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## Enhancing Resilience to Turbulent Global Financial Markets: An Indonesian Experience\*

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### Abstract

In the empirical literature, large and abrupt declines in capital inflows, or sudden stops, typically hit asset markets and generate output losses in the receiving countries. The significant decrease in capital flows to emerging markets in 2018 is a unique opportunity to test this premise. Using Indonesian data, we found that the sharp decline in capital inflows for over two consecutive quarters in 2018 had an adverse impact on the currency, equities, and bond markets, but no discernible output loss was recorded. Real GDP growth remained resilient throughout 2018 and held broadly steady at around 5 percent in the first quarter of 2019. Furthermore, asset markets rebounded quickly, regaining most of the losses incurred by March 2019. We attribute this resilience to Indonesia's strong macroeconomic fundamentals and responsive fiscal and monetary policies. We argue that to sustain this resilience in the years to come, complementary structural reforms to boost export-oriented FDI would be needed. The 2020 COVID-19 global pandemic has put the emerging economies to the test again, with a possibly more significant impact. We will revisit our analysis in the future in the aftermath of the pandemic.

**Keywords:** capital flows; sudden stops; GDP growth; monetary policy; fiscal policy

**JEL classifications:** E23; E51; E52; E62; G15

## 1. Introduction

Global financial markets witnessed heightened volatility in 2018 which is expected to continue until 2021 following the COVID-19 global pandemic. Indicators of U.S. stock (VIX) and bond market (MOVE) volatility have remained above their 2017 levels throughout the year with several bouts of extreme spikes (Figure 1). The volatility was particularly high in the first and last quarters of 2018 for equity markets, and for the bonds market, the only period of

low volatility was in June-September. The volatility reflects US Fed tightening monetary policy, policy uncertainty from US-China trade tensions, financial stress in a few countries (e.g., Turkey, Argentina), and concerns about the earnings of some global firms in specific sectors (e.g., technology stocks dropped over concerns of low earnings by global tech companies).

China-United States trade war has created global trade policy uncertainty, which in turn aggravates the impact of global demand on business confidence and global growth (IMF 2019). Central banks around the world – including the US Federal Reserve and the ECB – have responded with a loosening monetary policy, resulting in global yields to extremely low levels, where in fact in some advanced countries the bonds are touching negative

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values. Prospects of persistently low monetary policy rates alongside weak investment growth are lowering global yields, while elevated policy uncertainty raises fears of a global recession.

The US Federal Reserve embarked on a tightening cycle in March 2018 and raised the federal funds rate four times that year (in March, June, September, and December). This, combined with heightened policy uncertainty, suddenly reduced global investors' risk appetite toward emerging markets and triggered significant portfolio capital withdrawal from these countries. In 2018, portfolio capital flows to emerging markets were USD175 billion lower than those in 2017 (USD200 bn in 2018 versus USD375 bn in 2017). Indonesia was no exception. It registered a vast decline of capital inflows to USD 200 million in 2018, from a massive net portfolio inflow of more than USD8 billion in 2017 — an almost USD9 billion drop (Figure 2).

The decline in equity flows to Indonesia can be characterized as a sudden stop. In the literature, a sudden stop is defined as a decline in capital inflow by two standard deviations for at least two consecutive quarters. Equity flows to Indonesia turned negative in the second half of 2017 (selloffs) and dropped sharply and steadily over the subsequent four quarters. The bond flows remained healthy and positive throughout 2017 but fell sharply in the first three quarters of 2018 before gradually recovering in the last quarter.

Figure 3 shows the immediate response of the stock market index, which dropped sharply in 2018 and of bond yields, which increased throughout the year. As expected, the Indonesian Rupiah depreciated sharply by 7 percent in 2018 (with a peak of 13.7 percent between March and October) to absorb the shock. Foreign reserves dropped by USD11 billion during the same period (from USD126 billion to USD115) as the Central Bank intervened at times to smooth out erratic movements of the exchange rate.

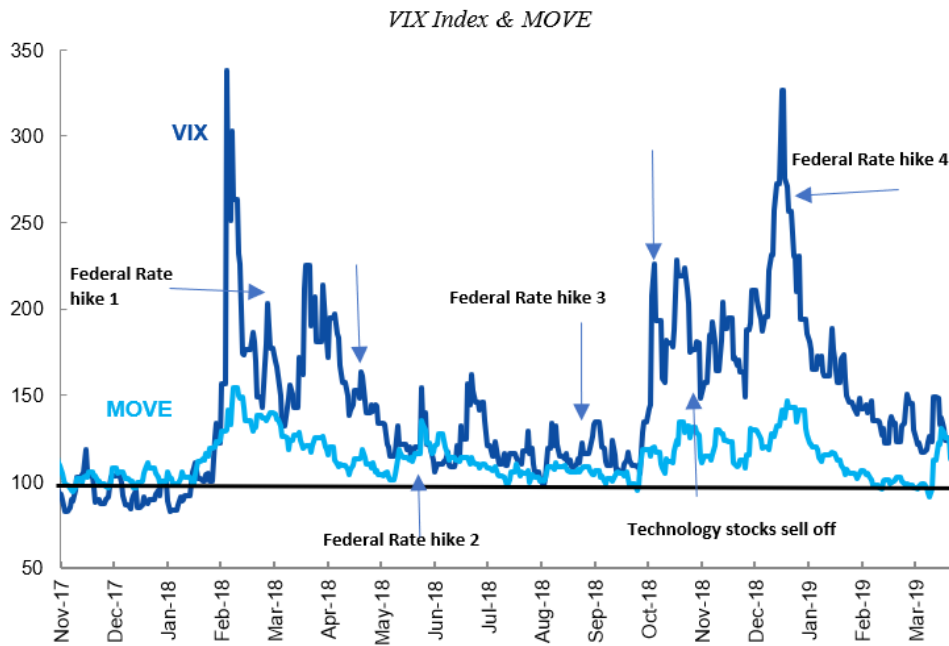
The Indonesian Rupiah depreciated the most among the currencies of Southeast Asia, reflect-

ing the country's negative basic balance (i.e., large external financing gap), shallower financial market, and larger share of non-resident portfolio holdings (Diop 2018).<sup>1</sup> Nevertheless, currency depreciation should be expected and seen as an essential shock absorber or adjustment mechanism for Southeast Asian countries that moved to a floating exchange rate regime after the 1997 crisis (Diop 2018).

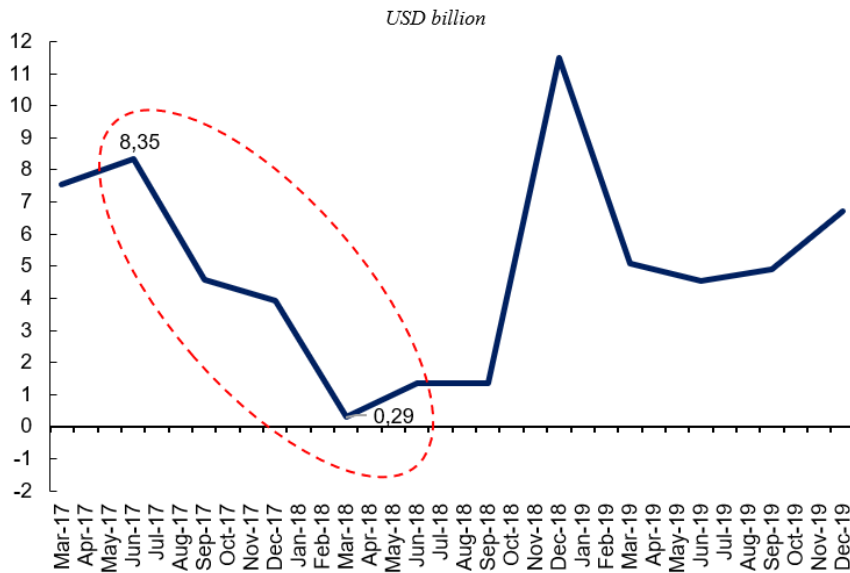
The COVID-19 pandemic started in January 2020 in China and had spread globally and reached more than 650,000 confirmed cases by the end of March 2020. This unprecedented pandemic also reached Indonesia with over 1,000 confirmed cases at the same time. There is still no clear indication as to how severe and how long the pandemic will be. Nevertheless, the impact on the emerging market financial markets, including Indonesia's, has been similar in terms of directions, i.e., net capital outflow in the portfolio investments. There is a possibility that the magnitude of the impact on Indonesia's financial market could be much greater than the shock in 2018. The macroeconomic policies will be tested once again.

