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## **Indonesia in Comparative Perspective**

# **INDIA AND INDONESIA: LESSONS LEARNED FROM THE 2013 TAPER TANTRUM**

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In May 2013, the US Federal Reserve began to talk about the possibility of ending its program of quantitative easing. This tapering talk had a significant impact on the main emerging-market countries – Brazil, India, Indonesia, South Africa, and Turkey (the ‘Fragile Five’) – whose exchange rates weakened dramatically and whose stock and bond markets were hit hard. This series of events is now known as the ‘taper tantrum’. In response to the tantrum, these five countries each took a series of macroeconomic policy measures to relieve pressure in their financial markets. Indonesia and India handled the problem in the shortest time (about seven months) and achieved macroeconomic stabilisation. This article examines how Indonesia and India managed to

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remain relatively unscathed by the taper tantrum and escape the Fragile Five. It looks at which policies the two countries adopted at the time, and why they chose them, as well as why India's economy performed better than Indonesia's after the tantrum.

**Keywords:** *quantitative easing, asset purchases, emerging markets, Fragile Five*

**JEL classification:** E52, E58, E65, O53, O57

## **INTRODUCTION**

The years 2008–14 were an important and interesting period for macroeconomic policy in both advanced- and emerging-market countries (EMCs). In the United States, a series of economic policies were issued in an effort to overcome the 2008 global financial crisis. The most important was the Federal Reserve's unprecedented monetary policy of large-scale asset purchases, better known as quantitative easing (QE). This policy resulted in capital outflows, mostly of portfolio investment, to EMCs, where low interest rate in the United States encouraged borrowing and induced expenditure in EMCs. As a result, they stimulated economic growth, increased financial-sector activity, and caused exchange rates to appreciate. Together with the huge demand in China for commodity exports from Indonesia, QE contributed to a commodity boom (Saghalian and Reed 2015; Frankel 2006). EMCs soon yielded high investment returns, which boosted investor optimism and attracted further portfolio investment (Saghalian and Reed 2015; Sahay et al. 2014). But these circumstances were short-lived. In May 2013, as the US economy improved, the Fed began to talk about the possibility of ending QE, or tapering its bond-buying program. This tapering talk had a significant impact on several EMCs, including Indonesia and India. It resulted in capital outflows from EMCs to advanced countries, particularly the United States. In June 2013, exchange rates weakened and stock and bond markets in EMCs were hit hard. This series of events is now known as the 'taper tantrum' (TT) (see, for example, *Wall Street Journal*, 1 Dec. 2016). Although the TT did not lead to a crisis, it made policymakers and financial companies worry that one was imminent.

Economic theory provides guidance on policy options for managing external imbalances and the volatility of capital flows, but it is less helpful on how such options should be implemented—especially in EMCs, where institutions and macroeconomic histories are often less established than in advanced-market countries (Hill 2013). India, for example, has in recent years been able to run much larger fiscal and current-account deficits than Indonesia. India avoided the worst of the 1997–98 Asian financial crisis—unlike Indonesia—so its financial market has been less jittery than Indonesia’s (possibly also because India’s capital account is less open than Indonesia’s and does not allow capital to exit so quickly). The range of experiences with QE and the TT reinforces the need for a case study of how countries react to external imbalances and the volatility of capital flows. I focus here on India and Indonesia because both are considered to have successfully managed the TT, despite their macroeconomic differences. This study will help in understanding how the Fed’s QE policy and the large current-account deficits of EMCs combined to create macroeconomic instability. The lessons learned by India and Indonesia during the TT could be relevant for EMCs as they face the normalisation of US monetary policy and, particularly for Indonesia, the end of the commodity super-cycle. They may also be of interest to EMC policymakers preparing to counter the expected lift-off in US interest rates (*New York Times*, 15 Mar. 2017).<sup>1</sup>

The IMF (2014) and Morgan Stanley (2013) have shown that the TT had different impacts on economic growth, exchange rates, and stock- and bond-market activity in different countries. One group of countries—Brazil, India, Indonesia, South Africa, and Turkey—experienced the worst effects and was subsequently labelled the ‘Fragile Five’ by Morgan Stanley. Facing pressures in their financial markets, these countries each undertook different combinations of macroeconomic policies. Of the five, Indonesia and India handled the problem in the shortest time (about seven months) and achieved macroeconomic stabilisation, as indicated by a decrease in their current-account deficits and the stabilisation of their financial markets. Capital inflows returned

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<sup>1</sup> In November 2016, the yield of 10-year Treasury notes increased significantly, suggesting that markets were expecting rates to rise (MarketWatch.com, 18 Nov. 2016). In addition, the Fed raised its benchmark rate in March 2017 and has signalled that there are more raises to come (CNN Money, 15 Mar. 2017).

to Indonesia in early 2014. The IMF (2015, 5) stated that Indonesia handled the TT well:

*Since mid 2013, Indonesia has taken significant steps to strengthen policy and reserve buffers . . . . Aided by enhanced policy credibility and global push factors, external inflows to Indonesia have been supportive [over] the past 18 months. Equity prices rebounded in the first half of 2014, including relative to most emerging-market economies peers. Government bond yields have stabilized, with the fixed-income market buoyed by strong foreign inflows, which has led to an increase in reserves and helped keep the rupiah relatively stable against the US dollar.*

The international media echoed this response (*Economist*, 20 Feb. 2014; CNBC.com, 6 Feb. 2014), as did the World Bank (2014). As for India, the IMF (2014b, 4) stated:

*Over the past four months, a combination of improving external conditions and domestic policy efforts have calmed markets. Externally, global financial markets improved as the US Fed decided not to advance the reduction in its monthly asset purchases. Domestically, the central bank increased its headline policy rate and intervened in [foreign exchange] markets by offering USD swaps to oil companies and to banks, with the latter leading to sizeable nonresident Indian (NRI) deposit inflows . . . . On the fiscal front, measures were implemented to continue to raise diesel prices, to shrink the financial losses of state electricity boards, and to contain central government spending. As external pressures eased, the government was able to unwind the earlier steps taken to tighten liquidity and partly reverse restrictions on capital outflows.*

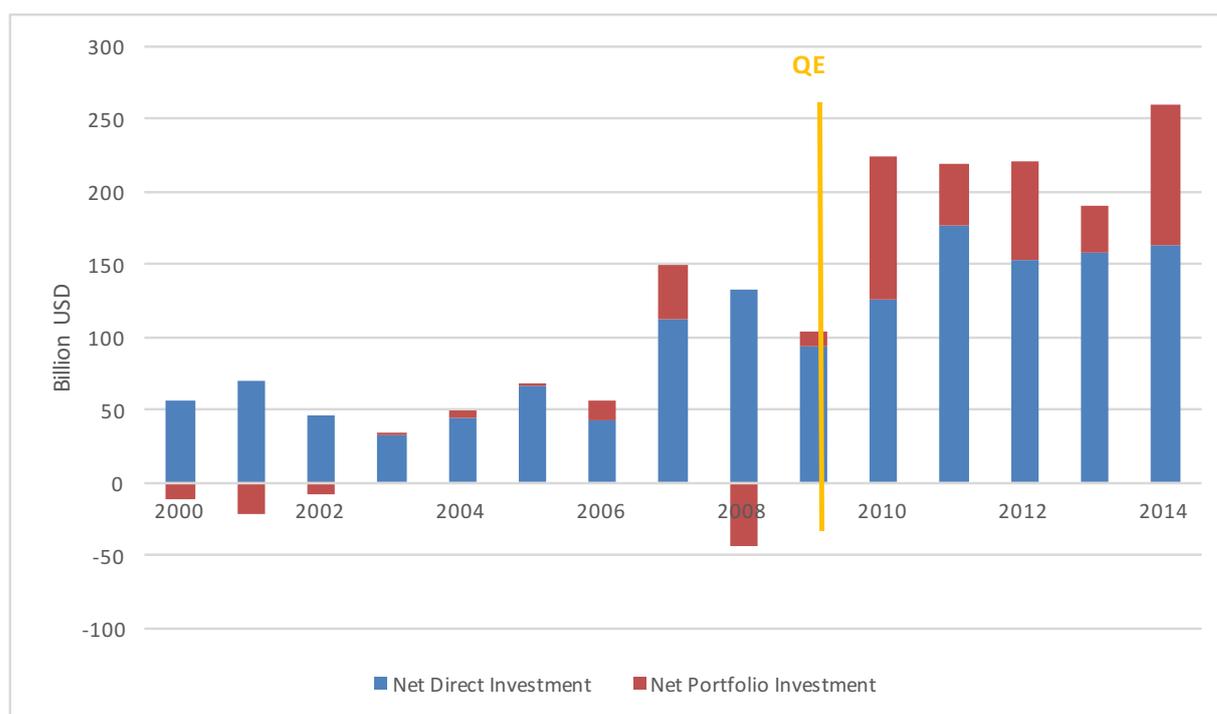
As mentioned above, this study examines how Indonesia and India, unlike the other members of the Fragile Five, emerged from the TT relatively unscathed. What policies did they adopt at the time, and why were those policies chosen? In addition, why did India perform better than Indonesia after the TT in terms of economic growth, current-account deficits, and financial-sector stability? This article will focus on the relevant differences and similarities between Indonesia and India. Both countries have similar levels of infrastructure quality, poverty, bureaucratic hurdles, and so on. On the other hand, they also have fundamental differences—particularly in their economic structures.

