



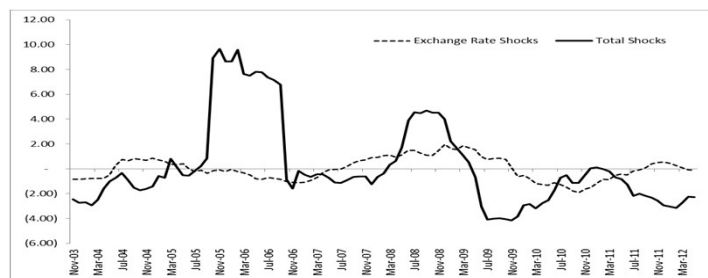
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EXCHANGE RATE CHANNEL

- The exchange rate management needs to be directed to find a feasible solution to 'accommodate' the impossible trinity. It should remain geared to align with the economic fundamentals through measurable interventions in the forex markets.
- Significant passthrough effect of the exchange rate to inflation, but the passthrough effect weakened during the post GFC period.
- Most possibly due to the declining trend in global commodity prices as well as exchange rate management strategy taken by BI that allows the rupiah to stable in recent years, thus neutralize the effect of external shocks, via the exchange rate, on inflation.

Figure 7. Exchange Rate Shocks and Historical Decomposition of Inflation



The GFC: lesson learned

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- In a small open economy, the multiple challenges facing monetary policy as a result of capital inflows imply that the monetary authorities should employ multiple instruments. The instrument mix allows Bank Indonesia to address multiple dilemmas.
- While price stability should remain the primary goal of central banks, the global crisis demonstrated that maintaining low inflation alone, without preserving financial stability, is insufficient to achieve macroeconomic stability.

Mishkin (2011): “none of the lessons from the financial crisis in any way undermines the nine basic principles of science of monetary policy”.

- Exchange rate policy should play an important role in the ITF of a small open economy.
 - In a small open economy with open capital movement, exchange rate dynamics are largely influenced by investor risk perception, which trigger capital movements.
 - There is a case for managing the exchange rate in order to avoid excess volatility.

A Post-GFC Framework: Flexible ITF

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ITF remains a reliable monetary policy strategy in Indonesia

- ITF implementation in Indonesia has yielded a number of noteworthy outcomes, namely (Juhro, et al., 2009):
 - (i) institutional strengthening of the monetary policy decision-making process;
 - (ii) clear monetary policy signals that affect inflation expectations; and
 - (iii) increased policy credibility.
- Nevertheless, achievement of the inflation target is not as straightforward as it seems. A number of supply side shocks pushed inflation beyond the target.
- Difficulty in achieving the inflation target is also linked to the complexities faced by Bank Indonesia in the monetary sector, i.e. excess liquidity, huge capital inflows.

Table 2. Inflation Target and Actual

Year	Inflation Target	Actual Inflation	Core Inflation	SBI (BI) Rate	Underlying Factors
2005	6 ± 1	17.1	9.7	9.17	Global shocks, fuel price increases in March and October
2006	8 ± 1	6.6	6.03	11.83	
2007	6 ± 1	6.6	6.29	8.56	Fuel price increase (May)
2008	5 ± 1	11.06	8.29	8.67	
2009	4.5 ± 1	2.72	4.09	6.5	Global commodity price increase, weather anomaly
2010	4.5 ± 1	6.39	4.29	6.5	
2011	4.5 ± 1	3.79	4.10	6.0	

A Post-GFC Framework: Flexible ITF

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ITF remains a reliable monetary policy strategy in Indonesia

- There is justification for the necessity to implement the ITF which is not rigid (e.g. flexible ITF) as an ideal format for the Indonesian economy (Juhro et al., 2009).
- *“In fulfilling the overriding objectives, ITF and Flexible ITF are substantively similar as they are both focus to control inflation. The ultimate difference relates to “flexibility”, specifically flexibility in terms of integrating the framework of the financial system stability with the policy mix of monetary – macroprudential instruments; flexible in positioning the role of the exchange rate strategy; as well as strengthening the institutional aspects to optimize policy coordination and communication.”*
(Bank Indonesia, 2011)



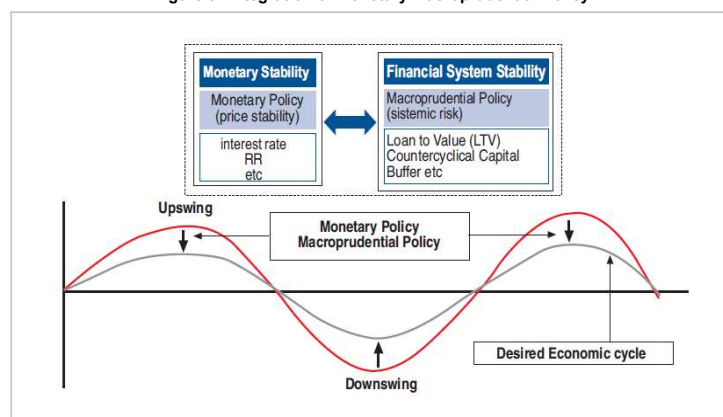
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Monetary and macroprudential policy integration

- The global financial crisis reinforced the paradigm that macroeconomic stability is not merely achieved through monetary stability but also determined by financial stability.
- Appropriate monetary and macroprudential policy integration or synergy is required in order to buttress monetary and financial system stability.