In this paper, we will limit our attention to the 2018 event, and we will revisit our analysis in the future in the aftermath of the 2020 COVID-19 pandemic. This paper aims to shed light on the absence of output loss following the episode of a sudden stop of capital flows in 2018. As contribution of this study to the literature, we argue that the resiliency of the real sector despite the negative external shock is attributed to the Indonesia's strong macroeconomic fundamentals and responsive fiscal and monetary policies during that period. Furthermore, in order to test our hypothesis regarding the role of macroeconomic policy mix in preventing output loss, we also examine the periods where the absence of

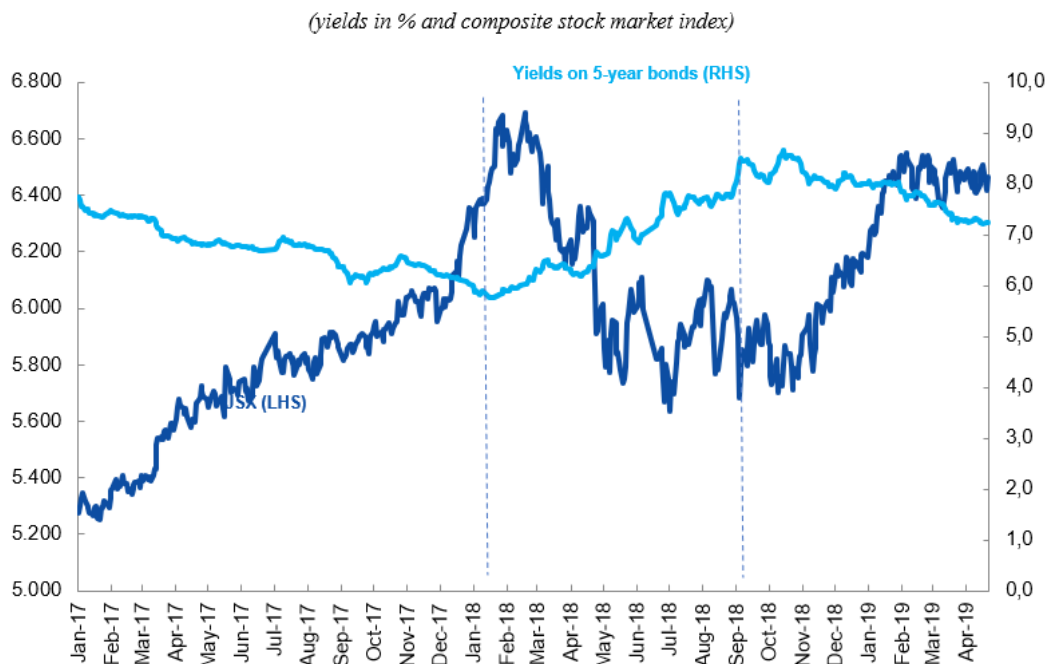
<sup>1</sup>The basic balance is the difference between the current account balance and FDI (as a percent of GDP). In 2018, the current account deficit was about 3.0 percent of GDP and FDI 1.8 percent of GDP, implying that the amount of FDI flowing to Indonesia fell short of fully covering the country's current account deficit, making the country reliant on portfolio flows to meet its external financing needs. In contrast, the basic balance was positive in Malaysia, Thailand, and the Philippines.



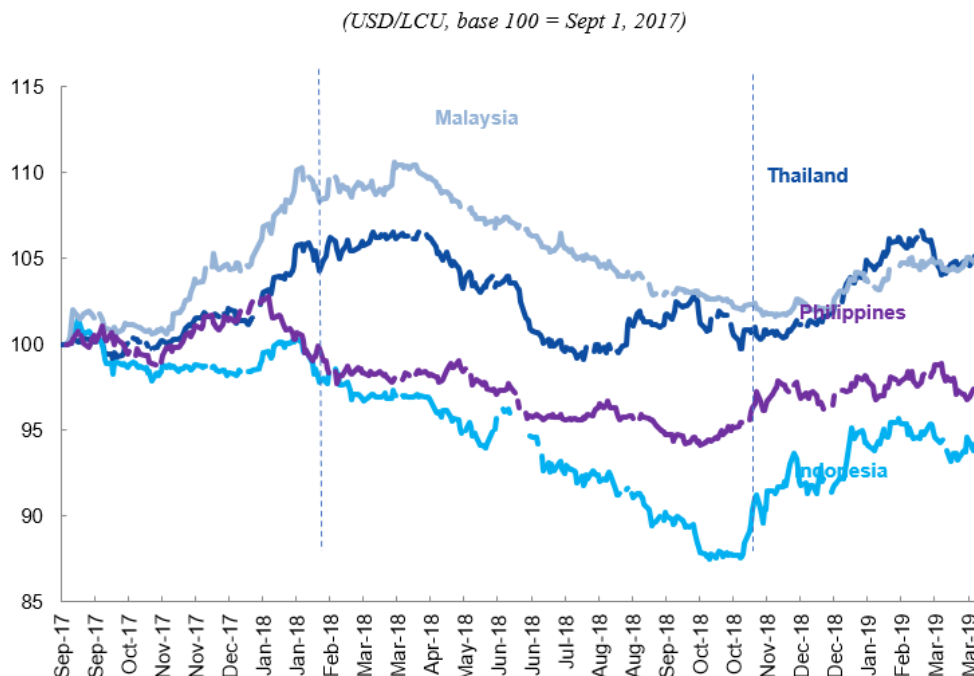
**Figure 1. Global Financial Market Volatility**  
Source: Bloomberg (2019)



**Figure 2. Indonesia Portfolio Capital Flows**  
Source: CEIC (2020)



**Figure 3. 5-yr Bonds Yields and the Stock Market Index**  
Source: CEIC (2020)



**Figure 4. Exchange Rates, Large South East Asia Economies**  
Source: CEIC (2020)

sound macroeconomic policy mix could lead sudden stops to output loss or decline in GDP growth of Indonesia.

## 2. Literature Review

For some emerging markets like Indonesia, the current account deficit is almost unavoidable. Figures 5 and 6 depict a simple correlation between GDP growth and current account as a percentage of GDP in some emerging markets including Indonesia.

It is shown that a country with a higher growth tends to be attributed to a current account deficit. This relationship is derived from a simple macroeconomic accounting equation:

$$(X - M) = (S - I) + (G - T) \quad (1)$$

where  $(X-M)$  is a current account as % of GDP,  $S-I$  is the savings-investment gap, and  $(G-T)$  is the government budget deficit. Given the government budget deficit, this identity shows that a higher growth requires a higher investment rate. To cover its current account deficit, a country needs to mobilize capital flows both in terms of direct investment and portfolio investment. Relying on foreign capital flows to finance high growth is risky. Global portfolio adjustments and/or changing perceptions of global investors would easily change the patterns of capital flows, which in the literature is termed as sudden stops.