## **LITERATURE REVIEW**

As QE drove capital from the United States to EMCs (figure 1), it led to exchange-rate appreciations and increased financial-market activity in the destination countries.

Sahay et al. (2014) show that most of this capital flowed into China as foreign direct investment (FDI). Yet

**Figure 1:** Capital inflows to the top ten emerging markets recipients, 2000-2014



Note: Brazil, India, Turkey, Mexico, Poland, Indonesia, Peru, Colombia, South Africa.  
Source: Economist Intelligence Unit

for other EMCs in Asia, capital inflows were dominated by portfolio investment. QE was accompanied by increases in commodity prices (Saghaian and Reed 2015). Frankel (2006) states that expansive monetary policy contributed to, but was not the only reason for, these increases. Kozicki, Santor, and Suchanek (2015), on the other hand, argue that QE did not affect commodity prices directly; they suggest that QE instead had a spillover effect on commodity-producing countries and in turn affected exchange rates and stock-markets.

Sahay et al. (2014) show that half of all global capital flows entered EMCs during 2009–12, with 90% of these flows to EMCs concentrated in just eight countries—

including India and Indonesia.<sup>2</sup> The impact was unsustainable, however, as both current account and capital account surpluses in EMC economies were mainly due to external effects—like capital inflow—and the commodity boom (Rodrik 2015). Further, Sahay et al. (2014) demonstrate that Brazil, China, Mexico, India, Indonesia, and Turkey received more capital inflows than they could absorb, which created an overflow.

The potential vulnerability arising from capital inflows has been thoroughly discussed in the literature on macroeconomic crises, as these types of situations often recur (see, for example, Kaminsky, Reinhart, and Veigh 2003; Reinhart and Rogoff 2009). Calvo, Leiderman, and Reinhart (1992, 1), in their study of crises in Latin America, found that

*falling interest rates, a continuing recession, and balance of payments developments in the United States, along with developments in other industrialized countries, have encouraged investors to shift their resources to Latin America to take advantage of renewed investment opportunities and the increased solvency [there].*

If we were simply to change ‘Latin America’ to ‘EMCs’ in the quote above, it could be describing the QE phenomenon. A shock in an initial crisis country—the United States, for QE—risks creating capital outflows, or a ‘surprise crisis’ (Kaminsky, Reinhart, and Veigh 2003). The situation is made worse when common creditors experience a shock from such a crisis and take anticipatory steps, reviewing or scaling back their portfolios in affected countries. Global fund managers do not necessarily have access to complete information about every country in which they invest. This forces them to use quantitative data, like the current-account deficit, as proxies. When these indicators display worrying signs, fund managers will remove the country in question from their portfolio, especially if there is a surprise factor. Conversely, if the crisis can be anticipated or if the country information is complete, investors have time to adjust and thereby to minimise the impact (Kaminsky and Reinhart 2003). We can consider the tapering talk by then Federal Reserve chair Ben Bernanke in 2013 to have created a ‘surprise crisis’, as borne out by data on the Fragile Five’s sharply increasing current-account deficits.

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<sup>2</sup> Brazil, China, India, Indonesia, Mexico, Peru, Poland, and Turkey.

The TT has been a hot topic in the recent literature on macroeconomic policy. Several studies have tried to understand the root causes of the situation in which the Fragile Five found themselves (Eichengreen and Gupta 2014; Aizenman, Binici, and Hutchison 2014; Sahay et al. 2014; Ahmed, Coulibaly, and Zlate 2015). Eichengreen and Gupta, in particular, show that the impact of the TT was greater in countries that had experienced steep currency appreciations during QE and had allowed their current-account deficits to increase. They also highlight that countries with relatively large financial markets felt a greater impact. In observing the extent of the TT's effects on different countries, Aizenman, Binici, and Hutchison emphasise the importance of fundamental economic factors, like , the size of each country's foreign reserves and external debt, its growth prospects and inflation rate, and whether it had a current-account deficit; Ahmed, Coulibaly, and Zlate, however, focus on the budget deficit and index vulnerability (although they acknowledge that the amount of private-capital inflow also influences later capital outflows).<sup>3</sup> A report from Morgan Stanley (2013) found that high inflation, high capital flows, and a current-account deficit—as well as low economic growth—were associated with an increase in vulnerability. The report showed that countries with these characteristics experienced pressure on their exchange rates and their stock and bond markets. It also stated that Morgan Stanley expected the Fragile Five to remain under pressure in the medium term.

Inflation, economic growth, foreign reserves, debt as a share of GDP, and the budget deficit as a share of GDP are not sufficient to explain the evolution of the Fragile Five (table 1).

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<sup>3</sup> In this case the index consisted of six variables: the current account as a share of GDP; foreign-exchange reserves as a share of GDP; short-term external debt as a share of foreign-exchange reserves; gross government debt as a share of GDP; the average annual inflation over the past three years; and any increase in the amount of bank credit given to the private sector, measured as the change in the ratio of bank credit to GDP over prior years.

Table 1: GDP Growth, Current Account, Fiscal Deficit, Debt/GDP

Country	GDP Growth		CPI		CA Surplus or deficit/GDP		Fiscal Deficit/GDP	Govt Debt/GDP
	(% , yoy)		(% , yoy)		(% )		(%)	%
	2012	Mid 2013	2012	Mid 2013	2012	Mid 2013	2012	2012
Brazil	0.9	1.9	5.4	6.4	-2.4	-4.5	-2.5	35.2
Turkey	2.2	3	8.9	6.5	-6.1	-8.1	-3	36.2
India	5.1	4.8	7.5	5.8	-5.1	-3.8	-7	46.5
Indonesia	6.2	5.8	4.3	8.6	-2.7	-4.4	-1.8	23
South Africa	2.6	2	5.7	6.4	-6.3	-6.7	-5.2	43.2
China	7.8	7.5	2.6	2.6	2.3	2.3	-1.6	15.2
Korea	2	2.3	2.2	1.4	3.8	3.5	2.7	34.5
Mexico	3.9	1.5	4.1	3.5	-1	-1.7	-2.6	29.7
Thailand	6.5	2.6	3	3	-0.4	-0.7	-4.1	44
Malaysia	5.6	4.3	1.7	1.7	6.1	1.1	-4.5	53
Philippines	6.8	7.5	3.1	3.1	2.8	5.3	-2.4	52
Russia	3.4	1.2	1.2	6.5	3.7	5.1	0.3	12.6

Source: CEIC

Eichengreen and Gupta (2014) and Basu, Eichengreen, and Gupta (2014) best explain the circumstances in Indonesia and India. Through mid-2013, Indonesia had the second-highest GDP growth of all G20 countries, after China and followed by India. Whereas inflation and the budget deficit were relatively high in India before the TT, inflation in Indonesia was more or less under control and the country maintained its budget deficit at less than 3%. Indonesia's budget deficit did increase in 2012 owing to rising fuel subsidies, but it remained relatively low. India, Turkey, and Brazil also posted relatively high economic growth compared with other G20 members. India, South Africa, and Turkey had higher fiscal deficits than Indonesia or Brazil, but Brazil had higher foreign-exchange reserves than India, South Africa, Turkey, and Indonesia.