Figure 3. Integration of Monetary-Macroprudential Policy



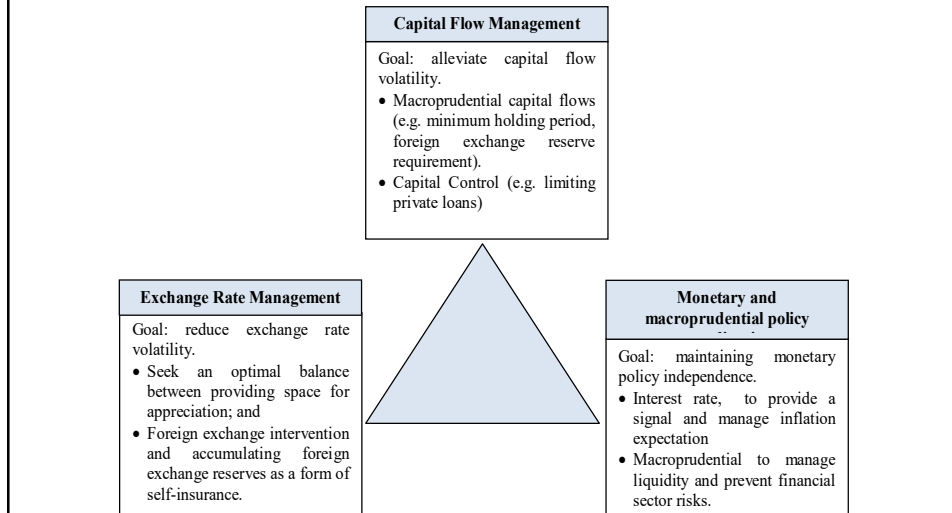
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Managing the dynamics of capital flows and exchange rates

- Coordinated implementation of a policy instrument mix is ultimately part of an important strategy to optimally transform the impossible trinity into a possible trinity

Figure 4. Indonesian Monetary Trilemma Management



A Post-GFC Framework: Flexible ITF

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Bank Indonesia's Policy Instrument Mix 2010-2012

Policy Instrument	Policy Response	Rationale
1. Interest rate policy	<ul style="list-style-type: none"> BI Rate increase by 25 bps to 6.75% in February 2011. BI Rate cut by 75 bps to 6.0% in Q4-2011 	<ul style="list-style-type: none"> Response over increasing inflation pressures from food prices and inflation expectation. To provide stimulus in anticipating the impact of global economic slowdown (crisis) on domestic economy, provided that future inflation remains on the target.
2. Exchange rate management	Rupiah appreciation/ depreciation is tolerated manageably, in line with economic fundamental; if necessary regional currency movement and foreign reserve sufficiency.	<ul style="list-style-type: none"> To stabilize exchange rate and help managing the impact of imported inflation, while it should conducive for promoting balance of payment performance..
3. FX reserve accumulation	FX reserves increased from USD 66 bio at end-2009 to USD 96 bio at end-2010. Further increase to USD119 (6.8 month of import and short term public debt repayment) by end of June 2011.	<ul style="list-style-type: none"> As a self insurance against risks of sudden reversals of capital inflows. In part as implications of FX intervention to stabilize exchange rate.

A Post-GFC Framework: Flexible ITF

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Bank Indonesia's Policy Instrument Mix 2010-2012

Policy Instrument	Policy Response	Rationale
4. Macroprudential on capital infows	<ol style="list-style-type: none"> One Month Holding Period (OMHP) on BI bills since June 2010 and 13 May 2011 to Six Months Holding Period. Shifting BI bills to Term Deposit since June 2010. Increase FX Reserve Requirement from 1% to 5% March 1st, 2011, to 8% June 1st, 2011. Reinstating limit offshore short term borrowing of banks to 30% capital, end Jan 2011, with 3 months transition period. Revocation BI direct FX supply to domestic corporate 	<ul style="list-style-type: none"> To "put sand in the wheels" on short-term and speculative capital inflows, and mitigate risks of sudden reversals. To lock up domestic liquidity to longer term, and limit the supply BI bills. To enhance bank FX management liquidity in responding to increase in FX exposure due to capital inflows, while support monetary operations in managing liquidity and stabilize exchange rate. Limit capital inflows to financial assets and encourage a shift to longer term offshore borrowing. Domestic FX liquidity back to normal and further deepen FX market liquidity.

A Post-GFC Framework: Flexible ITF

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Bank Indonesia's Policy Instrument Mix 2010-2012

Policy Instrument	Policy Response	Rationale
5. Monetary operation enhancement and macro-prudential on liquidity/ financial system stability	<ol style="list-style-type: none"> Lengthen interval of auction (from weekly to monthly) and offer longer BI Bills maturity from 1 and 3 month to 9 month since August 2010. Increase Rupiah reserve requirement from 5% to 8%, effective Nov 2010. Reserve requirement link to Loan to Deposit Ratio (78 - 100), effective March 1st, 2011. 	<ul style="list-style-type: none"> To enhance the effectiveness of domestic liquidity management, including from capital inflows, by locking up to longer term and in the same time help develop domestic financial markets. To absorb domestic liquidity and enhance banks's liquidity management, without exerting negative impact on lendings that are needed to stimulate growth. Prudential measure to enhance role of banking intermediation to support economic growth, while maintaining prudent banking operation.

Closing Remarks

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- A change in the framework will have a number of significant implications on **the institutional mandate** of Bank Indonesia.
- The paradigm that monetary policy requires the support of macroprudential policy has the consequence of being **unable to separate monetary policy from macroprudential policy** in order to ensure effective implementation.
- Last but not least, **strengthening Bank Indonesia and Government policy coordination** to controlling the prices and maintaining monetary and financial system stability is very essential.
- Policy coordination can be done in a **broader perspective to controlling capital flows** with considering characteristics of capital inflow which is sensitive to the shock of reversal issue.
- **Next issue: how will be the regional financial cooperation in the region affected and what can be done to strengthen it?**

THANK YOU