



Monetary Policy and the Role of Exchange Rate under Financial Distress: the case of Indonesia

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Buenos Aires, 31 August 2009

- 1. Financial Markets Distress, Monetary Policy and the Role of Exchange Rate**
- 2. Viewpoints on the Role of the Exchange Rate under ITF**
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Financial market distress since 2007 ...

- Common features with previous crisis episodes:
 - Long period of benign macroeconomic and financial environment
 - strong and stable growth globally
 - low global interest rates and pro-cyclicality of the financial sector
 - Lower perception of risk inducing search for yield.
 - Led to serious asset price bubbles

Emerging markets are affected .. But weathered the shocks relatively better...

- Limited exposure to the US subprime
- Early stage of development of structured credit and derivative products
- Relatively healthy banking system, and well capitalized, especially after the 97 Asian Crisis

Nevertheless ...

- exports were hit and real sector was deteriorated
- exacerbated by increase volatility in stock market and exchange rates

Pose challenges to policy makers

- Need to identify the degrees of macro-financial linkages
- Seeking Optimal monetary policy instruments to increase effectiveness
 - Pre-emptive nature of responses
 - Easing market uncertainties
 - Flexibility without hampering credibility

Role of the Exchange rate:

For example, Indonesia...

- A small open economy, adopting inflation targeting with floating exchange rate system and open capital account
- Increasingly integrated with the global financial market
- Shallow financial market and incomplete hedging instruments.
- Vulnerable to global volatility, putting pressures on the exchange rate

Under a period of financial distress:

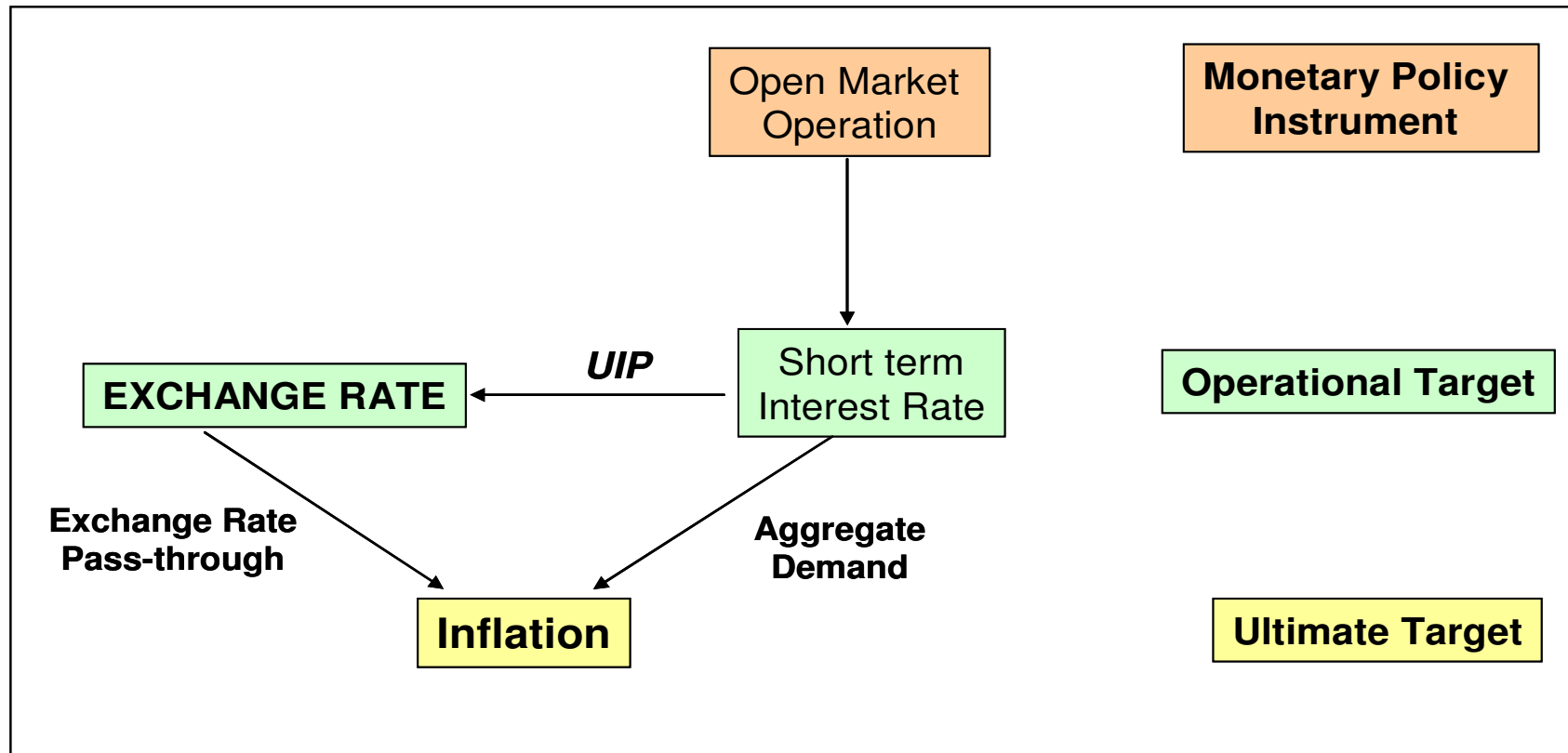
- A shock absorber for the economy??
- Volatility merely mirroring economic adjustment process back towards equilibrium subsequent to a shock??