The determinants of the current account deficit have been summarized in the literature on the determinants of the current account deficit itself (e.g., Calderon, Chong & Loayza 2002; Cusolito & Nedeljkovic 2013). Among the determinants is the high GDP growth rate that tends to cause higher current account deficits.

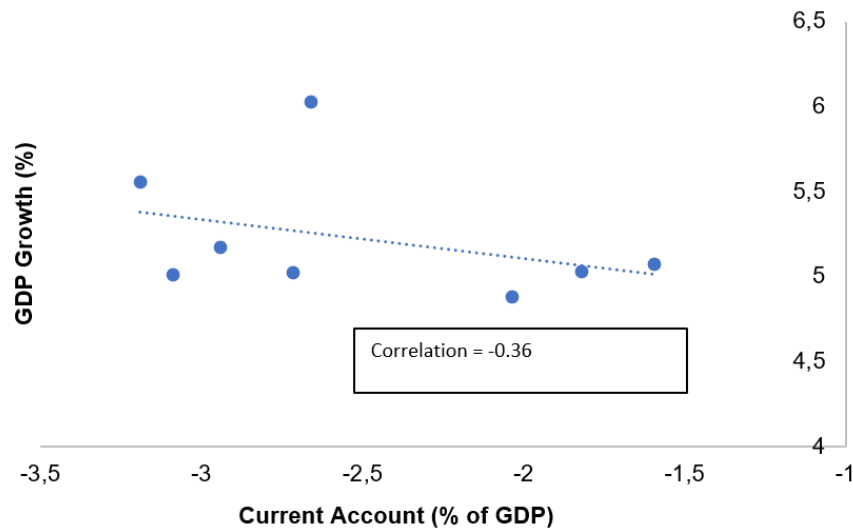
Kraay & Ventura (1999) proposed a rule stipulating that the current account response equals the savings generated by the shock multiplied by the country's share of foreign assets in total assets.

This implies that an increase in GDP growth rate leads to a current account deficit in a debtor country. This rule is suggested by an intertemporal approach to the current account when the investment risk is high, and the diminishing returns are weak.

Milesi-Ferreti & Razin (1996) modeled the sustainability of current account balance in the context of a persistent savings-investment gap of a country and showed how such a persistent current account balance could happen when the debtor country can convince its creditors of its solvency and also its willingness to pay back its debt. In this context, the GDP growth rate is among the most important determinants of the confidence the creditors have on the emerging market economies.

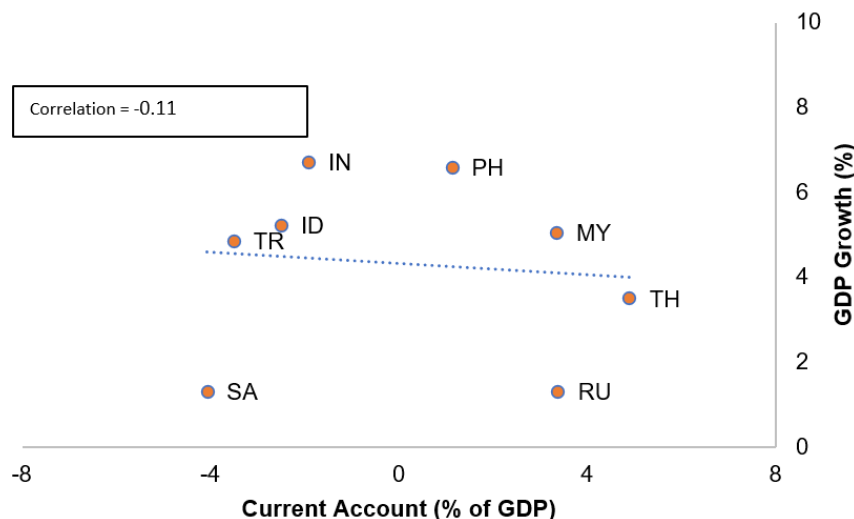
Existing literature has also suggested that the presence of current account deficit is prevalent among countries with a higher growth. Thus, this occurrence of current account deficit exposes those countries to the external risks in which any external shocks could put more pressure on their macroeconomic stability. Past studies have suggested that an episode of a sudden stop might result in a considerable amount of output loss. Hence, the relationship between current account deficit and GDP might be two-way. As discussed earlier, countries would run a higher deficit to fuel GDP growth; however, a higher current account deficit driven by a sudden stop might also harm GDP growth.

One of the main causes of the external shocks is the shift of market confidence toward emerging markets, and that would lead to a sudden stop of debt flow into the emerging market economies. A sudden stop driven by an abrupt reduction in global investors' risk appetite toward emerging market economies is generally associated with costly output losses. For instance, in a comprehensive review of sudden stop episodes in the emerging markets over the past quarter-century, Eichengreen & Gupta (2016) showed that sudden stops typically reduce GDP growth by roughly 4 percent year-on-year in the first four quarters (while the impact on financial variables peaks in the first two quarters). They also showed that the magnitude of the induced growth



**Figure 5. Indonesia Current Account vs. GDP Growth (2012–2019)**

Source: CEIC (2020)



**Figure 6. Current Account (% of GDP) vs. GDP Growth in Emerging Markets (Average 2012–2019)**

Source: CEIC (2020)

deceleration depends on how the shock is handled by fiscal and monetary policy. This is since fiscal policy and exchange rate policy have short- and expected-long-run impacts on the expected performance of current account and GDP, as found by Debelle & Faruqee (1996).

In the same vein, Caner, Koehler-Geib & Vincelette (2009) showed that sudden stops not only contribute to drops in economic growth, but their ef-

fect could be prolonged, especially in countries with sizeable external vulnerability (e.g., large current account deficits compared to the inflow of stable financing such as FDI). This is now even exacerbated since the capital inflows to the emerging market economies are increasingly fickle, as shown by Eichengreen, Gupta & Masetti (2018). Even the FDI outflows from emerging markets have grown and become more volatile. On the other hand, the bank-

intermediated capital outflows from emerging markets are now increasingly more volatile. In terms of shocks to the capital account of the balance of payments, the outflows from emerging markets, both FDI and bank-related flows, warrant more considerable attention from emerging-market analysts and policymakers.

In a more recent study, Bandaogo & Chen (2019) opted to use a hazard model to estimate the conditional probability that a country exits a sudden stop today, given that it experienced one until the end of the last period. They found that a higher ratio of foreign exchange reserves to short-term external debt shortens the duration of sudden stops and that a higher global economic growth rate tends to reduce sudden stop spells.

Calvo (2003) modeled the GDP growth as a negative function of fiscal burden in an open economy. They showed how GDP growth could behave discontinuously and be volatile when the fiscal responsibility is high. In this context, a sharp correction to the GDP growth can be demonstrated as resulting from a sudden stop of capital inflows, real depreciation, and a drop in production (driven by a fall in the production of non-tradable). These phenomena are commonly observed during financial crises in emerging markets. The model can be extended to include monetary policy. They showed how an adverse fiscal shock could cause a balance of payments (BOP) crises. An important policy implication of the model is to avoid sudden stop crises, and policymakers could use fiscal policy, especially the one that improves the fiscal credibility. Lowering the fiscal deficit is highly effective in the medium term, but it could otherwise be counterproductive if it relies on increasing taxes.