From these studies emerges a common view: an expanding current-account deficit was the primary criterion for a country's inclusion in Morgan Stanley's Fragile Five. A large current-account deficit is not necessarily a bad thing, as long it is financed by long-term and productive FDI like that in the export-oriented sector. A large current-account deficit may, however, increase a country's vulnerabilities if the deficit is financed by portfolio investment, as was the case among the Fragile Five. Such vulnerabilities may make portfolio investors nervous and induce them to withdraw their investments from respective countries. Edwards (2002) points out that a large current-account deficit should be a concern, although he acknowledges that not every large deficit will induce a crisis. Table 1 shows the similarities in the current-account deficits of the Fragile Five.

The situation worsened after Bernanke's tapering talk in 2013. The combination of these two factors eventually created capital outflows. Bernanke's announcement led to asset repricing, especially because capital inflows had been dominated by portfolio investment.

## **ECONOMIC STRUCTURES, QUANTITATIVE EASING, AND CAPITAL INFLOWS**

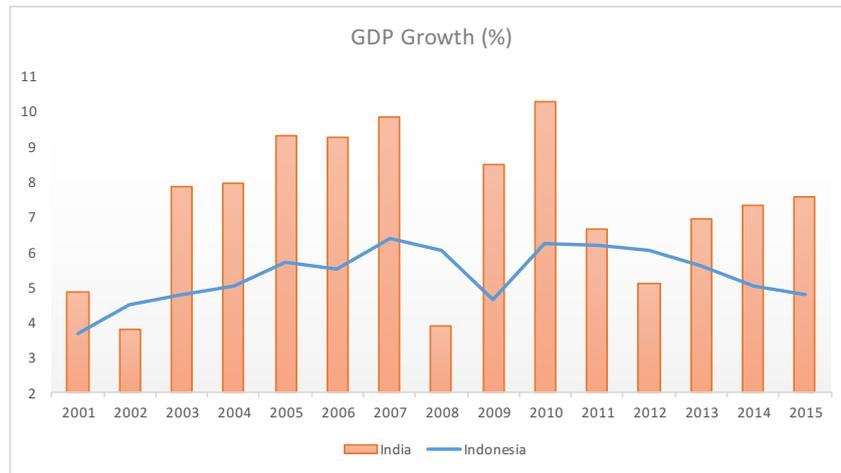
### **Economic Structures**

Nehru (2013) highlights several important differences between the economies of Indonesia and India. India's per-capita income is half that of Indonesia, although it stood at more than three-quarters in 2005. In terms of politics, Indonesia's path to democracy began in 1998, with the fall of Soeharto, while India's democratic traditions began with its independence, in 1947. One similarity is that, in addition to their large populations, both countries have an opportunity to reap a demographic dividend, with relatively young populations that hold great potential for their respective countries' futures. While both Indonesia and India rank in the top three for growth in the G20, they also face a myriad of problems related to poverty and, in particular, inefficient bureaucracy and poor-quality infrastructure. Although both countries have seen their poverty rates decrease, the numbers of poor people remain high. India has a federal government, but public finances are largely centralised, whereas Indonesia (despite being a unitary state) has public finances that are now largely decentralised. Both countries also face difficulties related to the quality of human capital, as their education systems are still developing. But India does have several world-class educational institutes.

Indonesia's and India's economic structures also warrant examination. Nehru (2013) argues that while Indonesia's export strength lies in commodities and processed raw materials rather than in manufacturing, India's exports are concentrated in the service sector, particularly in software development and business-process outsourcing. This implies that an increase in commodity or energy prices will have a positive impact on Indonesia, while the same increases would put pressure on India's economy. In short, India is like Indonesia without its resources. As such, it is worthwhile to compare economic growth in the two countries.

Both India and Indonesia have posted continuous economic growth since 2001 (figure 2). India achieved an average growth rate of 7.3% during 2001–15, while Indonesia averaged 5.3%. This positive growth made India and Indonesia magnets for investment (Richter Hume 2008; Koeberle 2011).

Figure 2: India and Indonesia: GDP Growth (%)



Source: CEIC

Economic growth in India surpassed that of Indonesia during 2003–8, owing to higher levels of investment and exports. Panagariya (2008) attributes this to a sharp increase in India's export of goods and services. Foreign investment also rose significantly in this period, although it was dominated by portfolio investment. Further, India's large population contributed to its economic growth, as reflected in the rise in domestic consumption. Still, the biggest factors in India's economic growth were investment and exports. From 2003 to 2015,

- exports increased from \$84.7 billion to \$428.6 billion,
- service exports rose from \$23.9 billion to \$156.2 billion,
- total FDI went from \$5 billion to \$45.1 billion, and
- the share of exports/GDP increased from 14.7% to 20%.

These figures show that India's economy was increasingly integrated with the global economy, having been stimulated by investment and exports, in which the export of services played an important role.

As in India, economic growth in Indonesia increased during 2003–12, particularly since 2010 (with the exception of 2008–9, owing to the global financial crisis). The increase in growth primarily resulted from domestic consumption and investment. In India, growth was stimulated by an increase in the export of manufacturing services, while in Indonesia it was due to the boom in commodities. Indonesia also attracted FDI that sought to take advantage of the country's natural resources and vast domestic market.

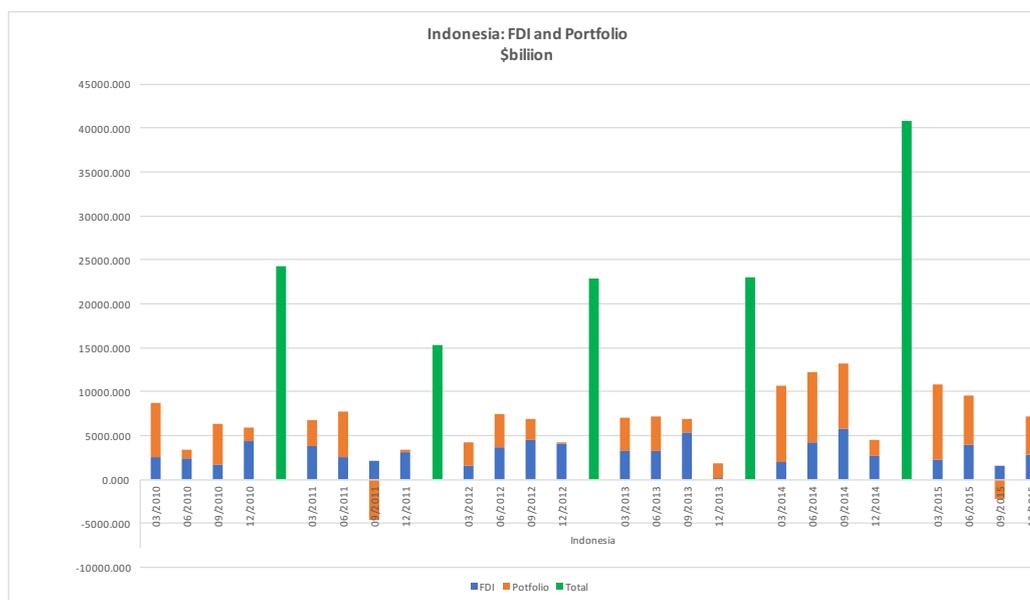
This significant increase in investment was good news. One of the main concerns of the Indonesian government at the time was the limited resource-seeking investment flowing to export-oriented sectors. There is an inherent risk of currency mismatch in market-seeking FDI, as revenue obtained in rupiah is repatriated in US dollars. Further, natural-resource-seeking FDI is highly vulnerable to commodity super-cycles (*Jakarta Post*, 5 Nov. 2012). On the other hand, growth in non-oil manufacturing exports slowed and the share of manufacturing in GDP decreased.

### **QE and Capital Inflows**

Indonesia's total foreign investment increased during 2010–15, with the exception of 2011. Figure 3 shows that portfolio investment played a significant role in Indonesian foreign investment (except in 2011). Both FDI and portfolio investment decreased in the second quarter of 2013 because of TT, before they rebounded again in the first quarter of 2014.