2. Viewpoints on the Role of Exchange Rate under ITF

- IT literature portrays limited role of exchange rate in monetary policy strategy
 - Promotes the role of interest rate as instrument
 - Generally formulated by taking into consideration its feedback or policy response to the deviation of inflation and output from their targets (Taylor Rule)

- **Two key arguments for the perceived limited role of the exchange rate under ITF.**
 - Merely a transmission channel of monetary policy in influencing the ultimate target of monetary policy, namely inflation (Diagram 1.).
 - direct inclusion in the response function give excessive impacts on the economic system (Taylor, 2001).
 - Using the exchange rate as a direct instrument can erode the effectiveness of monetary policy.
 - Central bank's direct intervention in the foreign exchange market can be counterproductive, suggesting dualism of monetary policy signals , confusing economic players. (Svensson, 2001; Mishkin and Schmidt-Hebbel, 2001).

Diagram 1. Flowchart of Exchange Rate against Inflation



Source: Hufner, 2004

Two complementing assumptions regarding the role the exchange rate as an economic shock absorber.

- The financial system is assumed to operate efficiently allowing market players to perform optimal portfolio adjustments, minimizing liquidity risk and solvency risk in the financial system
 - *Uncovered Interest Rate Parity (UIP) sound and hold*
- The belief that exchange rate volatility is primarily attributable to real shocks such as the terms of trade, economic productivity and real interest rate, less than the effect of nominal shocks, such as currency in circulation.
 - *The exchange rate steers the economy towards its long-term equilibrium when real fluctuations occur, illustrating the process of an economic stabilizer as well as absorber*

