Foreign exchange policy and intervention under inflation targeting in Thailand

Bank of Thailand

Abstract

Amid the evolving global financial landscape, different speeds of economic adjustments and spillovers of unconventional monetary policy, central banks in emerging economies, including Thailand, have encountered volatile capital flows and greater difficulties in maintaining economic stability. The conduct of exchange rate policy has been particularly challenging in these economies. Given the changing economic and financial structures, a comprehensive review of the policy framework, the use of tools and the design of policy operations is needed to justify their appropriateness. This paper describes Thailand's current exchange rate policy framework and its objectives, which have shifted in recent years. It also discusses the central bank's experiences with undertaking foreign exchange operations under an inflation targeting regime, as well as considerations on capital flow management measures with regard to their effectiveness. In addition, the paper addresses the implications of the FX intervention and sterilization on the economy, the financial system and the Bank of Thailand's balance sheet.

Keywords: Bank of Thailand, exchange rate policy, foreign exchange market, intervention, sterilization, instruments

JEL classification: O24, G23

1. The recent evolution of the exchange rate policy framework in Thailand

Economic context

After the Asian financial crisis, the Thai economy recovered and rebuilt its productive capacity, while proving resilient to numerous shocks. Thailand's prevailing growth model had relied on labour-intensive export-led growth dependent on small and medium-sized businesses with limited understanding of how to protect against exchange rate fluctuations. Against this backdrop, the Bank of Thailand (BOT) has maintained a managed-float exchange rate regime. The intervention framework is focused on curbing short-term volatility and maintaining regional competitiveness, while keeping the exchange rate aligned with economic fundamentals in the medium and long term. However, there are signs that this previous export-driven growth model is in decline.

Rising global competition has forced Thailand to move on to a new growth model based upon competitive value-added production. It is widely accepted that exchange rate flexibility can potentially facilitate the transition to this new reconfiguration, for while it is no panacea, it is one factor, among many, that supports long-term growth and stability. A flexible exchange rate is crucial for other determinants of long term growth: abundant factors of production, strong industrial policy, political stability, private sector efficiency, financial development and macroeconomic stability. For example, the exchange rate's role as a major price signal can support private sector efficiency by strengthening market incentives for adaptability and productivity. In addition, exchange rate flexibility is a key step for deepening and broadening foreign exchange (FX) markets, as greater incentives for market agents to form views and manage exchange rate risks promote market activity.

In this changing economic context, the exchange rate management framework in Thailand since 2011 has moved towards allowing more flexibility in exchange rate movements determined by market fundamentals—an approach that supports the desired structural transformation of the economy.

Policy consistency under inflation targeting

As the exchange rate is allowed to move more flexibly under the precondition of greater financial openness and monetary policy autonomy, policy will become more consistent under the trilemma principle. It should be noted that policy consistency under the trilemma does not imply policy optimality for a particular country. Where the inflation targeting framework has been chosen for its own merits, it is clear that monetary policy independence is called for to preserve its effectiveness.

Increasing financial openness would require the exchange rate to be flexible for the following reasons. First, where domestic prices have been explicitly targeted, the presence of nominal rigidities would prevail: thus the flexibility of the exchange rate would be needed as a price variable to absorb shocks. On the other hand, where the exchange rate is kept rigid, external adjustments may instead affect the real economy. Second, under the interest parity condition, the exchange rate is one of the channels of monetary policy transmission. Allowing it to move freely could help strengthen this channel, enhancing policy effectiveness. Thus, with a flexible

exchange rate acting as an absorber of external shocks, the policy rate under the inflation targeting framework can be more focused and can more effectively accommodate domestic shocks. A research study at the BOT[1] indeed found that financially open countries with inflation targeting regimes tend to benefit more with exchange rate flexibility, resulting in long-term sustainable growth.

2. Motivation for FX intervention

Despite the benefits of a flexible exchange rate regime for long-term economic growth and stability, as discussed above, in certain circumstances FX intervention to avoid excessive exchange volatility may be effective and beneficial. During episodes of excessive capital inflows, exchange rate interventions have some capacity to trim extreme movements in the currency and reduce the duration and extent of the exchange rate's deviation from the equilibrium.

The main objectives of FX intervention by the BOT have shifted in recent years. Initially, the aim was to curb excessive exchange rate speculation. The objectives have recently focused more on discouraging sharp capital inflows from core economies during periods of unconventional measures, and on maintaining external competitiveness. In certain periods where the country was faced with massive capital inflows, other measures were implemented as well, such as the Unremunerated Reserve Requirement (URR).