FDI inflows tended to focus on Indonesia's domestic market and natural resources. FDI and portfolio investment boosted the capital stock and stimulated Indonesia's economic growth.

Figure 3: Indonesia: FDI and Portfolio



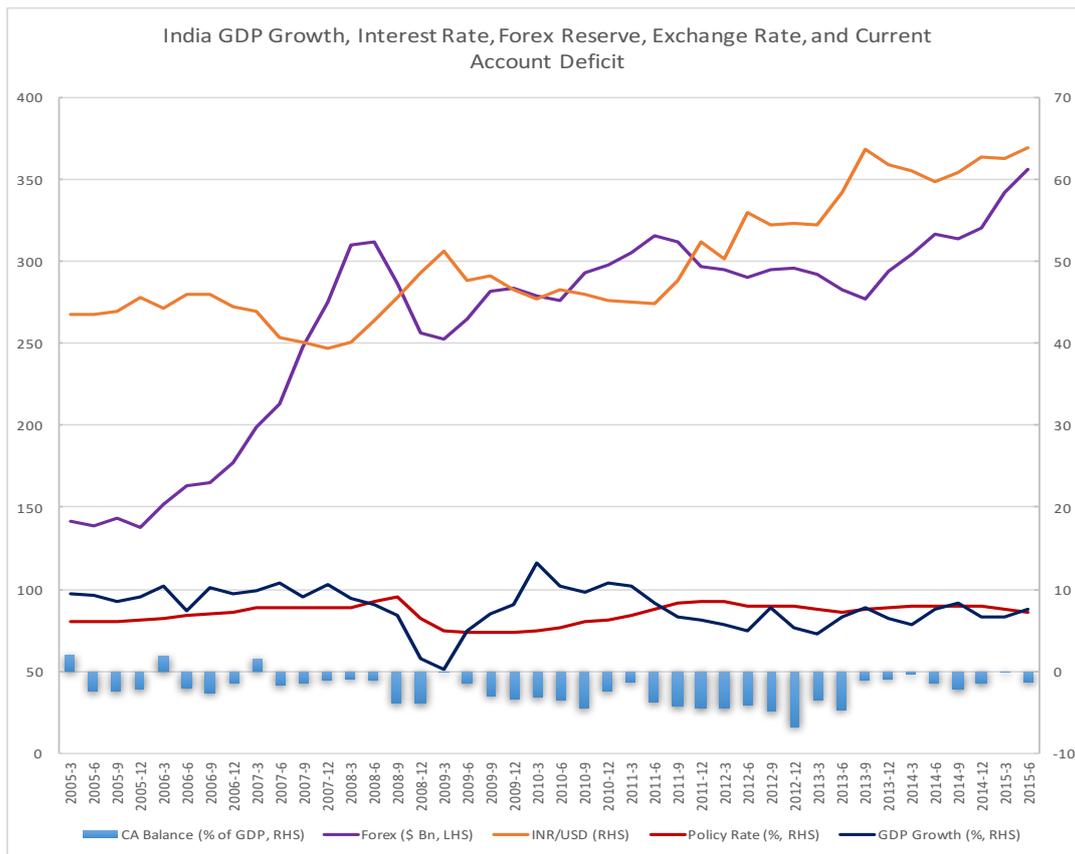
Source: CEIC

During 2010–12, the growth of gross fixed capital formation, exports, and domestic consumption caused the economy to grow by more than 6%. The Jakarta Composite Index also increased significantly, and, in the beginning of 2013, yields from government bonds fell to their lowest level since 2009. Papers As a result, the cost of funding decreased, and thus companies competed to access external funding sources.

The combination of capital inflows and the commodity boom which boosted economic growth in the short-term and caused an appreciation in the exchange rate, which led in turn to a decrease in Indonesia’s export competitiveness. In addition, increasing investment significantly encouraged imports (Basri, Rahardja, and Fitriana 2016). The situation was worsened by an increase in oil imports as a result of falling domestic oil production, the growing domestic demand for oil products, and fuel subsidies. The continuously rising fuel subsidies caused the budget deficit to swell. The combination of all of these factors led to a current-account deficit in the second quarter of 2011 (figure 4)

As for India, total foreign-investment inflows fluctuated but tended to increase during 2010–15. And, as in Indonesia, portfolio investment played a significant role in India’s foreign-

**Figure 4:** India: GDP Growth, Interest Rate, Forex Reserves, Exchange Rates and Current Account



Source: FRED economic data, Economist Intelligence Unit, CEIC

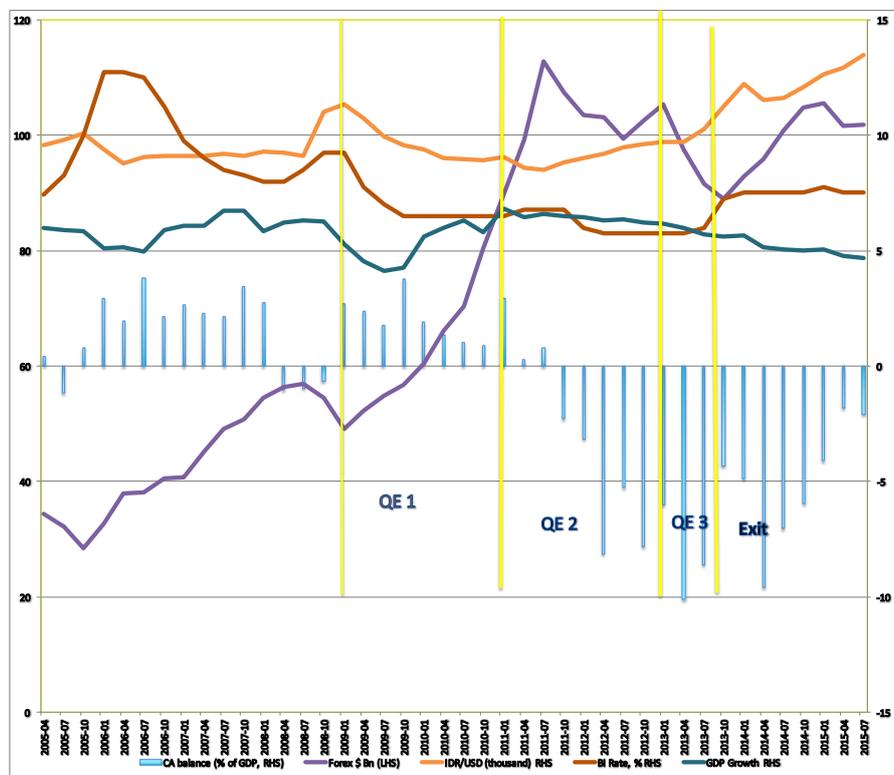
investment inflows. Portfolio investment decreased sharply after the second quarter of 2013, before it rebounded in the first quarter of 2014.

For India, the impact of the first instance of QE, which began in November 2008, induced capital inflows to India. The stock-market rose steeply during 2009–11 and the rupee appreciated. But the impact of the second instance of QE, which began in November 2010, was not very significant. Consistent with relatively low inflows of portfolio capital, the rupee’s exchange rate started to depreciate in 2011. It is important

to note the significant increase in India's current-account deficit in 2008, when India's budget deficit ballooned to 7.8% of GDP. India's current-account deficit continued to increase until 2013, after the TT (figure 4). Some blame the country's macroeconomic imbalances at the outset of the Fed's tapering talk. Several factors contributed to this economic uncertainty, including relatively high inflation, a large budget deficit, the slowdown of economic growth, and a high current-account deficit (due in part to an increase in gold imports). The increase in the current-account deficit was also driven by the appreciation of the real exchange rate owing to capital inflows. (Basu, Eichengreen, and Gupta 2014).

Although the Fed continued its QE policy during 2010–12, the rupee and the rupiah began to depreciate. The main reason was that the current-account deficits of Indonesia began to increase in 2011 and for India began to widen in 2008 and peaked in 2011 (figures 4 and 5).. Economic growth in Indonesia increased sharply during 2009–12, but the reverse was true for India (figure 4).

