

**INFORMAL  
SESSION TO  
BRIEF**

FO/DIS/16/68  
Correction 1

June 15, 2016

To: Members of the Executive Board

From: The Secretary

Subject: **ASEAN-5 Cluster Report—Evolution of Monetary Policy Frameworks**

Board Action:

The attached corrections to FO/DIS/16/68 (5/9/16) have been provided by the staff:

**Factual Errors Not  
Affecting the  
Presentation of Staff's  
Analysis or Views**

**Pages 6, 21 (figure 9 and para. 16), 41, 42**

**Typographical Error**

**Pages 2, 4, 28, 39, 40, 57**

Questions:

Mr. Peiris, APD (ext. 37336)  
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Going forward, the normalization of monetary policies in center economies should permit greater monetary policy independence in the ASEAN-5 economies, even with reduced recourse to nontraditional tools. Nonetheless, further evolution of the frameworks can be expected in response to rising leverage and dwindling policy buffers in the context of volatile capital flows and asynchronous monetary policies in AEs. Deepening cross-border financial integration, including in the context of the ASEAN Economic Community's goal of achieving financial liberalization and freer capital flows within the ASEAN region by [2020-2025](#), pose additional challenges.

The ASEAN-5 central banks broadly agreed with the analyses and findings of the report.<sup>1</sup> In particular, all five central banks highlighted the shift to greater exchange rate flexibility, the buildup in FX reserves, and enhanced financial surveillance post-AFC as key factors that reduced vulnerabilities and strengthened resilience to the GFC. They also emphasized the spillovers to domestic financial conditions from liquidity shocks emanating from the global financial cycle. In the more recent period of UMPs in AEs, ASEAN-5 central banks were compelled to refine their policy frameworks to strengthen monetary policy effectiveness and broaden toolkits further building on their experiences with MPPs post-AFC in order to address financial stability risks, as noted in the report.

## EVOLUTION OF MONETARY POLICY FRAMEWORKS

### A. Introduction

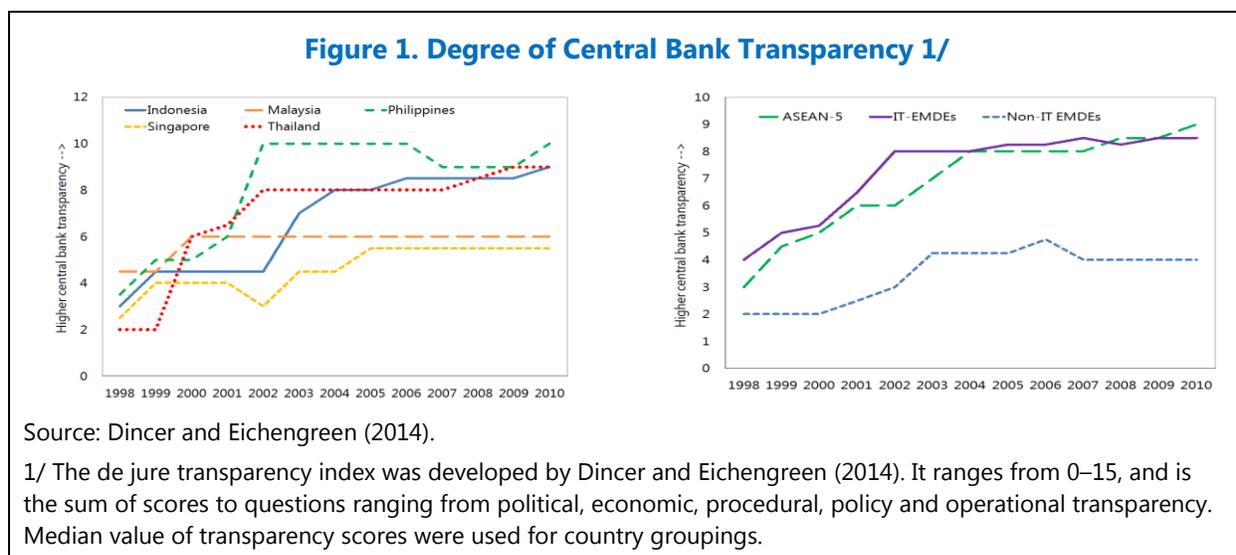
Monetary policy frameworks of the ASEAN-5 economies have on the whole performed well since the AFC, delivering both price and financial stability. The flexible inflation targeting frameworks put in place post-AFC alongside the move to greater exchange rate flexibility has served the ASEAN-5 economies well and provides lessons to other EMDEs. The region was also relatively resilient to the GFC as a result of a decade of financial and structural reforms following the AFC with refinements to the monetary policy framework playing an important role. However, the generalized reduction in global interest rates and loose liquidity conditions during the great moderation and UMP period pose a challenge to the traditional "trilemma" view as flexible exchange rates could not fully insulate economies from the global financial cycle, when the capital account is highly open.