Cúrdia (2007) proposed a model to investigate the effects of monetary policy in an emerging market economy that experiences a sudden stop of capital inflows. The model features credit frictions, debt denominated in foreign currency, imported inputs, and households that have indirect access to the international capital market. The sudden stop is defined as a change in the perceptions of foreign

lenders, which increases the yield of bonds. They showed how the elasticity of external demand is negatively related to the magnitude of the output contraction. They also showed how the more fixed the exchange rate regime is, the deeper the recession caused by the sudden stop. On the other hand, a rule-based monetary policy that reacts to inflation and output is more stabilizing. Nevertheless, when the commitment to inflation stabilization is slightly loose, the reduction of capital inflows will be more significant, and the interest rate will increase higher. However, there will be less contraction in the output. A study by Ramayandi & Rosario (2010) suggested that in the period of 2008, Indonesia lacked discipline in monetary policy conduct which manifested into a more volatile macroeconomic condition. Thus, without adequate degree of credibility, it may pose a huge cost to the central bank and the domestic economy. The credibility of the central bank is shown to have an important role, with low credibility and the risk of loose policy implying increased trade-offs, stronger contraction of the economy, and higher interest rates during the sudden stop.

On the structural policies, Eichengreen & Gupta (2016) showed that there is an increasing number of emerging market economies resorting to commitment to structural reforms when experiencing a sudden stop event. Ostry, Prati & Spilimbergo (2009) descriptively showed that countries with a relatively liberalized domestic financial sector enjoy lower macroeconomic volatility and experience a lower incidence of sudden stops. On the other hand, they also showed that trade reforms have a positive impact on credit ratings. This is an important point suggesting the efficacy of a real-financial linkage following structural reform, with the increased efficiency brought about by real sector reforms fostering improved access to credit or investment financing for domestic firms. Such favorable real-financial linkages are also apparent from the impact of current account reform on financial depth and the effects of telecommunications and electricity reforms on FDI.

Indonesia also experienced an episode of a sudden



stop in 2018. However, during this period, Indonesia did not seem to have any significant loss in output, as indicated by a steady GDP growth. This paper analyses how the responsive monetary and fiscal policies during this period helped to weather the negative impact of sudden stops to the real economy. As suggested in the previous literature, responsive monetary and fiscal policies play a crucial role in curbing the impact of external shocks, such as sudden stops, on macroeconomic indicators. In other words, sound macroeconomic policies, both from fiscal and monetary sides, could mitigate the transmission of negative impact brought by the external shocks to the domestic economy. However, there remains no consensus in the literature as to how the policies could mitigate and intercept the shocks along the transmission channel. This paper aims to contribute to the discourse by proposing credit growth as a crucial channel in determining whether sudden stops could hurt the real sector. Furthermore, sound fiscal and monetary policies that could maintain the growth of credit despite the occurrence of sudden stops might interject the harm to the real economy.

### 3. Method

This study employed the descriptive analysis method to examine the impact of monetary and fiscal policies on the real economy during the presence of financial market sudden stops in Indonesia. Through reviews of relevant literature as well as data analysis of Indonesia's capital flow and GDP condition over the past few years, this study is expected to address the research objective.

Data were collected from various sources depending on the data types. Information related to financial sector, such as capital flows and credit growth, were gathered from balance of payment published regularly by Bank Indonesia. Data associated with the country's output and other real sector indicators were mainly collected from BPS-Statistics Indonesia. Various types of relevant data were also

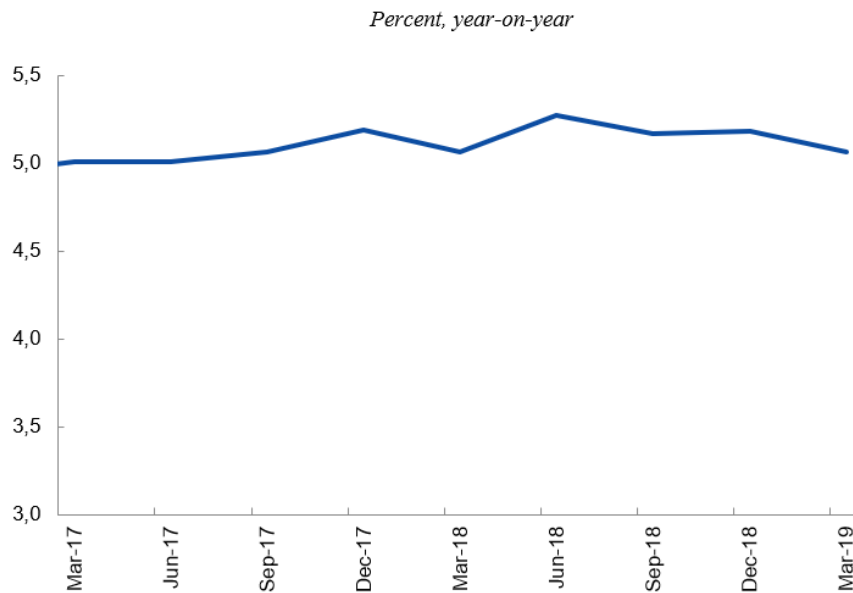
gathered directly from CEIC database.

## 4. Result and Discussion

### 4.1. Indonesia's experiences with sudden stops

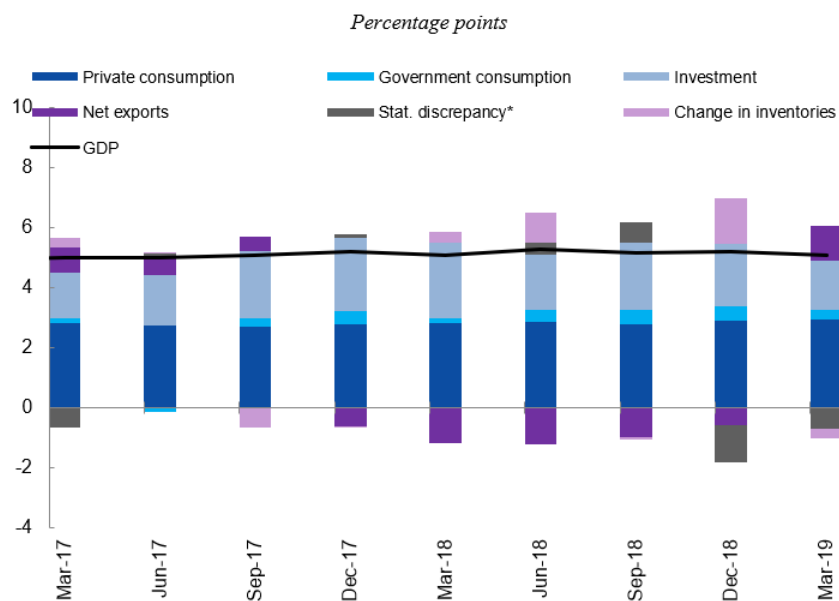
Strikingly, for Indonesia, the decline in capital inflows and the ensuing sharp depreciation of the Rupiah in 2018 did not appear to have significant negative impact on real output as the real GDP growth remained steady. Real GDP, in fact, edged up in the second quarter of the year, then softened in the third quarter before recovering in the fourth quarter (Figure 7). If there was any impact, it was short-lived. On average, real GDP growth was slightly higher in 2018 than in 2017 despite a higher uncertainty in the global financial market, owing to the resilience of private consumption, robust investment, and a slight increase in government consumption in the second half of the year (Figure 8). As another sign of resilience, capital inflows recovered rapidly from Q4-2018, partially correcting the impact of the initial decline of flows on the exchange rate, which also gradually recovered in the last quarter of the year.

Questions remain as to how the Indonesian macroeconomic policy mix helped prevent the sudden reversal of capital inflows in 2018 from adversely bringing down real GDP growth (and thus jobs and welfare). We argue that a well-coordinated response of monetary and fiscal policies to capital outflows helped avoid adverse effects on real sector. The monetary policy helped by providing a relatively predictable nominal depreciation rate path for Rupiah. Bank Indonesia intervened in the foreign exchange market while also gradually increasing its policy rates and at the same time managing the liquidity in the banking system, which helped maintain the credit growth. As the engine of GDP growth, credit growth plays a significant role in determining the real effects of financial shocks. In Figure 9, a higher credit growth in 2018 can be seen compared to its figure in 2017 emerging along with the



**Figure 7. GDP Growth**

Source: CEIC (2020)



**Figure 8. Contribution to GDP Growth**

Source: CEIC (2020)

improvement in GDP growth. The resilient credit growth amidst a sudden stop in 2018 shows a less vulnerable investment pattern to financial market. It can be perceived as the result of strong investment growth in Q4 2017 which was continued to be accompanied by record-low growth banking sec-

tor loans for investment purposes (Kacaribu et al. 2018).