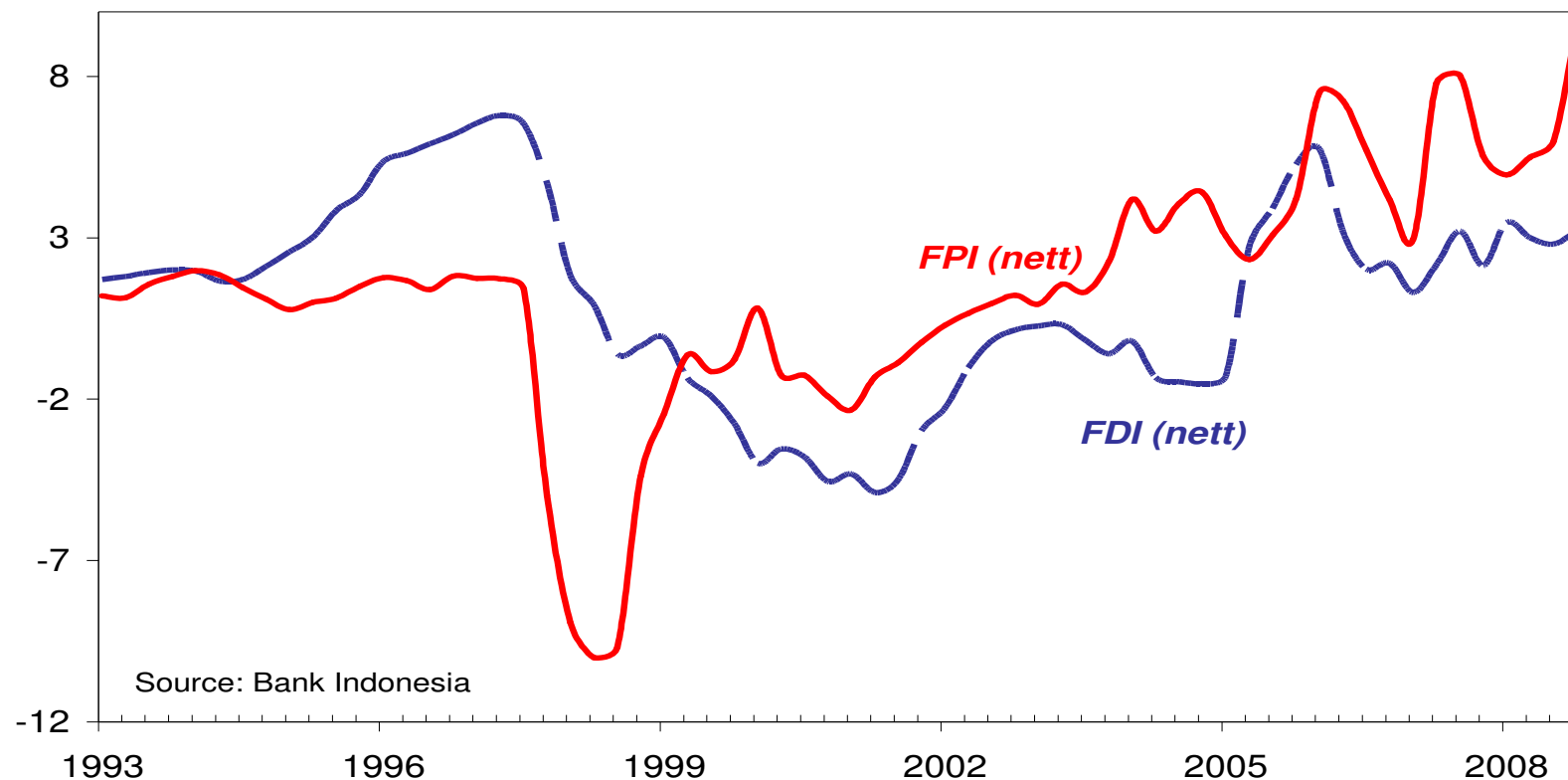
- **Hence, the view that exchange rate plays a limited role in monetary policy strategy.**
- **Free floating exchange rate system is recommended as the optimal policy option for an economy that uses ITF**

The dynamics of Indonesia's economy over the past 10 years have led to differences between the assumptions and empirical facts.