From late 2006 until early 2008, the BOT imposed the URR on short-term capital inflows. Financial institutions were required to withhold 30% of foreign currency bought or exchanged for the Thai Baht (THB), though transactions related to trades in goods and services, or to repatriation of investments abroad by residents, were exempt. After one year, customers whose foreign currencies have been withheld can request refunds by submitting evidence proving that the funds have been in Thailand for at least one year. The intention of the measure was to discourage short-term capital inflows and reduce speculation on appreciation of the THB, since the currency's volatility and appreciation had been increasing markedly.

However, the effectiveness of the measure was short-lived. The URR's effect diminished as short-term capital inflows were replaced by an accelerated flow of FX selling by residents, which provoked further appreciation of the THB. Thus, capital flow management cannot completely replace direct FX intervention.

Instead of introducing measures to halt inflows, the BOT has since 2010 started relaxing regulations in order to encourage capital outflows. The objective is to restore the balance between capital inflows and outflows in the market, creating natural counterflows while helping to promote outward direct investment (ODI) and encouraging Thai investment abroad.

[1] Ananchotikul, et al., "The Future of Monetary Policy: The Role of Financial Stability and Exchange Rate," BOT Discussion Paper 2010.

3. BOT practices in FX intervention: methods and tactics

Like other central banks, the BOT normally uses both verbal and actual intervention when THB movement is not in line with BOT FX policy as determined by the Monetary Policy Committee (MPC).

The actual interventions are outright spot or outright forward USD/THB transactions executed by selling or buying USD against THB.

The BOT intervenes in the interbank FX market, both onshore and offshore, using designated agent banks in order to maintain anonymity. In practice, the BOT generally intervenes during the Asian time zone of high market liquidity.

So far, the BOT has never employed FX derivatives in conducting FX intervention. However, the use of FX derivatives for intervention has provoked increasing interest for its cost effectiveness under some market conditions.

The BOT FX intervention strategy focuses on keeping USD/THB volatility at an acceptable level, which allows economic agents more time to adjust smoothly to upcoming volatility. Also, the BOT monitors FX misalignment vis-à-vis economic fundamentals; i.e. whether the exchange rate deviates markedly from an equilibrium level determined by economic fundamentals.

Thailand, like most Asian countries, is the recipient of capital inflows resulting from unconventional measures in core countries. Since 2009, the BOT has intervened in the FX market from time to time. In some cases, where the capital inflows were huge but underlying Thai economic fundamentals were still sound, the BOT has adjusted its intervention strategy accordingly, allowing the THB to strengthen gradually.

4. Effectiveness of intervention

During periods of active intervention, the BOT's Enterprise Risk Management Department conducted empirical studies on the effectiveness of intervention. A recent study in 2009 indicated that FX intervention had a positive impact in smoothing the USD/THB path. However, it remains inconclusive as to whether FX intervention could, with a high degree of statistical confidence, be expected to reverse a general USD/THB trend.

In general, persistent or occasional intervention has neutral impact on the market's expectations regarding the future trend of the exchange rate, given the condition that FX flows are normal flows and not speculative ones. However, in some cases FX intervention may be capable of influencing the perceptions of market participants – speculators' perceptions in particular – where FX intervention has been designed to surprise the market.

Both persistent and occasional FX intervention can impact exchange rate expectations to some degree, generally when the underlying economic fundamentals are in line with the FX movement. In the current climate of excessive global liquidity seeking higher yields in the EM environment, persistent FX intervention would be less effective in shaping exchange rate expectations.

The BOT has never announced any FX operations beforehand. The effectiveness of such pre-announcement in shaping exchange rate expectations would very much

depend on underlying economic fundamentals. If the country's current and expected fundamentals are in line with suspected intervention, expectations could be shaped easily. Otherwise, such a tack might pose risks or create doubt in the market. However, following a "walk the talk" strategy may involve a trade-off between credibility and costly intervention, especially when market conditions are inappropriate.

Domestic consequences of FX intervention

Macro implications: implications for growth and macroeconomic conditions

For emerging markets that rely on export-led growth, foreign exchange intervention to smooth currency movements and maintain export competitiveness – especially in the face of strong capital inflows – may help mitigate short-term impacts on growth. However, intervention to stabilize the exchange rate has often incurred the expense of greater volatility in other macroeconomic variables such as domestic interest rates, international reserves, and other price variables. Nonetheless, excessive macroeconomic volatility resulting from exchange rate management has not been much of an issue in Thailand's case during the past decade. According to an independent evaluation,[2] under the inflation targeting and managed-float exchange rate regime during the 2000–2010 period, Thailand's price stability performance was favourable in comparison with past records and with other countries in the region. More importantly, the study noted that price stability has not been achieved at the expense of economic growth.

However, taking into account both longer-term economic considerations and the large expansion in international reserves during the past years, it must be noted that further intervention would be increasingly costly for the economy as a whole, as it would delay structural adjustments that are needed to enhance the economy's long-term economic potential.