The absence of “real effects” in the event of sudden stops of capital inflows in 2018, however, is inapplicable with the sudden reversal in 2008–2009.

As can be seen in Figure 9, the period of massive capital outflows in 2008–2009 has lowered the GDP to 4.1% in Q1-2009 from 6.3% in the same period a year earlier. Meanwhile, credit growth has experienced an extreme drop even in the presence of 300 bps cut in BI's policy rate. The realization of IDR32.9 trillion fiscal stimulus also failed to pick up consumer confidence, hence curbing the credit growth. On the other hand, a fiscal policy discipline employed by the Ministry of Finance (MoF) in 2018, which involved several budget cuts, sent the right signal to markets as to the prudent management of the government budget.

## 4.2. Monetary policy response

In response to the heightened volatility and capital outflows, the Central Bank set out to (i) tighten monetary policy to keep the bond yield gap between US and Indonesia at a level that encouraged capital inflows while offsetting the potential inflationary-effect of depreciation, (ii) intervene in the foreign exchange market as needed to avoid too sharp and erratic depreciations that could undermine confidence and fuel inflation, and (iii) offset the mechanic impact of outflows and higher policy rates on credit, to avoid a credit crunch and a slowdown in economic activities.

Indonesia's Central Bank monetary policy rate was increased five times in 2018, by a cumulative 175 basis points. This pace of increase was faster than the pace at which Fed funds rate increased, which could explain the recovery in portfolio flows seen in the first quarter of 2019. In addition to widening the gap between the Fed's policy rate and the Central Bank short-term interest rate, this monetary tightening helped curb inflation expectations and offset the inflationary impact of the significant depreciation of the Indonesian Rupiah in 2018. Indeed, core inflation increased only slightly (despite the cost-push impact of the large depreciation), and headline inflation continued its declining trend and even reached historically low levels by the end of 2018 (Figure 9). Low inflation, along with an expansion

of conditional cash transfers to the poor (see fiscal analysis below), has undoubtedly supported private consumption, which remained resilient throughout 2018 (see Figure 8).<sup>2</sup>

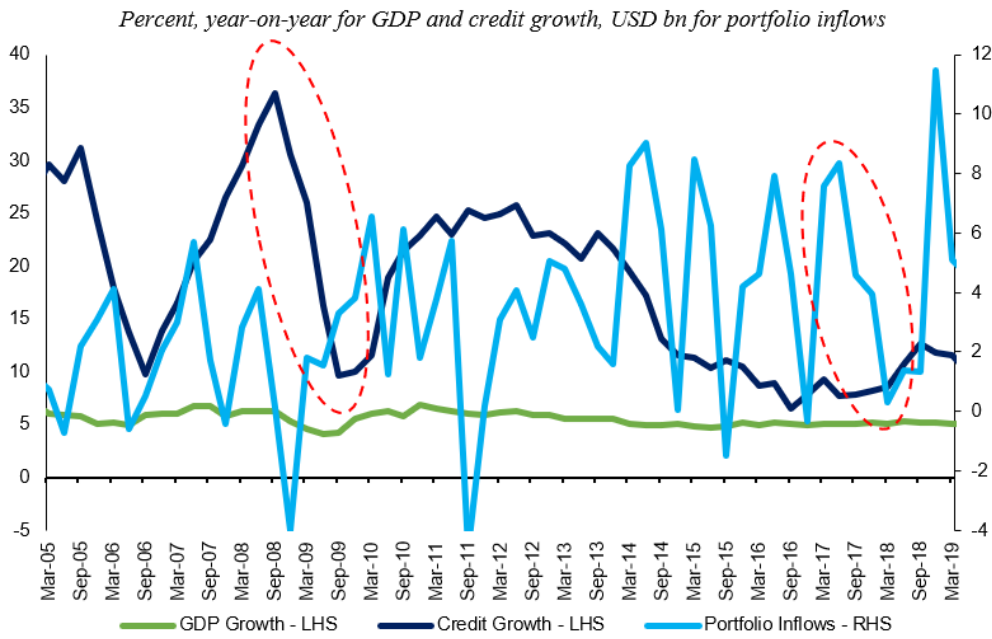
In addition, compensating measures were taken to ensure that monetary tightening would not reduce access to credit by firms and households. Figure 11 shows that credit growth rose sharply from March 2018, even as deposit growth declined. The rise in credit growth is counterintuitive, but it reflects a deliberate effort by the Central Bank to avoid a squeeze of economic activities. The measures that BI undertook to support liquidity included: (i) relaxing the average primary reserve requirement for commercial and sharia banks, (ii) relaxing the loan-to-value (LTV) ratio for home loans that banks could issue, from 85 percent to 90 percent for first home buyers, and (iii) implementing open market operations. These measures explain why credit growth increased, supporting economic activities, amid the tightening cycle. However, the faster growth in loans compared to that of deposits in 2018 implied an increase in the loans to deposits ratio (LDR) from 89.1 percent in January 2018 to 94 percent in January 2019 – above the central bank's target range of 80–92 percent. This led to a decline in banks' asset-liquidity ratio and requires banks to attract more deposits to be able to sustain loan growth going forward (Figure 12).<sup>3</sup>

## 4.3. Fiscal policy response

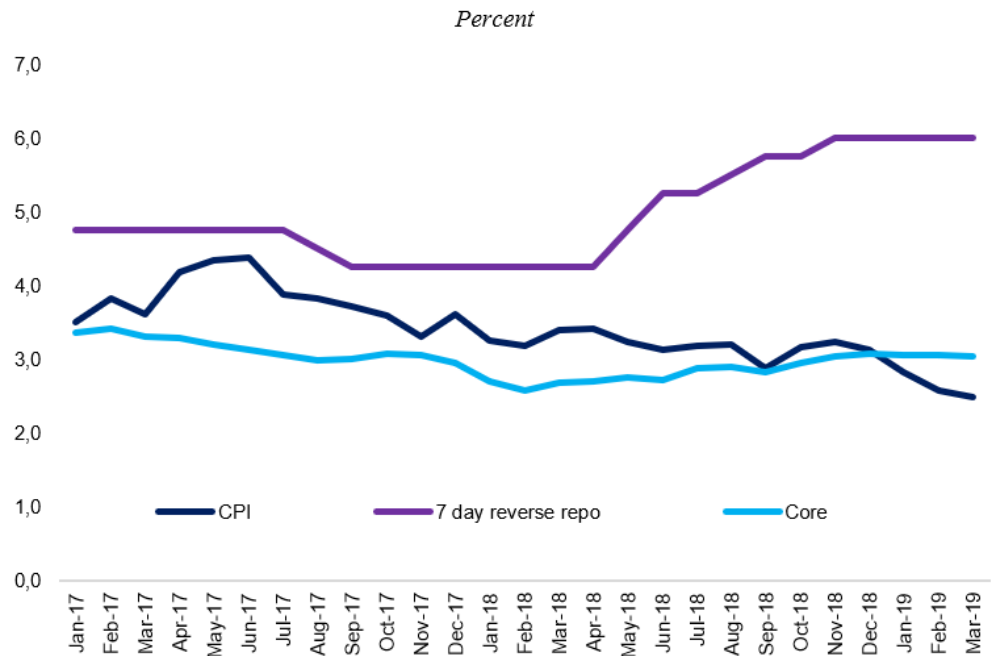
On the fiscal side, in response to capital outflows, the Government immediately declared that it would take all necessary actions to maintain macroeconomic stability, signalling to markets that stability would take precedence over growth as long as the global market volatility continued. Second, the favorable financial conditions that prevailed when the

<sup>2</sup>Indonesia's conditional cash transfer, the PKH, was expanded from 6 million households in 2017 to 10 million households in 2018.