The ASEAN-5 central banks were therefore compelled to adapt their policy framework and toolkits in order to strengthen policy autonomy and dampen risks. The policy toolkit has been broadened to MPPs to address systemic risks, and CFMs/FX intervention to manage volatile capital flows. The fallout, sources of resiliency and policy responses associated with capital outflow episodes provide valuable lessons for the current juncture where EMEs including the ASEAN-5 are facing the prospect of a prolonged period of capital outflows and risks of global financial volatility (IMF 2016a, b).

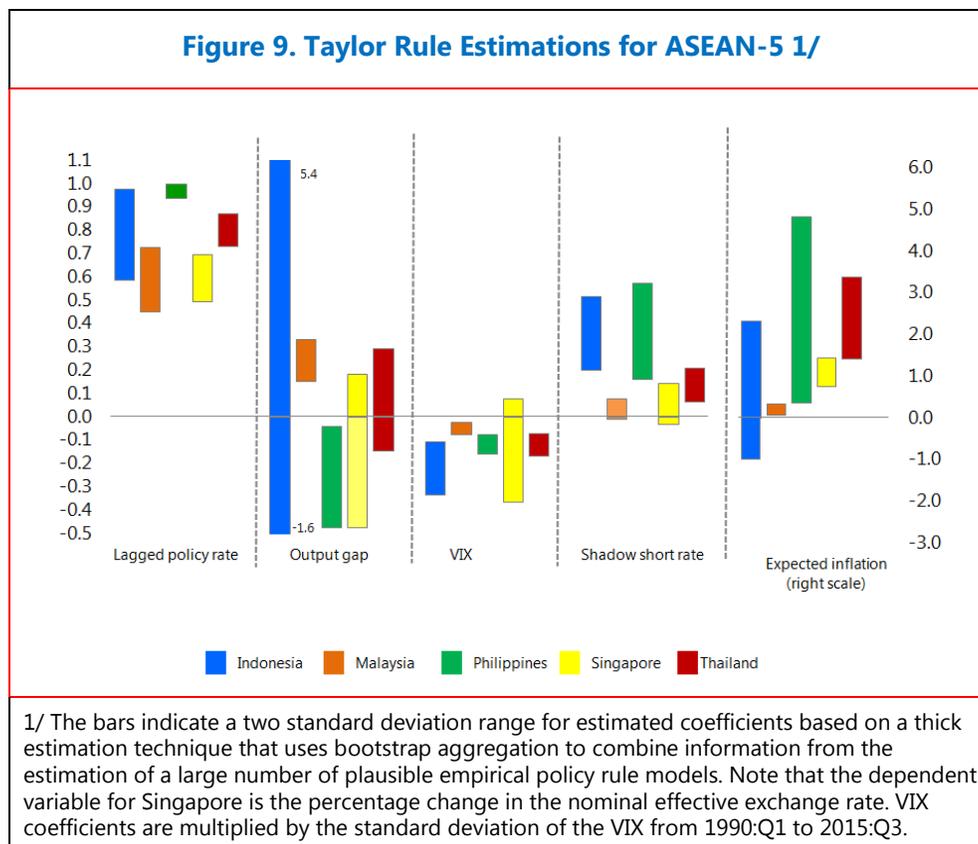
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<sup>1</sup> The analytical content and findings of this report were presented to the ASEAN-5 central banks over the past six months during their recent Article IV consultations and/or staff visits.

