Indonesia's monetary policy: coping with volatile commodity prices and capital inflows

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Introduction

Global commodity prices and volatile capital flows are among the key challenges facing Indonesian monetary policy over the past three years. Global commodity prices increased dramatically between mid-2010 and mid-2011 but then decelerated, as concerns over the global economic slowdown mounted. For Indonesia as a commodity exporter country, volatile global commodity prices have impacted not only domestic inflation but also the performance of the economy's external sectors. Effective monetary policy responses are needed to mitigate these impacts.

Volatile capital flows have also complicated the conduct of monetary policy. Capital continued to pour into Indonesia in the period up to August 2011, but capital flows then reversed abruptly as the global crisis deepened, especially in Europe. As a result, the rupiah exchange rate, which had previously appreciated strongly, came under downward pressure. In such a volatile environment, it is the task of monetary policy to mitigate the spillover impacts of global economic and financial turbulences to safeguard Indonesia's macroeconomic performance, and to maintain the stability of the exchange rate, inflation, and growth as well as of the overall financial system.

This paper reviews the Indonesian experience in designing and implementing monetary policy responses to volatile global commodity prices and capital flows. We find that an interest rate response alone would not have been sufficient to cope with these challenges. A mix of monetary and macroprudential measures is needed that complements interest rate policy with exchange rate policy, capital flow management, and macroprudential measures on bank lending and other banking activities. Active policy communication is also necessary. The following section will review Indonesia's macroeconomic performance, and then focus on the country's experience in implementing the monetary and macroprudential policy mix over the past three years.

Indonesia: the macroeconomic context

The Indonesian economy has been resilient against the global crisis and continues to combine robust growth with macroeconomic stability. Growth accelerated from 6.2% in 2010 to 6.5% in 2011, and is forecast to stay at about 6.4% in 2012 before accelerating again to 6.7% in 2013 (Table 1).² This performance is driven by strong domestic consumption and

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² With the continuing downward revisions of global growth forecasts and those of Indonesia's major trading partners, especially China and India, recent indicators show some downward revisions to Indonesian growth to 6.4% and 6.2% in Q2 and Q3 2012, respectively. Bank Indonesia's recent forecasts indicated that growth will come in at about 6.1–6.5% for 2012 and 6.3–6.7% for 2013. The downward revisions were driven mainly by export performance, while domestic consumption and investment continue to be robust, reflecting the economy's resilience. For instance, while export growth is forecast to slow to 3.1–3.5% in 2012, private consumption and investment growth is estimated to have accelerated to 4.7–5.1% and 10.4–10.8% in in Q2 and Q3 2012, respectively.

investment, which grew by about 5% and 10%, respectively, in 2010 and 2011. Exports put up a strong performance in 2010 and 2011, with growth of 15.3% and 13.6%, respectively, but they have come under pressure in 2012 from the slowdown in China and India. Overall, strong domestic consumption and investment have offset declining export performance.

Table 1

	2010	2011			2012*		2013**		
		Q1	Q2	Q3	Q4	2011	Q1	2012*	
Real GDP (%) • Consumption (%) • Investment (%) • Exports (%) • Imports (%)	6.2 4.1 8.7 15.3 17.3	6.4 4.3 7.2 12.2 14.4	6.4 4.6 9.3 17.2 15.3	6.5 4.6 7.1 17.8 14.0	6.5 4.6 11.5 7.9 10.1	6.5 4.6 8.8 13.6 13.3	6.3 5.0 9.9 7.8 8.2	6.4 5.2 10.0 8.8 10.0	6.7 5.1 10.5 11.4 12.4
CPI Inflation (%) • Core (%) • Volatile Foods (%) • Administered Prices (%)	6.9 4.3 17.7 5.4	6.6 4.5 15.2 5.5	5.5 4.6 8.6 5.6	4.6 4.9 5.1 2.8	3.8 4.3 3.4 2.8	3.8 4.3 3.4 2.8	4.0 4.2 4.5 2.9	4.5 4.2 6.9 3.1	4.6 4.6 6.2 3.0
Balance of Payments (US\$ B) • Current Account (US\$ B) • FDI Inflows (US\$ B) • Portfolio (US\$ B) • FX Reserves (US\$ B) • Exchange Rate (Rp/US\$)	31,765 5,144 13,771 15,713 96,207 9,023	7,666 2,657 4,990 4,109 105,709 8,761	11,876 136 6,321 6,259 119,655 8,564	-3,960 504 3,300 -4,804 114,502 8,766	-3,726 -1,577 4,294 -85 110,123 9,088	11,857 1,719 18,906 5,479 110,123 9,088	-1,034 -2,894 4,576 3,177 110,493 9,155	6,984 -7,275 19,467 5,391 	10,958 -6,950 20,700 4,216
Monetary & Financial • Policy Rate (%) • Lending Rate (%) • M2 Growth (%) • Lending Growth (%) • Stock Price Index	6,50 13.3 15.4 22.4 3,704	6.75 13.2 16.1 23.4 3,679	6.75 13.1 13.1 22.9 4,131	6.75 13.0 16.2 25.3 3.549	6,00 12.9 16.4 25.3 3.822	6,00 12.9 16.4 25.3 3.822	5.75 12.5 18.8 26.3 4.122	 	