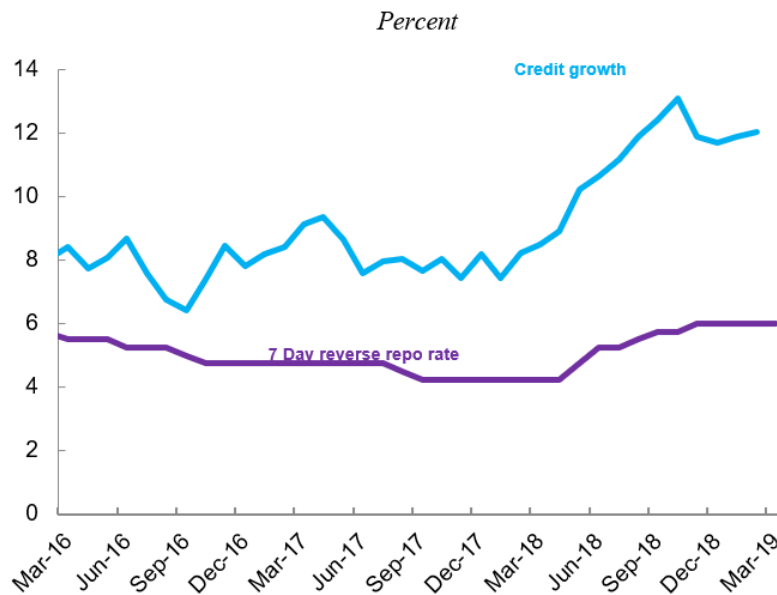
<sup>3</sup>OJK undertook measures (via regulations) to improve the quality of liquidity with a focus on ensuring stability.



**Figure 9. Capital Inflows, Credit Growth and GDP Growth**  
Source: CEIC (2020)

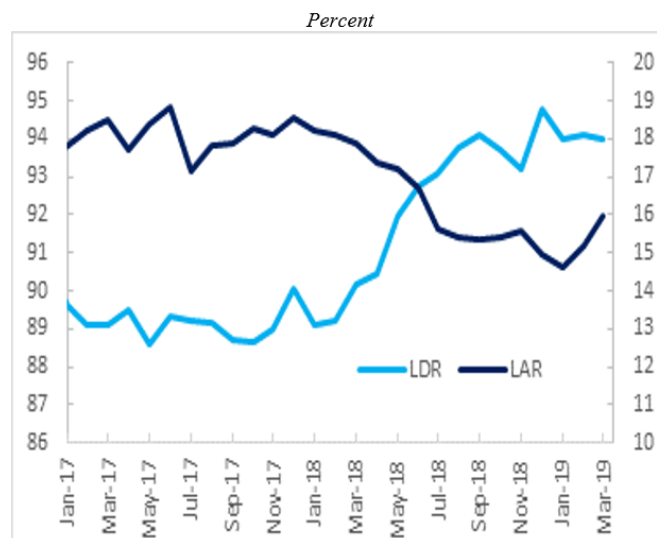


**Figure 10. Monetary Policy Tightening and Inflation**  
Source: CEIC (2020)



**Figure 11. Monetary Tightening and Credit Growth**

Source: CEIC (2020)



**Figure 12. Loan to Deposit and Liquidity to Asset Ratios**

Source: CEIC (2020)

shock occurred provided the MoF with the space to initiate a fiscal response to the global volatility without fearing adverse market reactions. The initial conditions for dealing with the shock were indeed very favorable in 2018, as evidenced by the low fiscal deficit (1.8 percent of GDP), low debt (29.8 percent), and a slew of four credit rating agencies' upgrades of Indonesia's sovereign credit in 2017-

18.<sup>4</sup> These upgrades reflect major efforts to return to a more conservative and prudent approach to construct the budget amid global market uncertainties, improvements in public spending allocative efficiency (following the historic fuel subsidy reform

<sup>4</sup>Standard and Poor's (BBB-), Fitch (BBB), Moody's (Baa2), and the Japan Credit Rating Agency (BBB).

in 2015), and a greater focus on tax reforms to improve revenue collection, including a tax amnesty initiative in 2017 and reforms of the tax administration. For instance, the fuel subsidy reform in 2015 removed 2 percent of GDP of subsidies and reallocated them to infrastructure, health, and social protection.<sup>5</sup> Also, government revenues increased by 16.6 percent in 2018, reverting the declining trend since 2011. Even though the improvement was mostly fuelled by the robust economic growth and higher crude oil price, steady tax compliance ratio at 71.1% after the tax amnesty initiative in 2017 also contributed to the high government revenue in 2018. The fiscal policy setting was thus deemed credible by markets when the shock occurred.

Within this context, the MoF set out to (i) signal a continuation of its prudent stance by producing a conservative 2019 budget (1.8 percent GDP of projected deficit) and (ii) reduce the rapid growth in imports through targeted tariff increases and a coordinated effort to slow down the pace of megaproject implementation (e.g., power plants, water plants, irrigation, airports) which contributed to a rapid rise in capital goods imports and a deterioration of the current account deficit. Indeed, capital goods imports have been increasing fast in response to a significant increase in government spending in infrastructure, and if the trend continued, the current account deficit could rise further. These actions contributed to a considerable decline in the current account deficit in the first quarter of 2019. The deceleration of infrastructure project-related capital imports was an important policy measure given the strong links between public investment and external balance. Nedeljkovic, Varela & Savini Zangrandi (2015) found that, on average, a 1 percentage point increase in FDI of GDP generates a 0.17 percent lower current account balance of GDP in Indonesia. It implies that the higher FDI increases the demand for imports of intermediates and capital goods. Importantly, these policies were well communicated to

<sup>5</sup>The share of fuel subsidy in total expenditure increased from 3 percent in 2015 to 4 percent in 2019. Fuel subsidy is still very low compared to its pre-reform, 2014 level 2.3 percent of GDP versus 0.6 percent of GDP in 2019.

the public and the markets, contributing to restoring confidence.

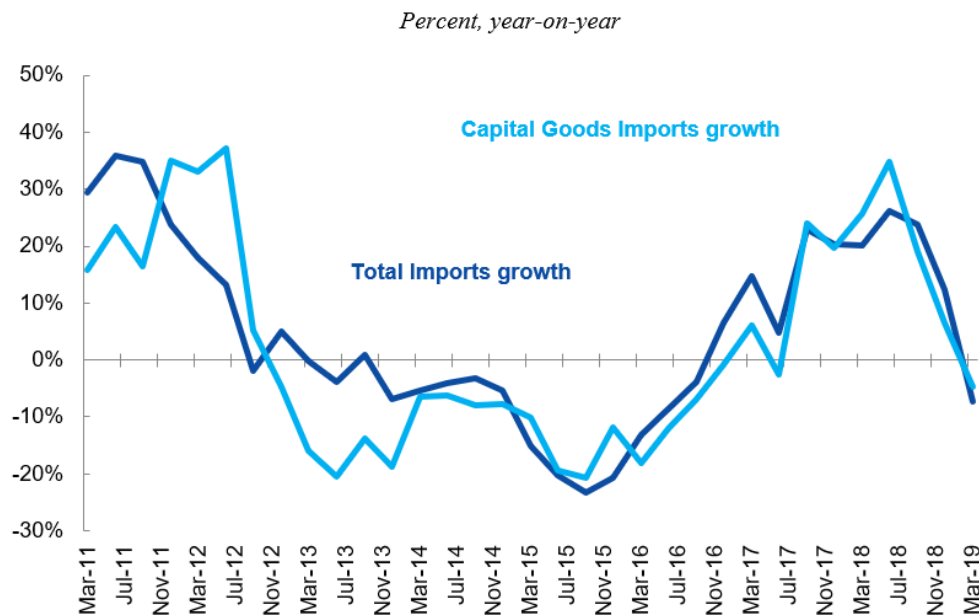
#### 4.4. Policy priorities for maintaining resilience