Two arguments:

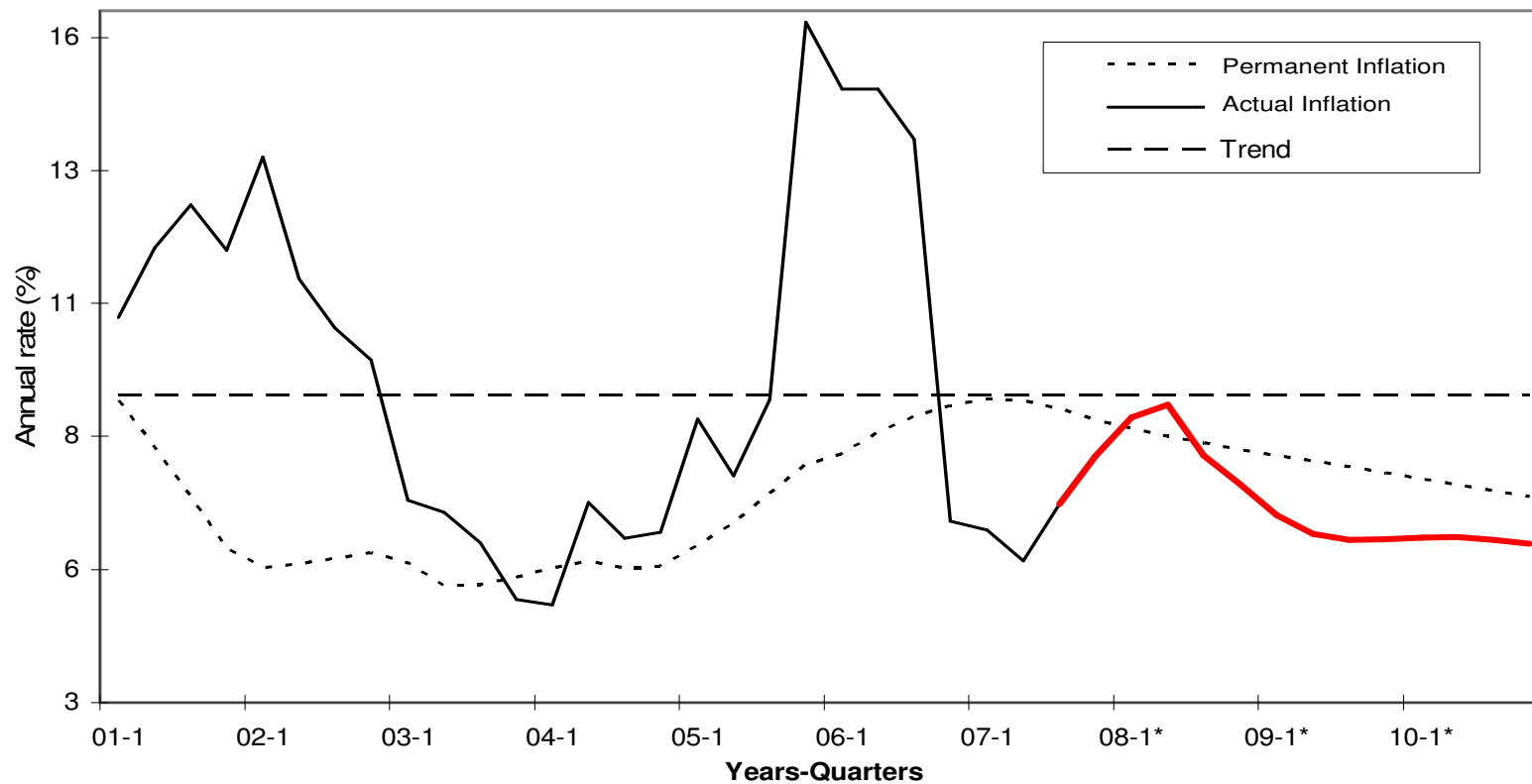
- FIRST, Greater integration pushed the dynamics of domestic financial market, and a slide in global financial market performance can rapidly trigger excessive asset price volatility and promote financial fragility.

Investment Portfolio and Foreign Direct Investment (Net)



- **SECOND:**
- **Inflation in Indonesia remains persistently high.** Permanent inflation in Indonesia remains high; in the range of 6% - 7%.