Financial impacts: foreign exchange market development

A regime based on greater exchange rate flexibility creates higher FX volatility for market participants than did the previous system, which was based on a basket of currencies. To manage FX risk, banks in Thailand offer a wide range of competitively-priced FX hedging products such as forwards, options, FX swaps and cross-currency swaps. The FX hedging ratio, on average, increased from 19% in 2005 to 35% in 2012, reflecting the width and depth of the FX hedging market in Thailand. Thai corporations have learned that their current profit margin cannot fully absorb higher FX volatility; hence, there is an increased demand for hedging FX exposure. The BOT has also collaborated with commercial banks in promoting the use of FX hedging products, by arranging seminars and providing related documents to educate the corporate sector, especially the small and medium enterprises (SMEs). Recently, in June 2012, the BOT coordinated with the Thailand Futures Exchange (TFEX) to launch the country's first currency futures as a new alternative for FX hedging.

[2] Stephen Grenville and Takatoshi Ito (2011), "An Independent Evaluation of the Bank of Thailand's Monetary Policy under the Inflation Targeting Framework, 2000–2010". http://www.bot.or.th/English/MonetaryPolicy/Pages/Assessment.aspx

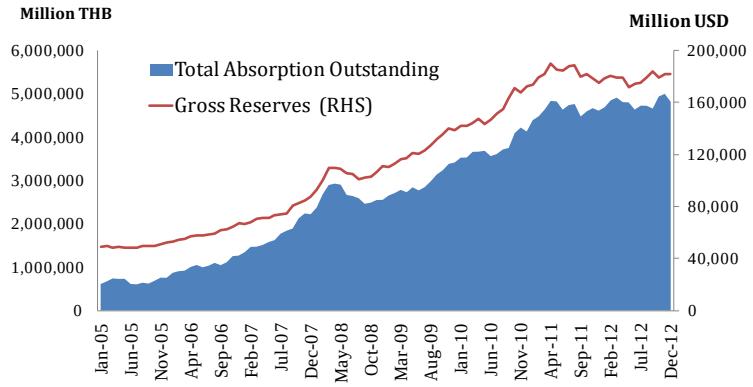
The market for FX hedging in Thailand is deep and liquid, with high transaction volume and competitive prices, and with products up to 1- to 3-year tenors being quoted. The BOT plays a major role in the FX swap market, absorbing THB liquidity while injecting USD liquidity to the market up to tenors of 1 year. The BOT's FX swaps book is roughly 23–24 billion USD as of end-January 2013. The presence of the BOT in the FX swap market significantly helps banks to efficiently manage their USD liquidity positions, which are driven by customers' FX hedging demand.

5. Sterilization: choice of instruments and implications

The choice of instruments

Over the past decade or so, continued purchase of foreign exchange to moderate the speed of currency appreciation has increased the obligation to sterilize excess liquidity. Under the inflation targeting regime, excess THB liquidity created by the purchase of USD needs to be fully sterilized to ensure that short-term money market rates move in line with the policy rate set by the Monetary Policy Committee (MPC). Sterilization obligations grew rapidly, especially in 2009–2010 following the Lehman crisis, increasing by over 50 per cent between end-2008 and end-2010. Nevertheless, the obligation has stabilized since the second half of 2011, and is in line with a more balanced capital flow. (Chart 1)

Total absorption instruments outstanding — Chart 1

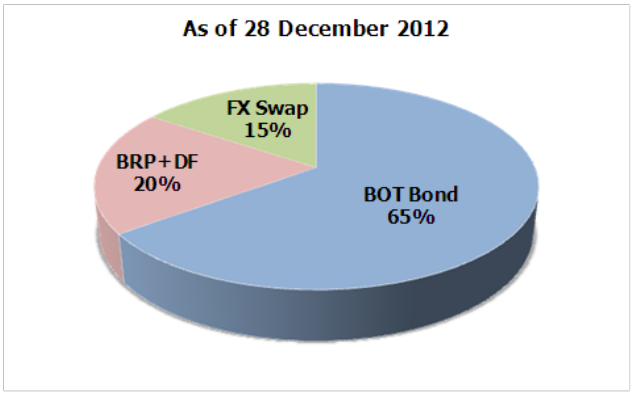


Source: Bank of Thailand

The BOT has employed several instruments to sterilize excess liquidity. The main instruments used are bilateral repurchase operations, issuance of BOT bills and bonds, and FX swaps. BOT bills and bonds represented the largest share of this mix – comprising over 60 per cent of the total instruments outstanding (Chart 2).