##### 4.4.1. Macroeconomic policies: necessary but not always sufficient to maintain resilience at low cost

While sound macroeconomic policy frameworks allow countries to respond flexibly to sudden capital outflows and maintain resilience, international experience has shown that they cannot guarantee resilience when the scale of shock is significant (Eichengreen & Gupta 2016). In the case of Indonesia, sound fiscal and monetary policies have served the country well so far, as seen above. However, the current exclusive reliance on fiscal and monetary policy to carry the burden of maintaining resilience comes with a cost. Indeed, both fiscal and monetary policies tend to be more restrictive to compensate for gaps in structural reforms. In the absence of sound structural reforms that help reduce the current account deficit and/or increase stable financing (e.g., FDI), the cost of maintaining resilience through macroeconomic policies tends to rise. Table 1 shows that Indonesia's policy rate and bond yields are the highest in Southeast Asia although its GDP growth is among the strongest and its fiscal deficits and public debt the lowest.

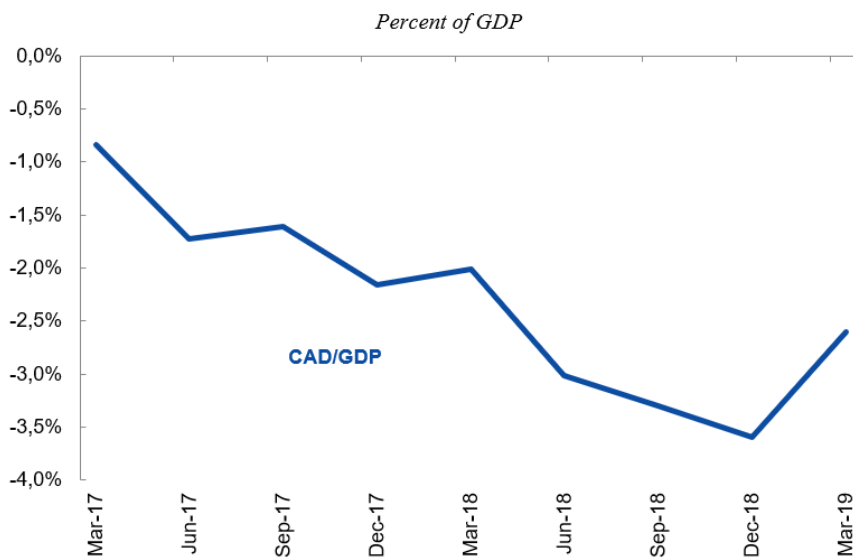
The high yields on Indonesian bonds are out of line with the sound macroeconomic fundamentals. They reflect, at least partially, the fact that basic need balance (current account deficit minus FDI) is negative, which increases external financing risk.<sup>6</sup> Indeed, while portfolio capital inflows can (i) help close external financing gaps when they are significant, (ii) support the accumulation of reserves, and (iii) contribute to the development of local capital markets,

<sup>6</sup>A part of the high yield appears difficult to justify. One assumption is that it reflects the peculiar functioning of Indonesia's bond market, with some players making super-profits. Such analysis is beyond the scope of this paper.



**Figure 13. Capital Goods Imports**

Source: CEIC (2020)



**Figure 14. Current Account Deficit**

Source: CEIC (2020)

they are volatile. This volatility breeds an external financing risk which affects bond yields. The reversal of portfolio flows between 2017 and 2018 driven by exogenous factors (mainly Fed's tightening) led to a higher external financing gap and increased yields in 2018 even though macroeconomic funda-

mentals remained strong. The inflow of portfolio debt liabilities has risen significantly since 2011, surpassing FDI by 2015, but can drop suddenly before recovering rapidly, as seen in 2018.<sup>7</sup> FDI

<sup>7</sup>In 2017, portfolio debt accounted for 2.7 percent of GDP, compared to 2 percent of GDP for FDI.

**Table 1. Indonesia's Yields are Out of Line With its Strong Macro Fundamentals**

2018	GDP growth	Fiscal Deficit	Public Debt	Central Bank Policy Rate	10-year Bond Yield
Indonesia	5.2	-1.8	29.8	5.1	7.6
Thailand	4.1	-2.9	40	1.52	2.7
Malaysia	4.7	-3.7	51.8	3.25	4.1
Philippines	6.2	-3.2	45	3.73	6.7

Source: CEIC (2020)

inflows to Indonesia dropped considerably in 2014 and have not fully recovered since. The current level of FDI compares unfavorably to Vietnam (7 percent of GDP), Malaysia (4 percent of GDP), and the Philippines (3.5 percent of GDP). Furthermore, FDI inflows that use Indonesia as a platform for export, i.e., the type of FDI that also helps reduce the current account deficit, has declined over time. Increasing the level of FDI inflows (in quantity and quality) could help Indonesia afford a higher level of current account deficit and stronger resilience to global financial market turmoil.

#### 4.4.2. Key structural reforms to support competitiveness and resilience

In the spirit of maintaining capital flows amidst high uncertainty, the government needs to focus more on attracting FDI inflows as they are less volatile than the non-FDI cross-border capital flows. However, improving the FDI flows remains the unresolved homework. The FDI inflows are relatively muted due to the unfavorable investment climate in Indonesia as seen by the lowest Ease of Doing Business (EoDB) compared to that of the other peer countries, such as Vietnam, Thailand, and Malaysia. The bureaucracy reforms are critically needed in attracting the FDI inflows, particularly related to starting a business, enforcing contracts, and trading across borders as highlighted by the World Bank Ease of Doing Business in 2020.

Furthermore, the investment attractiveness can also be addressed by improving Indonesia's competitiveness compared to the other emerging countries. The key policies required on structural reforms to boost competitiveness and FDI are well known, including (i) further reducing the country's infras-

structure gap to support production, labor mobility, trade and ultimately productivity growth, (ii) reducing skills gaps to support the development of new sectors (e.g., digital economy), attract FDI in sectors where skills are a key factor (e.g., advanced manufacturing, high-tech), and (iii) further improving the business environment by reducing red tapes, facilitate the acquisition of licenses and permits at the sub-national government level, and reduce restrictions to competition and investment in some sectors, to attract more investments, including FDI.

**Infrastructure.** Indonesia has significantly increased infrastructure spending over the past five years. Investments in ports, airports, highways, and urban infrastructure are already visible and impactful. Still, more is needed given the scale of the gap and the size and complex geography of the country. In the short-term, specific priority reforms should include (i) providing more incentives for State Own Enterprises (SOEs) to improve efficiency, (ii) strengthening the decision-making framework to prioritize private finance and PPPs, (iii) improving regulations to promote private sector investments including in the gas sector, and (iv) developing more effective concession agreements and tender documents.