Indonesia: selected macroeconomic indicators, 2010-13

Indonesia's strong economic performance has been underpinned by macroeconomic and financial system stability. CPI inflation has declined from 6.9% at the end of 2010 to 3.8% in 2011, and is forecast to fall within its target range of $4.5\pm1\%$ in 2012 and 2013. Core inflation has been kept below 4.5%, with a contribution to lower inflation from the government's abandonment of a planned increase in energy prices. The upward pressure on food inflation stemming from high global commodity prices has eased, especially since the second half of 2011.

Nonetheless, high global commodity prices have complicated the monetary policy response. In particular, they have put upward pressure on inflation stemming from the volatile food prices, which rose steeply between mid-2010 and mid-2011 (see charts below). For Indonesia, the increase in rice prices was particularly significant, as this cereal is a major component in the basket. But other staple foods such as cooking oil, onions, and chili peppers also saw price increases. Food price inflation drove up overall inflation expectations but the impact of global commodity prices on inflation, and especially on core inflation, was somewhat mitigated by Bank Indonesia's policy of allowing the rupiah to appreciate on the back of large capital inflows, as a means of dampening imported inflation.

Graph 1 Inflation developments



2.97 -4 -10 TTTTFF 2007 20.08 2009 2010 2011 2012

Rice & VF Inflation

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Volatile global commodity prices and capital flows have also affected the performance of Indonesia's external sector (Graph 2). As a commodity exporter, Indonesia benefited from both strong external demand and high commodity prices during the period up to mid-2011. As a result, the country enjoyed a sizeable balance of payments surplus, thanks to surpluses in both the current account and the capital account during this period. From then onwards, the current account posted diminishing surpluses, and fell into deficit from Q4 2011. Deficits have since continued to widen on falling exports as well as strong domestic demand for imports.





With the declining current account performance, the balance of payments and its implications for the exchange rate depend on the capital account surplus. Thus, capital flows are highly significant for the design of macroeconomic and monetary policy responses. Despite the global crisis, FDI inflows to Indonesia continue to be strong, driven by solid domestic demand for investment in mining, transport and communications, manufacturing and trade. FDI amounted to US\$19 billion in 2011 and an estimated US\$20 billion in 2012. But portfolio inflows have been volatile, driven by risk perceptions in the global financial markets. They reached US\$10.3 billion in the first half of 2011, but outflows of US\$4.9 billion were seen in the second half of 2011. Inflows of US\$3.2 billion followed in Q1 2012 and funds have since continued to flow in strongly thanks to the strength of Indonesia's domestic economy.

These balance of payments dynamics, including the volatile capital flows, have strongly affected the exchange rate over the past three years (Graph 3). Thus, the rupiah appreciated strongly up to August 2011, reflecting the surpluses in both the current and capital accounts, but it has come under pressure since then owing to the capital flow reversals driven by the worsening of the European crisis. In this regard, Bank Indonesia continues to adopt a flexible policy with the aim of stabilising the exchange rate at its fundamental level. This is nonetheless a daunting challenge in such a volatile global environment. FX interventions supported by ample FX reserves are one option open to Bank Indonesia but this instrument needs to be complemented by the management of capital flows, especially the short-term and volatile capital flows that often cause the exchange rate to overshoot.