Inflation Decomposition



3. Incomplete study: “*Bending the Rule*”

- Indonesia, a salient fact:
 - After gaining independence in 1999, and the Central Bank objective is price stability, inflation (CPI) is trending down, except for end 2005 whereby domestic fuel price was increased by nearly 80%.
 - Inflation Targeting Framework (ITF) was formally adopted in May 2005., and monetary policy remain anchored to inflation to curb exchange rate pass-through.
 - However, in a non-fully efficient financial system, and in an economy with relatively large foreign short term debt, exchange rate pressures can exacerbate economic volatility.
- Can exchange rate be included independently with inflation and economic growth in a central bank’s preference function.
- “***Bending rule***”: the role of the exchange rate can be further identified within operational monetary policy.

To measure the role of the exchange rate using **the Taylor rule**:



The presence of interest smoothing:



The presence ad-hoc role of reexchange rate:



- This slight bending of the rule is an interesting format since it takes into account the exchange rate's role.
- Doubt may emerge, also considered inconsistent with basic ITF substance, however, several empirical observations for economies characterized by large exchange rate pass-through as well as relatively high and unstable inflation accords merit to this rule bending (Edwards, 2006).
- Technically, for small open economies the addition of an exchange rate variable offers the possibility of achieving system stability, providing that the data used is contemporaneous. If the data is lagged then such an addition is unnecessary (Bask, 2006) .

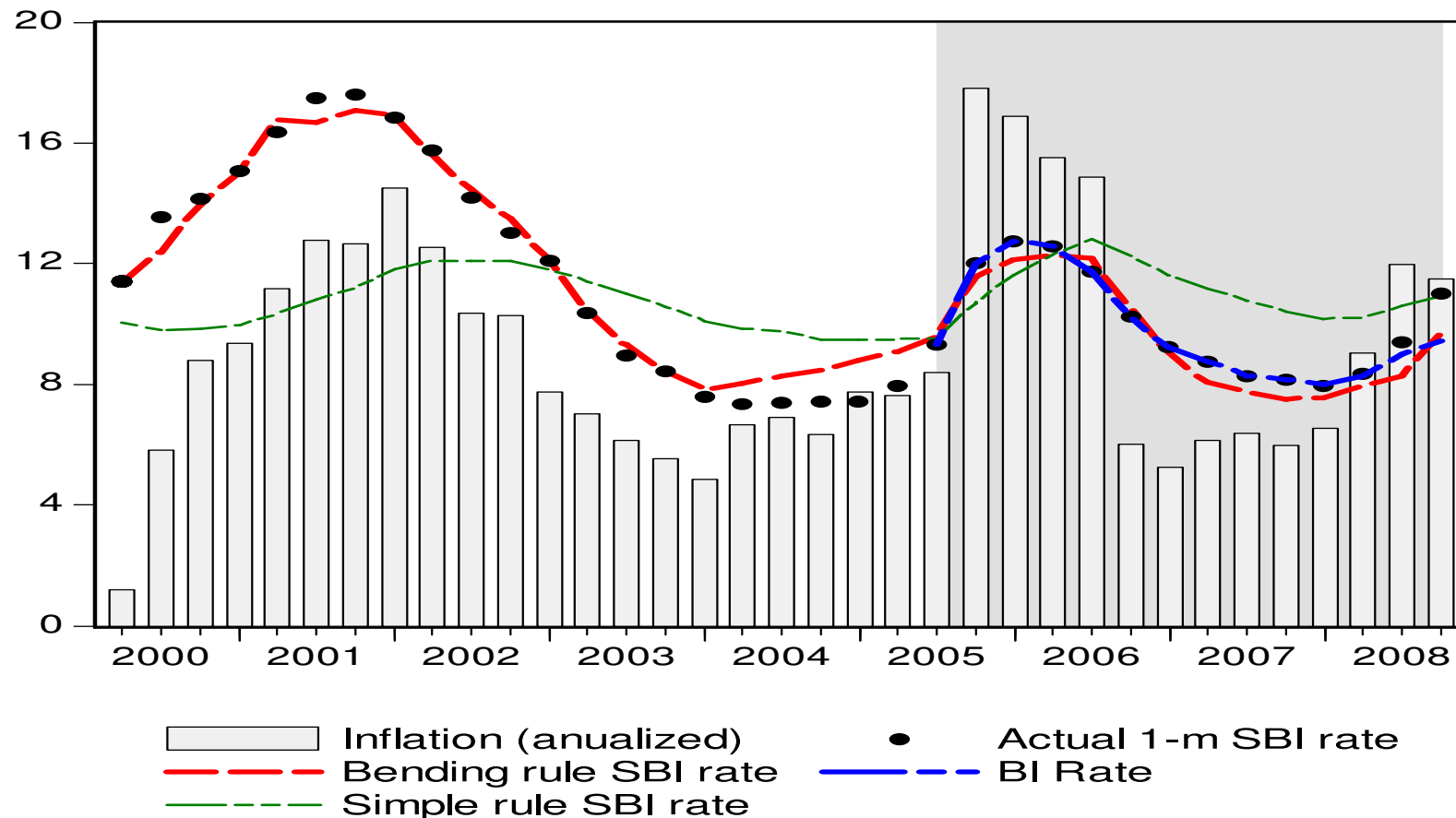
- Parsimonious Taylor rule estimations using equation (2) and (3) conducted for the period of 2000.1 – 2007.4:



- It was generally concluded that the behavior of these two rules can be explained by the data.
- The quite large short-term exchange rate effect is greater than Chile's economy, which is zero, but far less than Mexico with a short-term effect of 0.8.

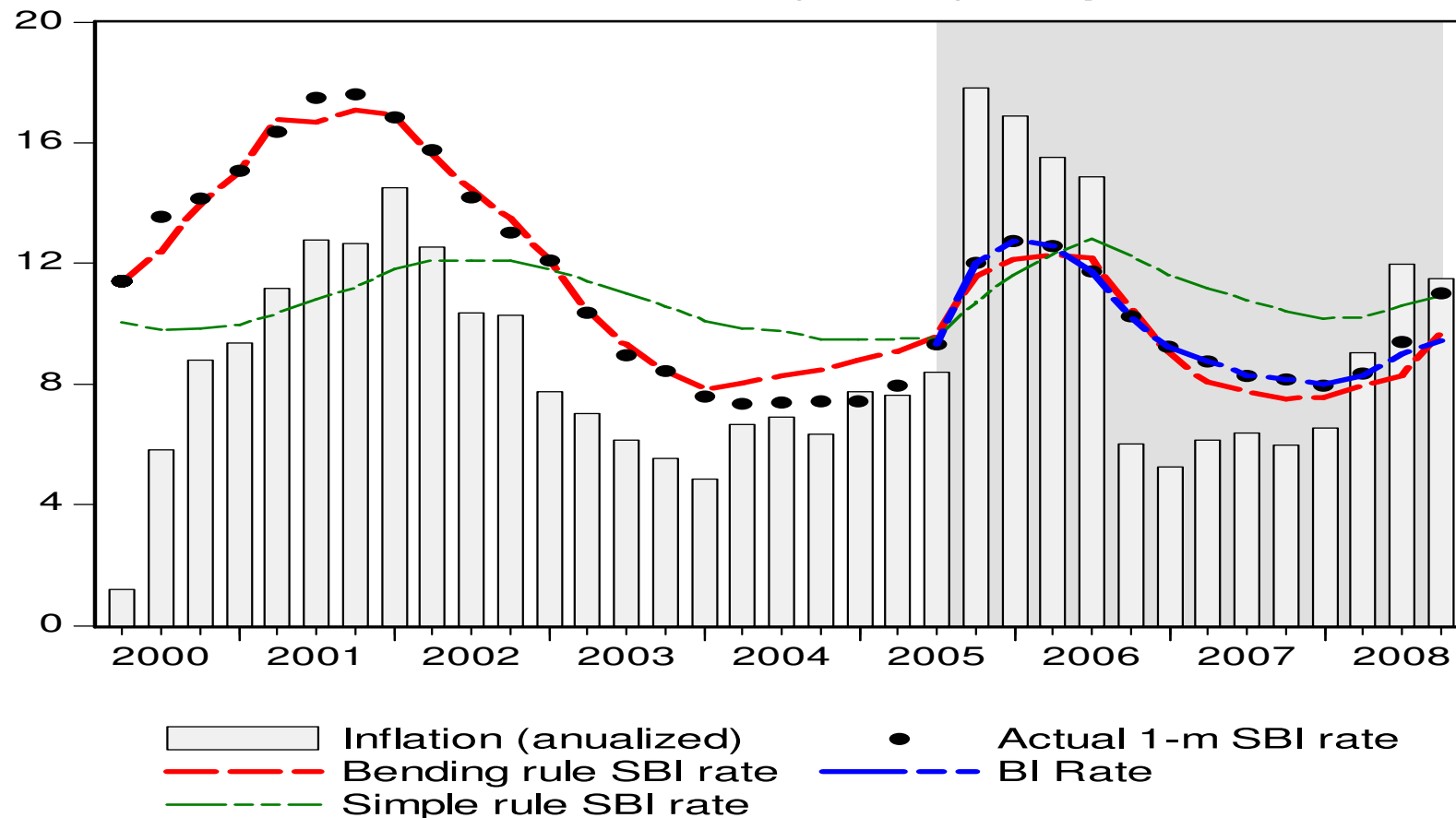
- Though much simplified, the bending rule has indicated that it outperforms the simple rule .. enables a more optimal countercyclical policy response