**Skills development.** On skills, it will be essential to improve the availability of critically scarce skills, including through (i) easing regulatory restrictions to work permits to fill in critical skills gaps and (ii) incentivizing firms – e.g., through tax breaks - to provide on the job training. Equally important is the need to increase effective private participation in some sectors such as the health sector by addressing key short-term bottlenecks (restrictions to certain foreign skills). Furthermore, an industry-led agency is highly needed to precisely target groups



of people who have the potential to meet the industry requirements. The private sector participation becomes a key part in financing the skills development. The government can establish training contracts with private providers with placement based payments (e.g., Nepal) or develop a national public-private partnership body (e.g., India) to fund training programs, thus scaling up skills development.

**Improvement of business environment.** Critical short-term reforms in this area include (i) reducing regulatory uncertainty for investors by eliminating frequent discretionary and inconsistent changes in rules governing investment and business conduct, which could be done through establishing a regulatory oversight body to mainstream good regulatory practices across central government agencies/ministries, (ii) reducing red tape at the sub-national level. An innovative potential tool is to reward local governments that perform well in facilitating permits and private investments for instance through performance-based transfers. Other measures are (iii) lowering barriers to entry in certain sectors by relaxing foreign equity limits on investments in key commercial sectors in the DNI, (iv) revising the competition law to clarify the application of administrative and criminal sanctions, and (v) removing restrictions on imports of inputs and raw materials entering in local production process.

**Revisiting the incentive system.** Indonesia provides fiscal incentives to firms operating in many sectors and special economic zones. Revisiting the incentive system to ensure a better alignment between the country's investment objectives and the eligible sectors is called for. Furthermore, moving from profit-based incentives (e.g., tax holidays) to cost-based incentives, tax incentives such as accelerated depreciation and investment allowances are better suited as they can better help tie incentives with actual investments and ensure that only companies that attract investors are rewarded with tax incentives.

## 5. Conclusion

Indonesia's fiscal and monetary policies have served the country well by safeguarding macro stability and economic resilience in the face of a turbulent world. They have allowed the country to continue to grow in a stable fashion and to reduce poverty, which since 2018, has reached a single-digit level. It is striking that in 2018, the sudden sharp decline in capital inflows has not led to a deceleration in economic growth, as is typically the case, owing to the country's credible and sound fiscal and monetary policy responses.

It should be acknowledged, however, that leaving the country's resilience to shocks to macroeconomic policies alone has a cost, and external financing risks would be significantly reduced if equally sound structural reforms were implemented. This paper discusses some of the most urgent structural reforms that the new government could implement in its early days to further strengthen growth and resilience as the world enters a period of a significant uncertainty and a possible increase in the frequency of shocks.

The COVID-19 global pandemic beginning in January 2020 has posed another big test to Indonesia's macroeconomic stability and also to our conclusion in this paper. The impact of the pandemic on the emerging market financial markets, including Indonesia's, has been similar in terms of directions of the net capital outflow in the portfolio investments. There is a chance that the magnitude of the impact on Indonesia's financial market could be much greater than the shock in 2018. We will revisit our analysis in the future in the aftermath of the 2020 COVID-19 pandemic.

## References

- [1] Bandaogo, MS & Chen, YC 2020, 'Duration of sudden stop spells: A hazard model approach', *Review of International Economics*, vol. 28, no. 1, pp.105-118. doi: <https://doi.org/10.1111/roie.12443>.

- [2] Bloomberg 2019, *Bloomberg Terminal [Online]*, *Subscription Service*, viewed at 30 December 2019.
- [3] Calvo, GA 2003, 'Explaining sudden stop, growth collapse, and BOP crisis: the case of distortionary output taxes', *IMF Staff Papers*, vol. 50, IMF Third Annual Research Conference (2003), pp. 1-20. doi: <https://doi.org/10.2307/4149912>.
- [4] Calderon, CA, Chong, A, & Loayza, NV 2002, 'Determinants of current account deficits in developing countries', *The B.E. Journal of Macroeconomics*, vol. 2, no. 1, pp. 1021-1021. doi: <https://doi.org/10.2202/1534-6005.1021>.
- [5] Caner, M, Koehler-Geib, F, & Vincelette, GA, 2009, 'When do sudden stops really hurt?', *Policy Research Working Paper 5021*, World Bank. doi: <https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5021>.
- [6] CEIC 2020, *CDMNext*, viewed at 30 May 2020, <<https://insights.ceicdata.com>>.
- [7] Cúrdia, V 2007, 'Monetary policy under sudden stops', *Staff Report 278*, Federal Reserve Bank of New York.
- [8] Cusolito, AP & Nedeljkovic, M 2013, *Toolkit for the analysis of current account imbalances*, The World Bank, <<https://openknowledge.worldbank.org/bitstream/handle/10986/17005/832480WP0WB0Cu00Box382079B00PUBLIC0.pdf>>.
- [9] Debelle, G & Faruqee, H 1996, 'What determines the current account? A cross-sectional and panel approach', *IMF Working Paper WP/96/58*, International Monetary Fund, <<https://www.imf.org/en/Publications/WP/Issues/2016/12/30/What-Determines-the-Current-Account-a-Cross-Sectional-and-Panel-Approach-2039>>.
- [10] Diop, N 2018, 'Global financial market turmoil: Why is South East Asia exposed but resilient?', *Viewpoint No. 353 [Report Number 133629]*, The World Bank, <<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/167741547153878979/global-financial-market-turmoil-why-is-south-east-asia-exposed-but-resilient>>.
- [11] Eichengreen, B & Gupta, P 2016, 'Managing sudden stops', *Policy Research Working Paper 7639*, World Bank Group, <<http://documents1.worldbank.org/curated/en/877591468186563349/pdf/WPS7639.pdf>>.
- [12] Eichengreen, B, Gupta, P & Masetti, O 2018, 'Are capital flows fickle? Increasingly? And does the answer still depend on type? Increasingly? And does the answer still depend on type?', *Asian Economic Papers*, vol. 17, no. 1, pp. 22-41. doi: [https://doi.org/10.1162/asep\\_a\\_00583](https://doi.org/10.1162/asep_a_00583).
- [13] IMF 2019, *World economic outlook: Global manufacturing downturn, rising trade barriers* (October 2019), International Monetary Fund. doi: <http://dx.doi.org/10.5089/9781513508214.081>.
- [14] Kacaribu, F, Lumbanraja, AU, Revindo, MD, Sabrina, S, Pricilia, Z & Natanael, Y 2018, 'Recent developments in Indonesia's macro-economy and trade, Q1-2018', *Economics and Finance in Indonesia*, vol. 64, no. 1, pp. 1-24.
- [15] Kraay, A & Ventura, J 1999, *Current accounts in debtor and creditor countries*, The World Bank. doi: <https://doi.org/10.1596/1813-9450-1825>.
- [16] Milesi-Ferreti, GM & Razin, A 1996, 'Current account sustainability: Selected East Asian and Latin American experiences', *NBER Working Paper 5791*, National Bureau of Economic Research, <<https://www.nber.org/papers/w5791.pdf>>.
- [17] Nedeljkovic, M, Varela, GJ, & Savini Zangrandi, M 2015, 'Indonesia - Current account assessment', *Report Number 98206*, World Bank Group, <<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/559731468187799610/indonesia-current-account-assessment>>.
- [18] Ostry, JD, Prati, A, & Spilimbergo, A 2009, 'Structural reforms and economic performance in advanced and developing countries', *Occasional Paper No. 268*, International Monetary Fund, <<https://www.imf.org/en/Publications/Occasional-Papers/Issues/2016/12/31/Structural-Reforms-and-Economic-Performance-in-Advanced-and-Developing-Countries-22594>>.
- [19] Ramayandi, A & Rosario, A 2010, 'Monetary policy discipline and macroeconomic performance: The case of Indonesia', *ADB Economics Working Paper Series No. 238*, Asian Development Bank, <<https://www.adb.org/publications/monetary-policy-discipline-and-macroeconomic-performance-case-indonesia>>.