Volatile capital flows, together with the current account deficit, have also affected the functioning of the monetary policy transmission mechanism, particularly via the impact on domestic excess liquidity in the financial markets. Hence, interest rate policy alone would not be sufficient for effective monetary policy transmission. Although the deposit rate moves in line with the Bank Indonesia (policy) rate, the lending rate is less sensitive owing to, eg, high overhead costs, risk premia and interest rate margins in the banking system (Graph 4). At the same time, growth in the monetary aggregates and bank lending is strong. Bank Indonesia believes it is important to complement interest rate policy with macroprudential measures that aim at managing excess liquidity as well as credit growth.





Graph 4 Monetary and credit developments



Monetary and macroprudential policy mix

The discussions in the previous section point to the complexity of monetary policymaking in a small open economy under the conditions of volatile global commodity prices and capital flows. In such circumstances, interest rate policy alone is ineffective as an instrument for meeting the price stability objective, to say nothing of preserving overall macroeconomic and financial system stability. A mix of monetary and macroprudential policy measures is required to deal with the multiple challenges of "the impossible trinity" and the preservation of monetary and financial system stability. Even though interest rate policy is still the primary instrument, monetary policy needs to work through all available transmission channels, including interest rates, exchange rates, money and credit, and expectations.

These considerations form the basis for the monetary policy framework adopted in Indonesia since mid-2010. Starting from the inflation targeting framework, we have added macroprudential measures to manage capital flows and safeguard financial system stability. We call this an enhanced inflation targeting framework based on a monetary and macroprudential policy mix (Graph 5). The policy mix consists of five instruments: first, the interest rate policy aims to achieve price stability, taking into account the overall macroeconomic outlook and financial system stability. The policy rate is targeted on anticipated inflation two years ahead, as commonly seen under an inflation targeting regime. Second, the exchange rate policy is consistent with the overall macroeconomic outlook and has the aim of smoothing out excessive volatility. Thus, the long-term objective for the exchange rate path is adjusted to the inflation and growth forecasts, and hence the policy rate. At the same time, the short-term goal is to smooth out exchange rate volatility along the chosen path. Third, capital flows are managed with an emphasis on short-term and speculative capital flows, and on mitigating the risks of sudden reversals in capital flows. The aim is to support the exchange rate policy against the risk of overshooting and to guide its movement along a path that is appropriate for the overall macroeconomic outlook. Fourth, macroprudential policies for managing domestic liquidity, money and credit are consistent with overall outlook for the economy and financial stability. Such policies are an important support for interest rate policy, as monetary and credit movements tend to be procyclical and thus less sensitive to interest rate changes. And fifth, monetary policy communication is required to manage expectations in an uncertain environment. This is important not only from a transparency viewpoint but, more importantly, as a way of building forward-looking expectations and thus strengthening the monetary policy response.

Our experience over the past three years shows that this new framework has been effective. The following three episodes illustrate the Indonesian monetary policy challenges and the corresponding monetary and macroprudential policy responses. The first period corresponds to the period from 2010 to August 2011. During this period, we faced three policy challenges: (i) strong growth driven by both external and domestic demand; (ii) rising inflation pressure from both high global commodity prices and domestic disruptions in food supplies; and (iii) large capital inflows from both FDI and portfolio investment. Under such circumstances, it would not have been effective to rely solely on an interest rate response to contain inflation pressures. We therefore complemented the interest rate policy with an exchange rate policy and macroprudential measures to manage capital flows and domestic liquidity. Table 2 gives details of policy instruments, policy measures, and the rationale for adopting the policy mix.





Tabl	e 2
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Policy measures, 2010 to August 2011

Instrument	Policy	Rationale
1. Interest rate policy	• BI Rate increase by 25 bps to 6.75% in February 2011.	 To signal monetary tightening to mitigate increasing inflation pressures from food prices and inflation expectation.
2. Exchange rate policy	• Rupiah appreciation: 14.9% in 2009, 4.6% in 2010, 5.4% to August 2011.	 To stabilize exchange rate and help mitigate imported inflation from high global commodity prices
3. Capital flows management	• Apply holding period on BI certificates, from one month since June 2010 and to six month since May 2011.	 To "put sand in the wheels" on short-term and speculative capital inflows, and mitigate risks of sudden reversals.
	• Reinstate limits on short-term offshore borrowing of the banks to a maximum of 30% of capital, January 2011	 To limit FX exposure of the banking system and short-term/volatile capital inflows.
4. Macroprudential measures	• Increase Rupiah reserve requirement from 5% to 8%, effective Nov 2010.	• To absorb domestic liquidity and enhance liquidity management of the banks, without exerting negative impact on lendings that are needed to stimulate growth.