**2. ASEAN-5 monetary policy frameworks have evolved to embody the key characteristics of a coherent forward-looking monetary policy framework** (Appendix I). In particular, Indonesia, Philippines and Thailand adopted an inflation targeting (IT) framework while Singapore developed a more rigorous implicit IT regime. Bank Negara Malaysia adopted a fixed exchange rate regime in the aftermath of the AFC but in 2005, it moved to a flexible exchange rate regime and a monetary policy framework that focus on both price and financial stability conducive to sustainable growth but also takes into consideration the impact of monetary policy on financial stability. While the frameworks differ in terms of their exact characteristics, especially with respect to instruments, operating targets, and intermediate targets, all of the ASEAN-5 central banks generally have a clear statement of internally consistent goals of policy, the institutional arrangements that give the central bank the freedom to pursue these goals, and transparency and effective communication with respect to its goals and policy actions (see Appendix I). Price stability is the primary objective of monetary policy over the policy horizon for all ASEAN-5 central banks although many of them are also required to consider output and employment conditions as in other AEs and EMEs.<sup>2</sup> The clear independent operation frameworks also enhance the central bank's accountability for fulfilling its objectives that are well communicated to the general public and market participants through regular reports, press conferences, and dialogue. Even in the somewhat special cases of Malaysia and Singapore where the inflation and intermediate targets, respectively are not explicitly disclosed, the policy actions and intentions are well articulated to the market so that market participants have a good idea of what the central banks' tolerance levels are for inflation. The central bank transparency scores for the ASEAN-5 are comparable to other IT EMEs reflecting the strong communication and transparency practices of the ASEAN-5 central banks (Figure 1).



<sup>2</sup> External stability is also an explicit objective in Indonesia as observed in a few other EMEs (see Ostry and others, 2012).



**16. Nontraditional factors also play a role in the ASEAN-5 economies.** In previous studies, the exchange rate has been found to have an impact on the monetary policy decisions even in EMEs with IT regimes (Ostry and others, 2012). ~~With the exception of Malaysia, the coefficient estimates are on aggregate statistically insignificant, suggesting little role for the exchange rate in setting the policy interest rate.~~ The coefficient estimates are on aggregate insignificant, suggesting little role the exchange rate played in setting the policy interest rate in the ASEAN countries. Looking at the possible role of global shocks, a dummy variable for the global financial crisis is statistically significant with a large negative sign, ranging between 30 bps for Malaysia to 75 bps for Indonesia, and captures the role of external factor in affecting policy rates. Alternatively, the VIX was found to be statistically significant and suggests that a 30 point increase in the VIX (e.g., as in September 2011) has been associated with a decline in policy rates of 10–45 bps.

**17. The role of U.S. interest rates in policy reaction functions are explored in more detail given the finding of U.S. interest rate spillovers on domestic financial conditions.** Higher U.S. short-term interest rates are generally associated with higher policy rates in the ASEAN-5 countries, and this is the case for both the federal funds rate as well as the shadow-short term rate. The results suggested that U.S. shadow interest rates associated with UMPs have put significant downward pressure on policy interest rates in the ASEAN-5 economies (Figure 10). That said, there appears to be some heterogeneity in the response, with the estimated impact smaller in the more financially developed markets of Malaysia and Singapore, that may be better able to insulate asset markets from volatile capital flows. This deviation from more traditional Taylor rule implied policy rates in the ASEAN-5 countries suggests a potential structural break (Hofmann and Bogdanova, 2012) to a “new normal.”

departures in several ways using both survey-based expectations and statistical model estimates. The average ex-ante total costs for Indonesia, Philippines, Thailand, Malaysia, and Singapore are 0.6, 0.7, 0.9, 1.0 and 1.3 percent of GDP, respectively. The total cost for the median EME, on the other hand, is 0.5 percent of GDP. Total costs of FX reserve buffers for ASEAN-5 countries seem to be in line with a broad sample of countries, albeit slightly on the high side (Figure 16).