**Figure 5:** Indonesia GDP Growth, Interest Rate, Forex Reserves, Exchange Rates and Current Account



Source: FRED economic data, Economist Intelligence Unit, Bank Indonesia

In this context, the responses of the countries' central banks—the Reserve Bank of India (RBI) and Bank Indonesia (BI)—deserve analysis. Instead of raising interest rates to slow economic growth and reduce the current-account deficit, BI lowered rates and used its foreign-exchange reserves to defend the rupiah. As a result, the current-account deficit continued to rise, the rupiah weakened, and foreign-exchange reserves fell (figure 5). This was exacerbated by the government's inaction on reducing energy subsidies, and thus the budget deficit continued to rise.

Unlike BI, the RBI increased interest rates, starting in 2010, to handle the sharp rise in inflation. The increase in inflation was due primarily to increases in food prices as a result of sharp rises in commodity prices related to soaring oil prices in 2008 (IMF 2011). India's economic growth subsequently slowed, and an increase in the current-account deficit triggered capital outflows.

### **TAPER TANTRUM**

In May 2013, Bernanke began to allude to the possibility of the QE policy ending as the Fed started to taper its securities purchases. This became clearer when he testified in front of Congress on 22 May 2013. His announcements had a direct impact on financial markets in EMCs, where stock-market indicators decreased and exchange rates depreciated. Aizenman, Binici, and Hutchison (2015) show that the impact of Bernanke's announcement was more greatly felt in EMCs with current-account surpluses, high foreign reserves, and low debt. But one month after the announcement, the impact was cumulatively more influential on stock prices and exchange rates in 'fragile' nations. The same effect was felt in Indonesia and India (Basu, Eichengreen, and Gupta 2014). Both the rupiah and the rupee exchange rates began to depreciate and there was erosion in the stock and bond markets (figures 6 and 7).

As for Indonesia, the situation was exacerbated when BI announced that the current-account deficit had reached \$9.8 billion, or 4.4% of GDP in August 17, 2013. Portfolio investors took the news badly and the Indonesian financial market went into shock: the rupiah plummeted, the stock-market index decreased, and government bond yields and credit-default swaps soared. In short, a degree of panic unfolded.

## POLICY RESPONSES AND STABILISATION

India and Indonesia adopted similar policies on handling the TT, namely a combination of expenditure switching, via the exchange rate, and expenditure reducing, via fiscal and

**Figure 6: India and Indonesia: Stock Market Index (Daily, 2 Jan 2013 = 100)**

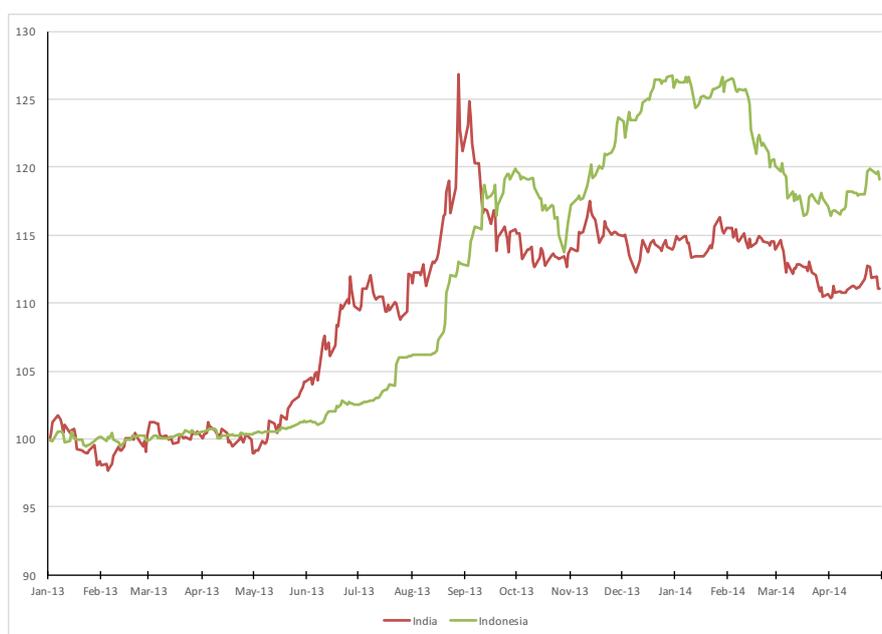


monetary tightening. According to the Mundell–Fleming framework (Caves, Jones, and Frankel 1993), reducing a current-account deficit should involve decreasing investment, most often through monetary tightening, and increasing savings, most often by decreasing the budget deficit by cutting fuel subsidies, in Indonesia, or food subsidies, in India. The current-account balance can also be improved through expenditure switching.

Intuitively, a depreciating exchange rate, all things being equal, will increase exports and decrease imports. We can therefore expect that depreciations in the exchange rate will improve the current-account balance. Another measure is to increase the budget surplus by increasing government revenue (taxes) or decreasing government spending. The mechanism behind the Mundell–Fleming framework is as follows: an increase in government spending (a budget deficit) will result in increased interest rates, attracting

capital inflows. Capital inflows will lead to an appreciation of the exchange rate, which then leads to a decrease in exports and an increase in imports. As a result, the current account weakens. On the other hand, an increase in interest rates will decrease investment and turn increase the current-account deficit.

**Figure 7 India and Indonesia:** Exchange Rates (Daily, 2 Jan 2013 = 100)



Source: FRED Economic Data

Indonesia and India engaged in fiscal and monetary tightening, and allowed their currencies to depreciate to a certain level by using macroprudential methods to protect against exchange-rate volatility. Basri (2016) shows that decreasing Indonesia's budget deficit also decreased the country's current-account deficit. He points to econometric proof that reducing or switching expenditure reduced the current-account deficit.<sup>4</sup>

India and Indonesia also introduced macroprudential policies, including imposing a lower loan-to-value ratio for second and third mortgages (in Indonesia) and tightening gold-lending rules and lowering the cap on capital inflows for investors and Indian residents (in India) (table 2). Furthermore, Indonesia introduced a tax incentive that worked as a reverse Tobin tax. Whereas a Tobin tax involves taxing short-term inflows

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<sup>4</sup> For more detail on how Indonesia managed the TT, see Basri's (2016) article.

to minimise the volatility of hot money, the Indonesian government's tax policy encouraged investors to reinvest their profits for the long-term.

Equally important as these policies was communication. During the TT, India's and Indonesia's governments and central banks calmed markets by provided updates to investors and the media. In Indonesia at the time, a view was circulating that the situation could worsen and become a repeat of the 1997–98 Asian financial crisis. But by communicating with investors and the media, BI and the government were able to explain how in the circumstances were different in 1998 and thus allay investors' fears. Indonesia's Financial Services Authority (OJK) also took several precautions, including relaxing various regulations, such as buyback permits in the stock-market and policies to support initial public offerings.<sup>5</sup>

The steps taken by India and Indonesia began to show results more quickly than expected. In Indonesia, in the third quarter of 2013, the current-account deficit decreased from \$9.8 billion, or 4.4% of GDP, to \$8.6 billion (4.0% of GDP). It decreased further in the fourth quarter, to \$4.3 billion (2.1% of GDP). For the whole of 2013, the current-account deficit was at 3.2% of GDP, falling slightly to 3.0% in 2014.

As a consequence of these policy, economic growth slowed to 5.8% in 2013, from 6.5% in 2011. Still, such economic growth was high compared to other countries. Indonesia had previously posted growth rates above 6.0%, so it had room to manoeuvre, allowing it to focus on macroeconomic stability over economic growth.

The exchange rate remained under pressure until the end of 2013, perhaps because the current-account deficit decreased (as BI announced in February 2014). Figure 8 shows that after the government scrapped the import quotas for beef and removed the duties on imported soybeans, the prices of both were brought under control. Starting in September 2013, food inflation decreased, in part because it coincided with the end of Idul Fitri festivities in August. Combined, the tightening of monetary policy and the lowering of trade barriers reduced inflation to 8.4% by the end of the year.