The second period corresponds to the period from September 2011 to February 2012. During this period, we faced the following three policy challenges: (i) inflation was under control at 3.8% at end-2011, below the lower bound of the 5%±1% inflation target; (ii) a downward risk of global economic slowdown necessitated a countercyclical policy response to maintain domestic growth momentum in Indonesia; and (iii) large capital flow reversals from the worsening European crisis put pressure on the exchange rate and liquidity in both the FX and rupiah money markets. Again, an interest rate response alone would not have been effective under such circumstances. Thus, during this period we adopted a policy mix by setting the interest rate on a countercyclical basis with the aim of stimulating growth (without jeopardising the inflation target), while exchange rate pressures and capital reversals were dealt with by FX interventions complemented by central bank purchases of government bonds from the secondary market. Table 3 gives details of policy instruments, policy measures, and the rationale for adopting the policy mix.

Table 3

Instrument	Policy	Rationale		
1. Interest rate policy	• BI Rate cuts three times by a total of 100 bps to 5.75%.	• With a low inflation, the interest rate cuts are for counter-cyclical response to mitigate the negative impacts of global economic slowdown to Indonesian economic growth.		
2. Exchange rate policy	• FX Intervention to supply the excess demand from capital reversals .	 To stabilize exchange rate consistent with macroeconomic outlook and smooth out volatility in tandem with exchange rate movements in the region 		
	 Purchase of government bonds from the secondary market 	 To help stabilizing the exchange rate and to manage liquidity in the Rupiah money market. 		

Policy measures, September 2011 to February 2012

The third period extends from March 2012 to the present. In this period, we have again faced three policy challenges, namely: (i) rising inflation expectations from the planned (and then cancelled) increase in domestic fuel prices (March and April); (ii) large capital outflows have continued as the deepening European crisis put pressure on exchange rate and liquidity in both the FX and rupiah money markets; and (iii) lending growth to certain sectors (automotive, property and credit cards) is too high, even though overall lending growth is still in line with the macroeconomic forecast. Thus, we have complemented interest rate and exchange rate policy with macroprudential measures to manage lending growth within certain sectors. Table 4 gives details of policy instruments, policy measures, and the rationale for adopting the policy mix.

Table 4

Policy measures, March 2012 to present

Instrument	Policy	Rationale
1. Interest rate policy	• BI Rate maintained at 5.75%.	• Deemed consistent with the inflation targets of 4.5%±1% for 2012 and 2013, as well as growth forecast of 6.3-6.7% in 2012 and 6.4-6.8% in 2013.
2. Exchange rate policy	 Continue FX Intervention and purchase of government bonds from the secondary market 	 To stabilize exchange rate and to manage liquidity in the Rupiah money market.
3. Macroprudential policy	 Introduce LTV for lending to automotive and property, tighten standards for credit cards 	• To reduce excessive lending to these sectors while maintain the overall lending growth to be consistent with macroeconomic outlook.

Final remarks

The economic outlook for 2012 and 2013 is robust. However, policymakers face a complex challenge in managing strong domestic demand in an uncertain global economic and financial environment. The key question is how to balance price stability for sustainable growth while maintaining external and financial system stability in the face of highly volatile capital flows, exchange rates, and global commodity prices. The monetary and macroprudential policy mix applied by Bank Indonesia since 2010 has struck an effective balance between coping with the impossible trinity and safeguarding monetary and financial system stability. The policy mix is not always easy to design and implement, and it needs to be appropriately and continuously calibrated according to the evolving dynamics of the global and domestic economic environment. Communicating the policy mix is also a challenge. We need to be clear at all times which instrument is directed to which specific objective, and we must also avoid substituting the interest rate policy for other instruments in the mix. Even when we are successful in these aims, there is always a risk that the market may perceive matters differently, given that the monetary policy response is generally (and often only) associated with interest rate adjustments.