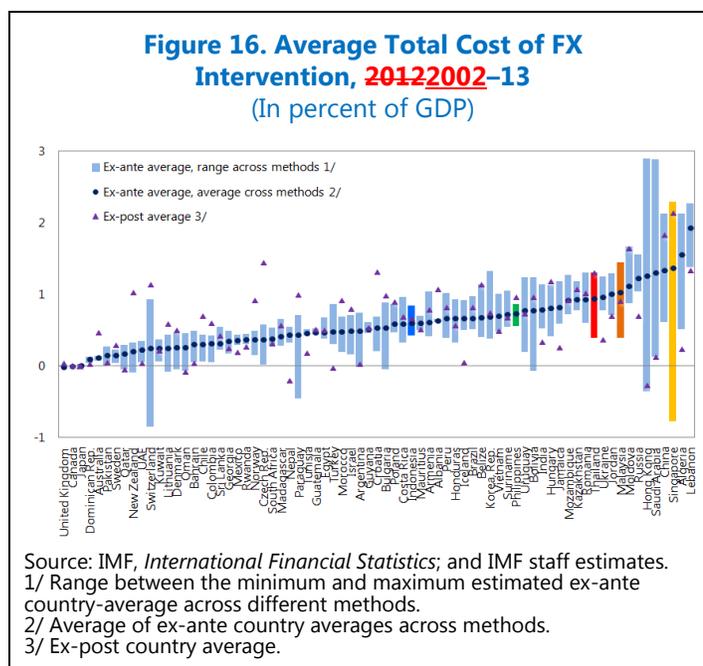
### C. MPPs, CFMs, and the Financial Cycle

#### 23. Capital inflows present

**opportunities, but they can also pose stability risks.** Capital inflows, if channeled effectively, represent an opportunity to address long-standing investment needs, such as in infrastructure (Sahay and others, 2015). However, capital inflows, especially short-term portfolio flows, need to be managed carefully in order to avoid macroeconomic and financial stability risks.

#### 24. Capital flows can give rise to financial stability risks through different channels

(IMF 2014a), including: (i) increases in short-term wholesale funding of the banking system; (ii) increases in foreign currency funding of the financial system; (iii) contributions of capital inflows to local credit booms and asset price appreciation; and (iv) credit risks from foreign currency denominated loans. While (i), (ii), and (iv) are beyond the scope of this paper, credit cycles related to capital inflows can complicate monetary management and also raise systemic risks, with implications for macroeconomic stability and the conduct of monetary policy. Asia's economic and financial history also suggests that high liquidity growth at a time of large capital inflows increases the risk of asset price boom and bust cycles (Gupta and others, 2009) that could lead to potential feedback loops between the corporate/household sectors and banks.



currency debt unlike the pre-AFC period and allowed the exchange rate to act as an effective shock absorber during the GFC. Alongside this policy shift, foreign reserves in these economies also rose significantly providing an important buffer to capital flow volatility. The authorities also made efforts to develop their capital markets to provide alternative source of financing and deepen their financial markets.

**38. That said, financial integration and volatility of capital flows has made the ASEAN-5 economies' domestic financial conditions susceptible to global financial spillovers, albeit with policy rates and liquidity management still important for monetary transmission.** The ASEAN-5 economies strong macroeconomic fundamentals and responsive monetary policy frameworks continued to maintain domestic balance despite the strong influence of global factors on domestic financial conditions. Fully sterilizing the buildup of reserve buffers active liquidity management has helped insulate aggregate credit conditions and anchor market expectations, but has entailed significant quasi-fiscal costs. The Fund's reserve adequacy metric suggests that the reserve buildup in some of the ASEAN-5 economies may have been excessive at times, especially during periods of surges in capital inflows, although in general reserves have been drawn down during periods of capital outflows, with no statistical evidence of targeting a specific level of the exchange rate.