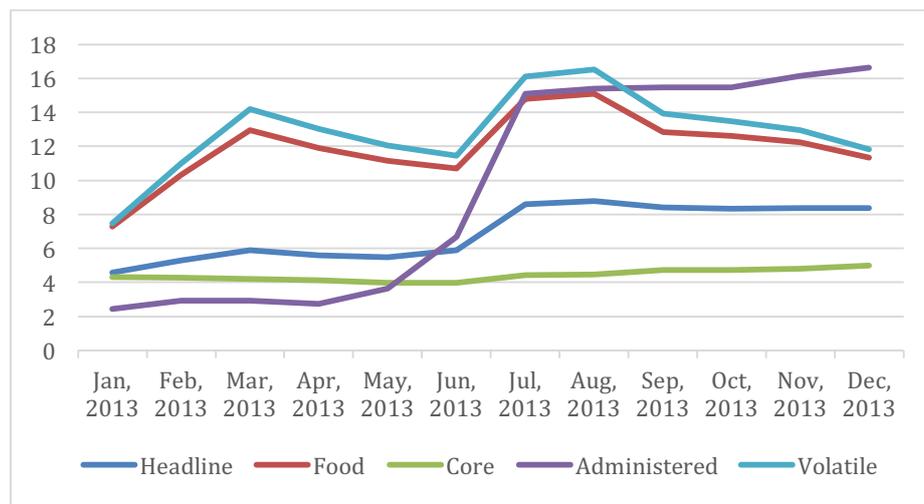
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<sup>5</sup> Although not discussed in detail here, the steps taken by the OJK helped to calm the stock-market.

Once BI allowed the rupiah's exchange rate to follow the market, intervening only to control volatility, the rupiah's spot rate and non-deliverable forward (NDF) rate converged. Because the Jakarta Interbank Dollar Rate (JISDOR) eventually reflected the market rate, a small gap opened between the spot and NDF rates. In early 2014 the Association of Banks in Singapore (press release, 18 Feb. 2014) erased its NDF rate and adopted the JISDOR as its reference for Rp/\$ exchange rates.<sup>6</sup>

Improvements in the current account had a positive impact on government bond rates. The 10-year local-government bond yield fell from 8.9% in September 2013 to around 7.8% in April 2014. The stock-market index also rallied, from 3,967 points in August 2013 to around 5,000 points in April 2014. And the rupiah's exchange rate appreciated in January 2014, stabilising at around Rp 11,250 per US dollar, down from Rp 12,235 (December 2013).

**Figure 8:** Indonesia: Inflation (year on year) (%), January–December 2013



Source: Indonesian Statistical Agency (BPS)

India's monetary authorities also stabilised the rupee, which subsequently appreciated, although it did not return to pre-TT levels. India's stock-market also improved significantly (figure 6). And, as discussed earlier, India's current-account deficit also decreased remarkably in 2013. India's stabilisation was followed by an increase in

economic growth, whereas Indonesia's policies of expenditure switching and expenditure reducing led to a decrease in economic growth.

### **INDIA AND INDONESIA: NOT SO BAD AFTER ALL**

Compared with their Fragile Five counterparts, India and Indonesia proved to be relatively capable of overcoming the TT (table 2). All the Fragile Five countries responded to the TT by tightening their monetary policies. Indonesia, Turkey, and South Africa started to increase rates in 2013, when few months after TT occurred. India and Brazil had even begun to raise the interest rate before 2013 due to increasing inflation (figure 9). As discussed earlier, the RBI raised its benchmark interest rate in 2010, owing to India's increasing inflation, but lowered it again in June 2012. Nevertheless, in response to the TT, the RBI again raised the rate in

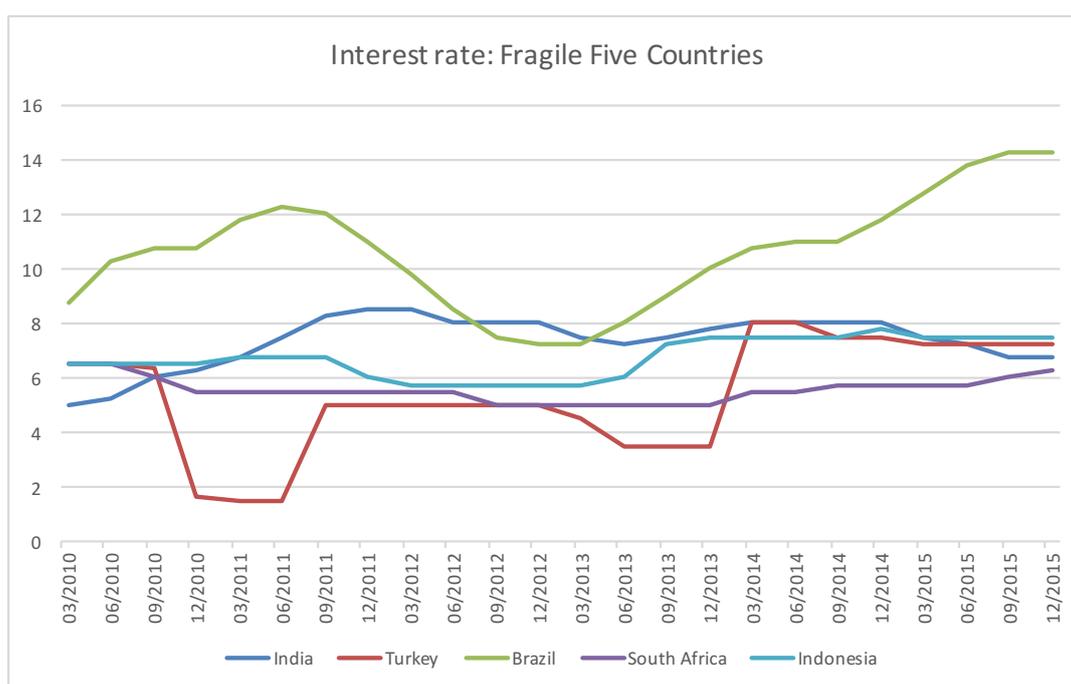
**Table 2** Summary of Policy Actions of The Fragile Five

<b>Country</b>	<b>Monetary Policy</b>	<b>Fiscal Policy</b>	<b>Macroprudential and Other</b>	<b>Results</b>
<b>Brazil</b>	Policy rate hikes and currency intervention program through currency swaps and repurchase agreements	Proposed \$18.5 bn fiscal tightening and a new primary surplus goal of 1.9% for 2014	IOF tax rate on foreign purchases of fixed-income debt instruments reduced to zero	Budget deficit continued to rise  Current account deficit remained a problem
<b>India</b>	Policy rate hikes, liquidity tightening measures, and currency intervention	Government departments asked to cut non-plan expenditure by 10%	Tighter rules on lending against gold, some gold imports restrictions, higher taxes on gold import, lower cap on capital inflows for investors and Indian residents; subsidy program for banks hedging nonresident	Succeeded in preventing a worsening in current account deficit  Budget deficit fell

			foreign currency deposits and bank capital, easing investment rules for foreigners and Indian expatriates	
<b>Indonesia</b>	Policy rate hikes, currency intervention, relaxed holding period of central bank securities, and tightening of the secondary reserve requirement	Curbed energy subsidies to reduce external and fiscal pressures	Lower loan-to-value ratios on second and third mortgages and lower loan-to-deposit ratio-linked reserve requirement	Succeeded in preventing a worsening in current account deficit  Budget deficit maintained at less than 3%
<b>Turkey</b>	Policy rate hike, and currency intervention		Introduction of credit card limits and changes to provisioning rates for uncollateralized consumer loans and on export and small and medium enterprise loans	Succeeded in preventing a worsening in current account deficit  Budget deficit slightly increased
<b>South Africa</b>	Policy rate hike			Both budget deficit and current account deficit improved in 2014, although remained relatively high in 2013

Source: Modified from Global Financial Stability Report, April 2014, Figure 1.26, p.38.