Inflation and Monetary Policy Response



- Indonesia's monetary policy response during the period of crisis was gradualist

Inflation and Monetary Policy Response



- Hence, policy strategy using the interest rate as a primary instrument must be buttressed by other policy strategies, through measured intervention in the foreign exchange market coupled with sterilized intervention.
- Cautious intervention is implemented during the excessive market pressure.
 - Considered effective in managing expectations of depreciation and short-term inflation.
 - Still hold the key principle that in the long run exchange rate fluctuations are strongly influenced by fundamental factors.

Foreign Exchange Reserve (USD million, end of period)

Periode	Indonesia	Singapore	Malaysia	India	Brazil	Rusia	South Korea	Australia
Jun-04	34,851	101,604	51,955	114,129	48,860	84,463	167,030	na
Dec-04	36,321	112,575	64,906	125,164	53,960	120,809	199,066	na
Jun-05	33,865	114,898	73,617	132,942	60,946	147,776	204,986	na
Jan-06	35,076	119,746	70,197	133,281	53,961	181,401	216,933	na
Jun-06	40,107	128,316	77,975	155,968	62,283	243,175	224,360	na
Dec-06	41,579	135,342	81,724	170,187	86,226	295,568	234,260	52,821
Jun-07	50,924	144,056	97,680	206,114	143,117	397,398	250,700	65,391
Dec-07	56,920	162,957	100,635	266,767	165,507	464,379	262,220	24,237
Jun-08	59,450	176,650	125,063	302,050	184,592	554,501	258,100	31,547
Sep-08	57,108	168,802	109,052	282,652	205,271	542,094	239,670	26,442
Dec-08	51,640	174,196	90,605	245,870	192,950	412,547	201,220	29,047
Mar-09	54,840	166,099	86,855	241,597	189,903	368,146	206,340	27,972

- Policy flexibility is crucial in the short term so that the policy response instituted does not undermine the actions taken to maintain macroeconomic stability.
- ITF implementation in needs to be more elastic and flexible compared to the existing standard analysis, in particular during widespread crisis.
- Several preconditions still need to be considered, especially relating to the role of the financial sector as a mediator as well as a channel of global portfolio movements.

Thank You