**39. The broadening of the toolkit to MPPs was related to the risk posed to financial stability and the sectoral nature of the risk.** In an open economy, raising the policy rate to dampen overheating pressures may induce even more capital inflows and exacerbate the financial stability challenge (IMF 2014b). Besides, monetary policy has an economy wide impact, and can be too blunt to address sector-specific overheating as it will have unintended effects on other sectors of the economy. The limited evidence of generalized credit booms but the emergence of pockets of excessive leverage among households and house price inflation in the ASEAN-5 economies may explain the widespread use of sectoral MPPs and instead of monetary policy and/or countercyclical MPPs (see IMF 2015c,d).

**40. Further evolution of frameworks is likely in the conduct of monetary policy in the "new normal"** (Bayoumi and others, 2014). In the aftermath of the GFC and the corresponding UMP period, taper tantrums and asynchronous monetary policies in AEs, recent policy debates have centered on the effectiveness of conventional countercyclical instruments and the interactions with MPPs and CFMs in containing sector-specific overheating and systemic risks (IMF 2014b). The normalization of U.S. monetary policy should provide greater scope for monetary policy independence in the ASEAN-5 economies given the limited impact of conventional and UMPs of other jurisdictions. However, ASEAN-5 economies may need to consider the implementation of more countercyclical MPPs (such as [Basle-Basel III's](#) countercyclical capital requirements) and/or loosening existing MPPs and CFMs in the event of a prolonged period of lower global growth or negative shocks (IMF 2016a), balance sheet considerations permitting.

**41. Going forward, additional intermediate objectives (such as financial and external stability) will play a greater role than in the past** (Bayoumi and others, 2014). When possible, these should be targeted with additional instruments (e.g., MPPs, CFMs, and FX intervention). The use of MPPs in the ASEAN-5 economies is a case in point but new challenges may arise if, for

example, reserve buffers were to fall below critical levels and/or generalized credit and asset price booms were to materialize. The reversal of post-crisis accommodative global financial conditions poses risks to household and corporate balance sheets in the ASEAN-5 economies, as leveraged households and corporates find it increasingly difficult to service their debt (IMF 2015d). While the current exposure to FX denominated debt in the region is lower than in the pre-AFC period, the ASEAN-5 economies have relatively higher exposure compared to regional counterparts. In addition, should these measures prove insufficient, interest rate policy might have to play a role (IMF 2015f). Furthermore, when asset price and inflation cycles diverge, monetary policy may face a difficult dilemma (see IMF 2013b). The ASEAN Economic Community's move towards financial liberalization and freer capital flows within the ASEAN region by 2020-2025 may also pose additional cross border and financial sector challenges.

	Indonesia	Malaysia	Philippines	Singapore	Thailand
<b>Mandate, Objective and Strategy</b>					
1. Central bank mandate	Achieve and maintain the stable value of rupiah.	Promote monetary and financial stability conducive to the sustainable growth of the Malaysian economy.	Promote and maintain price stability; provide proactive leadership in bringing about a strong financial system conducive to a sustainable growth of the economy.	Maintain price stability; foster a sound and reputable financial centre and promote financial stability; ensure prudent and effective management of foreign reserves; and grow Singapore as an internationally competitive financial center.	Maintain monetary stability and stability of the financial and payment systems.
2. Primary monetary policy objective	Stable price of goods and services; and stable exchange rate.	Price stability	Price stability	Price stability	Price stability
3. Stated monetary policy framework	Inflation targeting (2005)	Implicit inflation targeting	Inflation targeting (2002)	Implicit inflation targeting	Inflation targeting (2000)
4. Medium-term inflation target <sup>1</sup>	Government approved inflation target 2013–2015: 4.0% ±1 percentage point (ppt)	Comfort level of about 3%	Government approved inflation target 2015–2018: 3.0% ±1 ppt	Comfort level of about 2%	Government approved inflation target 2015: 2.5% ±1.5 ppt
5. Intermediate monetary policy target <sup>2</sup>	BI inflation forecast <ul style="list-style-type: none"> <li>• 2015: below midpoint of 4%.</li> </ul>	BNM inflation forecast 2015: 2–3%	BSP inflation forecast <ul style="list-style-type: none"> <li>• 2015: below the range of 3.0% ± 1.0 ppt;</li> <li>• <del>2016–2016: midpoint-low end of 3.0%±1.0 ppt</del></li> <li>• <u>2017: midpoint of 3.0%±1.0 ppt</u></li> </ul>	<i>Explicitly stated:</i> Nominal effective exchange rate (NEER), with undisclosed location and parameters of the band and weights of currencies in NEER basket.	BOT inflation forecast <ul style="list-style-type: none"> <li>• 2015: -0.9%</li> <li>• 2016: 1.2%</li> </ul>
<b>Independence</b>					
6. De jure operational independence	Yes, with exceptional cases for lending to systemic important banks.	<del>Not full; with provisions on Cabinet recommendation in case of disagreement on a policy between BNM and Minister.</del> Yes.	Yes	Yes	Yes
7. De jure operational (i.e., inflation targets)	<del>Set by the government based on Central Bank recommendation.</del> <u>Set by the government based on Central Bank recommendation.</u> <del>With government intervention on inflation target.</del>	Yes. BNM sets its own targets.	Needs intergovernmental committee approval on inflation target.	Yes. MAS sets its own inflation targets.	Needs Finance Minister and Cabinet approval on inflation target.