**Figure 9** Interest Rate Policy of the Fragile Five, 2010-2014



Source: CEIC

September 2013, after a new governor was appointed. As for Brazil, Banco Central do Brazil also raised its benchmark rate in 2010, but then lowered it in September 2011. As in other Fragile Five countries, the bank later raised its rate (in June 2013) in response to the TT. The central banks of Turkey and South Africa did not raise their rates until January 2014, when Turkey drastically increased its rate from 3.5% to 8.0% and South Africa from 5.0% to 5.5%. But Turkey then decreased its rate in April 2014, although inflation continued to rise, reaching 9.4% (Spiro 2014).<sup>7</sup>

Indonesia and India also engaged in fiscal tightening. The Indian government was committed to fiscal discipline, in line with its deficit targets for 2012–13, even though it was facing an economic slowdown (IMF 2014a). The same occurred in Indonesia. Both India and Indonesia thus chose stability over growth, adopting consistent public-expenditure reduction and expenditure-switching policies. Meanwhile, Brazil’s and Turkey’s current-account deficits continued to rise, while South Africa’s fell. Both Turkey and South Africa were facing serious problems related to their current-account deficits. Turkey’s deficit was immense (7.9% of GDP

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in 2013), and was paid for with capital inflows backed by short-term debt (IMF 2014c). In South Africa, the budget deficit and the current-account deficit improved in 2014, but the ratios of the current-account deficit to GDP ratio and the budget deficit to GDP remained relatively high (4.9% and 5.7%, respectively) in 2013.

In terms of exchange rates, both Indonesia and India chose to employ exchange-rate flexibility in an attempt to counter capital-flow volatility. All Fragile Five countries, except Brazil, succeeded in preventing a larger current-account deficit between 2013 and 2014. Consequently, Indonesia and India were relatively successful in overcoming the TT, largely because of their choosing stability over growth and by adopting expenditure-reducing and expenditure-switching policies.

### **COMMODITY PRICES AND ECONOMIC GROWTH**

Indonesia is a net producer of energy and commodities, like coal and palm oil, while India is a net consumer. The World Bank (2015) points to a strong positive correlation between the price of oil and the prices of energy and commodities: when oil prices rise, substitutes are sought, and thus demand grows for non-oil energy sources like coal and palm oil as for both non-oil energy sources and cooking oil. Even though Indonesia and India are net importers of oil, falling oil prices affect their economies through falling commodity and energy prices. In Indonesia, a decrease in the price of oil will lower the prices of coal and palm oil, which in turn will decrease exports. A weakening in these terms of trade will also decrease household consumption and economic growth. Further, falling commodity and energy prices will also reduce government revenue and thus limit the government's fiscal expansion capacity—especially in Indonesia, where the budget deficit is capped at 3% by law. Conversely, India, as a net consumer of natural resources, will benefit from any decrease in oil prices, because inflation will decrease and the country's terms of trade will improve. This has a positive impact on Indonesia's economy.

Figures 10 and 11 show the correlations between the oil price and economic growth in India and Indonesia. Figure 10 shows the positive correlation between the price of oil and economic growth in Indonesia. The lower the price of oil, the lower Indonesia's economic growth. Conversely, figure 11 shows the negative correlation between the price of oil and economic growth in India. The lower the price of oil, the higher India's economic growth. From these figures we can see that oil, energy, and commodity prices affected economic growth in both

Figure 10: Indonesia: GDP growth and Oil price

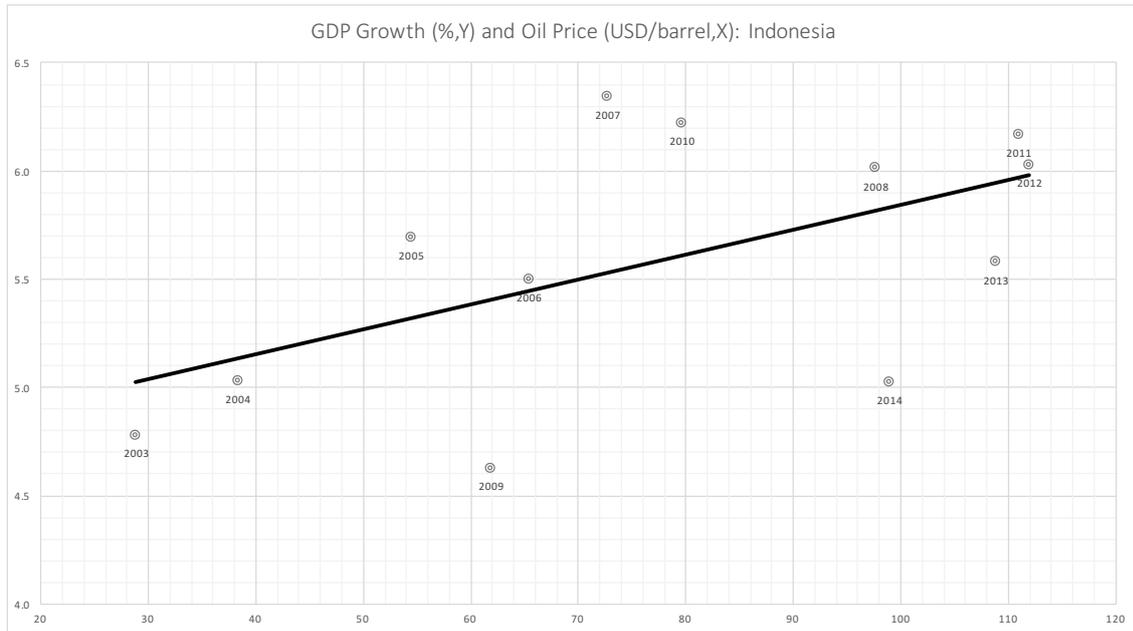
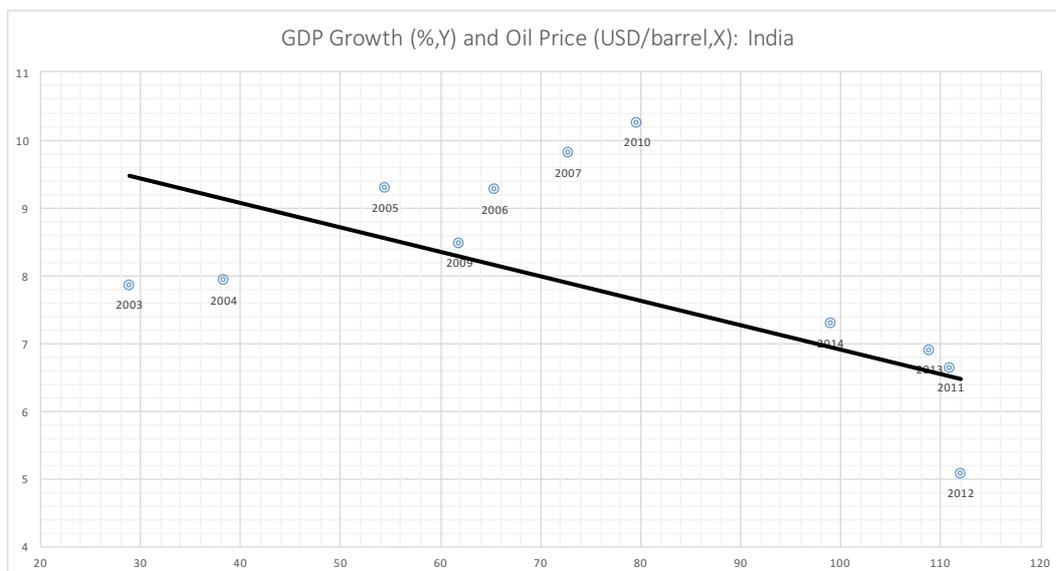


Figure 11: India: GDP growth and Oil Price



countries. This is consistent with other research that shows a positive correlation between an improving terms of trade and economic growth (Jawaid and Raza 2013; Blattman, Hwang, and Williamson 2004; Funke, Granziera, and Imam 2008).

This empirical evidence helps us to understand why economic growth in India was superior to that in Indonesia after the TT. The end of the commodity super-cycle had a negative impact on Indonesia but a positive impact on India. Two factors—namely the price of oil and the prices of other commodities—explain how two countries that adopted similar policies to counter the TT had such different results: India was able to increase its economic growth, whereas Indonesia continued to face a slowdown.

Oil prices were not the only factor. In India, optimism inspired by Prime Minister Narendra Modi's government reforms also played an important role. In Indonesia, the under President Joko Widodo (Jokowi) inspired confidence, too, particularly in 2016, but Indonesia needed more time than India because the Indonesian economy relies on commodity exports. Further, Jokowi's government gave mixed signals for its the first nine months—its policies tended to be protectionist, and a large fiscal risk loomed from unrealistic tax targets in 2015 and 2016. India was able to decrease interest rates more quickly after its economy stabilised. In Indonesia, BI lowered interest rates more slowly, as it took longer to decrease the current-account deficit in Indonesia than in India. Significant reductions in the current-account deficit accelerated the return of investor confidence in India. Steps taken by Raghuram Rajan, the then RBI governor, to open the banking sector to foreign investors also boosted investor confidence (TheHindu.com, 28 May 2016).