	Indonesia	Malaysia	Philippines	Singapore	Thailand
<b>Policy Instruments</b>					
8. Central banks' policy rate/stance	BI policy rate, deposit and lending rates	BNM overnight policy rate	BSP overnight reverse repo (RRP) or borrowing rate, overnight repo (RP) or lending rate, and SDA rate	MAS indicates level, slope and width of NEER band every six months	BOT 1-day bilateral repo rate
9. Reserve requirement	Yes	Yes	Yes	Yes	Yes
Statutory reserve requirement ratio (RRR)	Primary RRR (7%) + secondary RRR on liquid assets (2.5%)	43.5%, commercial banks	20%, universal and commercial banks	3%, all banks	61%, commercial banks
10. Open market operations	<ul style="list-style-type: none"> <li>• Issuance of BI certificates</li> <li>• Repo and reverse repo transactions on government securities</li> <li>• Outright sales/purchase of government securities</li> <li>• Foreign exchange buying/selling against the rupiah</li> </ul>	<ul style="list-style-type: none"> <li>• Uncollateralized direct borrowing</li> <li>• Repo and reverse repo of government securities</li> <li>• Issuance of BNM notes</li> <li>• Outright sales/purchase of government securities</li> <li>• Foreign exchange swaps</li> </ul>	<ul style="list-style-type: none"> <li>• Repo and reverse repo transactions on government securities</li> <li>• Outright sales/purchase of government securities</li> <li>• Foreign exchange swaps</li> </ul>	<ul style="list-style-type: none"> <li>• Issuance of short-term MAS bills</li> <li>• Repo and reverse repo transactions on SG securities</li> <li>• Foreign exchange swaps</li> </ul>	<ul style="list-style-type: none"> <li>• Issuance of BOT bills</li> <li>• Bilateral repo transactions on purchase/sale of securities</li> <li>• Outright sales/purchase of primarily BOT and government bonds</li> <li>• Foreign exchange swaps</li> </ul>
11. Standing facilities	Deposit and lending facilities	Deposit and lending facilities	<ul style="list-style-type: none"> <li>• Fixed-term deposit (Special Deposit Accounts) facility</li> <li>• Lending (rediscounted rates) facility</li> </ul>	<ul style="list-style-type: none"> <li>• Overnight deposit and lending facilities</li> <li>• Overnight RMB foreign currency lending facility</li> </ul>	Deposit and lending facilities
<b>Transparency and Communications</b>					
<i>Explanation on:</i>					
12. Monetary Policy Objective	Yes	Yes	Yes	Yes	Yes
13. Monetary Policy Framework	Yes	Yes	Yes	Yes	Yes
14. Intermediate target	Yes, inflation target	Yes, short-term interest rate movements	Yes, inflation target	Yes, direction of NEER policy band	Yes, inflation target
15. Decision making process	Yes	Yes	Yes	Yes	Yes
16. Rationale/basis of monetary policy decisions/stance	Yes	Yes	Yes	Yes	Yes

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