This explains why, when the Fed started to mention plans to normalise US monetary policy in 2014–15, the impact in India was relatively limited compared with in Indonesia, even though the rupee weakened. In Indonesia, the financial markets faced serious pressure. The situation in Indonesia stabilised somewhat when the Fed increased rates by only 25 basis points in December 2015, around the same that Japan and Europe adopted negative rates. In 2015, the rupiah depreciated by less than 10%, compared with more than 15% in 2013. Inflation and the current-account deficit were also much lower than in 2013, but markets perceived Indonesia to be riskier than two years earlier (IIF 2015)—essentially because the Indonesian authorities had not been very successful in communicating their policy responses to investors and the business community in general in 2015.

## **CRITICISM AND LESSONS LEARNED**

India's and Indonesia's policy measures to manage their current-account deficits and minimise the impact of TT have drawn criticism. For example, the policy measures were considered excessive. This view argues that in an open economy, policymakers do not need to take a series of measures to manage a current-account deficit. They just need to use the exchange rate as a shock absorber and let the adjustment take place automatically. While there is merit in this argument, it assumes that economic agents are rational and have a perfect foresight, as well as that there is no cost associated with the volatility of capital flows. In addition, this view assumes no significant adjustment cost from the old equilibrium (pre-TT) to a new equilibrium (post-TT).

In practice, however, such an adjustment can create uncertainties that cause markets to overreact. That overreaction may unnecessarily exacerbate the consequences of the adjustment and may create macroeconomic instability. Frankel and Edwards (2002) criticised the argument that a current-account deficit is not a cause for concern if foreign borrowings go to the private sector. They argued that sudden reversal is most likely to take the form of a reduction in investment, which will affect economic growth. Their argument reinforces the Indian and Indonesian cases. Krueger and Liliana Rojas-Suares point out that a current-account deficit due to highly productive investment is likely to be more sustainable than one due to low levels of savings (Frankel and Edwards 2002). This supports the argument that a current-account deficit does not matter as long it is financed by long-term and productive FDI. It does matter, however, if it is financed by portfolio investment.

As for Indonesia, the trauma of the 1997–98 Asian financial crisis still looms large. A significant exchange-rate depreciation due to a sudden reversal of capital flows, as happened during the TT, might create exchange-rate hysteresis. Under these circumstances, BI would need to change its policies in response to the exchange-rate adjustment. The government and the central bank would need to combine expenditure-switching and expenditure-reducing policies to minimise uncertainty during the adjustment period. Although India skirted the 1997–98 crisis, a significant and sudden reversal in capital flows could damage its economy. Despite this criticism, many reports show that both India and Indonesia overcame the TT in a relatively short time and managed to escape the shared plight of the Fragile Five (IMF 2015, 2017; World Bank 2014).

What lessons can we learn from India and Indonesia's experience with the TT? In essence, anticipatory policies are needed to counter the expected normalisation of US monetary policy. But there are several other lessons. First, the investment boom caused by capital inflows stimulated the economies of India and Indonesia and increased their current-account deficits. Such deficits can be tolerated to a point; as long as they are financed by export-oriented FDI, the risk of capital outflow is likely to be small. Nevertheless, as I argued earlier, the situation is exacerbated when a current-account deficit is financed by portfolio investment, especially in the form of short-term debt. Therefore, Indonesia should perhaps consider introducing a Tobin tax to minimise the negative impact of short-term capital inflows in the future. Another key lesson is that FDI inflows must be directed towards export-oriented sectors to minimise the risk of currency mismatch and balance-of-payment pressures.

Second, an overdependence on external financing increases risk for volatility of capital flows in home country. As put forth by Reinhart and Rogoff (2010), the dependence of EMCs on external financing increased economic risk. Indonesia must strive to increase its domestic savings; Mexico avoided joining the Fragile Five owing to its deep financial market. Indonesia and India must increase their resilience by developing their domestic financing resources.

Third, adopting a flexible exchange-rate regime is important to help necessary adjustments in an economy. As for Indonesia, BI should not have intervened in the foreign-exchange market, as it did in 2011, but instead allowed the exchange rate to depreciate earlier. The sharp appreciation in the exchange rate from 2009 to 2011 made Indonesia more vulnerable. The government should have adopted tighter fiscal policy at the time, and BI should not have allowed the exchange rate to appreciate so sharply. Nevertheless, fiscal tightening is not easy to achieve politically when economic booms are in full swing. In addition, if BI had tried sterilisation when the exchange rate was appreciating, the cost would have been excessive.

## **THE WAY AHEAD**

This article has shown that the tapering talk triggered by Bernanke's QE statement in May 2013 created financial turbulence in some EMCs. Nevertheless, the TT was not the main culprit for the sudden reversal of capital flows to some EMCs; it was only a trigger that propelled capital from countries with a structural problem, particularly a current-account deficit, as was the case with the Fragile Five. I have argued that a large current-account deficit financed by portfolio investment may increase a country's vulnerability. When India and Indonesia faced

short-term risks in their current-account deficits and vulnerabilities in their financial sectors during the TT, their governments and central banks adopted short-term strategies that promoted stability over growth. The policies mainly involved reducing and switching expenditure. These policies helped them to overcome difficulties that the other Fragile Five countries encountered. However, no one set of policies fits all. The policies may have worked well for India and Indonesia at that particular time, but they are not necessarily the right policy for other countries or during a sudden reversal of all capital flows.

This article has also shown that policy consistency is likely to raise credibility in the eyes of investors. This is what sets Indonesia and India apart from the other Fragile Five countries. In that context, the cases of Indonesia and India demonstrate the importance of combining policies. Macroeconomic policy cannot rely on one instrument. Overly high interest rates increase the risk of bad debt in the banking sector, which in turn encourages capital outflows (Stiglitz 2002). Overly tight fiscal policy can harm welfare programs and economic growth, while overly weak exchange rates can lead to fears about another Asian financial crisis. These fears can be self-fulfilling prophecy, when they turn into panic. Combining expenditure reducing and expenditure switching with continuous market guidance was therefore important during the TT.

Yet expenditure reducing and expenditure switching are not appropriate in the long-term. Economic growth cannot be restricted for the sake of resolving a current-account deficit and achieving macroeconomic stability. The Indian and Indonesian governments must look beyond stability by increasing productivity through improvements in human capital, infrastructure, and governance (Basri, Rahardja, and Namira 2016; Harvard Kennedy School Indonesia Program 2011; Rodrik 2011, 2015). If the capital inflows to India and Indonesia during QE had been anticipated and channelled into productive investments in infrastructure and manufacturing, both countries would now have more sustainable sources for growth.

Negative interest rates in Japan and Europe and the continued gradual normalisation of monetary policy in the United States will facilitate further capital inflows into EMCs, including Indonesia and India. (This explains why the exchange rates for the rupee and rupiah have strengthened since 2016.) Still, external forces that lead to sudden economic recovery can disappear quickly. We need to remain cautious, particularly given the current economic slowdown in China and the normalisation of monetary policy in the United States, as well as the uncertainty surrounding the economic policies of US President Donald Trump. It is

therefore important to learn from past events. If an influx of portfolio investment coincides with higher budget and current-account deficits, Indonesia and India could again be vulnerable.

In India, for example, economic recovery was due in no small part to decreasing oil prices. If oil prices rise again, they will put pressure on India's economy and, in particular, its current-account deficit. The risk of capital-flow volatility remains. As the IMF (2017) points out, however, the economies of both India and Indonesia are in better shape because since 2013 both countries reduced their external imbalances and strengthened their policy buffers.

India and Indonesia must focus on mid- to long-term growth strategies, which require advances in productivity. Infrastructure development policy, gains in the quality of human capital, and advances in good governance are key to economic development for both countries. Without them, the India and Indonesia will continue to be vulnerable to the effects of terms-of-trade fluctuations.

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