The allocation of absorption instruments is designed to take the effectiveness of monetary policy transmission and financial market developments into account. The fact that the largest allocation was to BOT bills and bonds was deliberate. As the obligation level increases, BOT bills and bonds have become an increasingly important sterilization instrument.

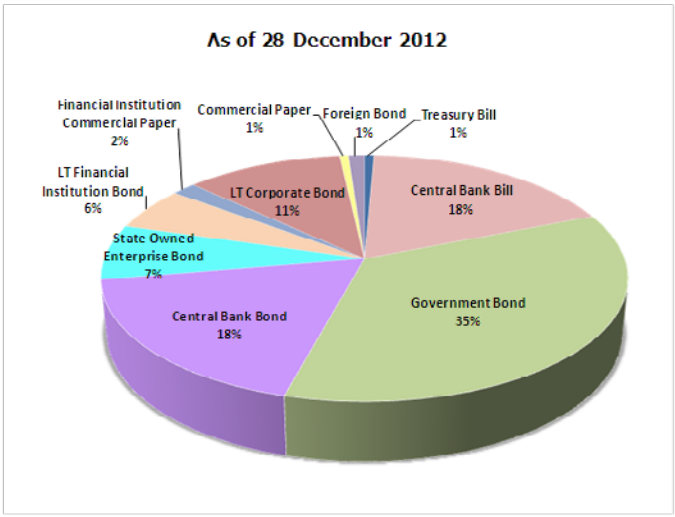
Proportion of total instruments outstanding — Chart 2



Source: Bank of Thailand

While other absorption instruments have limited and shorter tenors, and too much concentration could affect short-term market rates and hinder monetary policy transmission, the issuance of BOT bills and bonds is more flexible. This is because the BOT can issue a variety of bonds and bills at varying tenors, bearing in mind that it also intends to foster bond market development by providing a regular supply of bonds (see Table 1). The BOT and the Ministry of Finance are major issuers of domestic bonds, accounting for over 70 per cent of the total outstanding (Chart 3). Hence, close collaboration between these two main issuers is essential.

Domestic bonds, by issuer — Chart 3



Source: Thai BMA

BOT bond issuance plan — Table 1

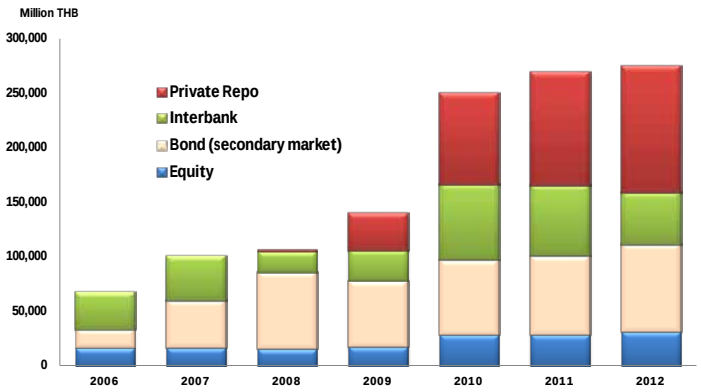
	Type of bond	Issue size per auction (Millions of bahts)	Outstanding per issue (Millions of bahts)	Number of issues per year
1.	Discount Bonds			
	Cash management bills	30,000 – 70,000	30,000 – 70,000	50 – 52
	1-, 3- and 6- month	25,000 – 35,000	25,000 – 35,000	50 – 52
	1-year	30,000 – 50,000	90,000 – 150,000	4
2.	Fixed-coupon bonds			
	2- and 3-year	20,000 – 40,000	60,000 – 120,000	2
3.	Floating-rate bonds			
	3-year	10,000 – 15,000	60,000 – 90,000	1

Implications

Implications for financial market developments

The increasing obligation to sterilize helps facilitate overall financial market developments in both money and bond markets. An increasing volume of bilateral repurchase (BRP) transactions has contributed to rapid development in the private repo market. With this in view, the BOT has designed the BRP to conform to international market practices – for example, it employs initial haircuts, margin calls and marking to market of collaterals. The private repo market has grown rapidly, with trading volume in 2011 more than three times the 2009 volume (Chart 4).

Average daily trading volume by market — Chart 4



Source: Bank of Thailand, SET and Thai BMA

The issuance of BOT bonds has contributed to a more complete range of securities. The BOT carefully plans the types of bonds it issues to fill in the tenor gaps, i.e. by issuing only shorter-term bonds with tenors that do not replicate the government's. With a wider range of products to choose from, the domestic bond market has increasingly attracted investors of all types – both local investors and

non-residents. Participation by foreign investors has increased from around 5 per cent in 2010 to 11 per cent as of end-2012.

Implications for the BOT's balance sheet

In the aftermath of the Lehman crisis, the continued weakness of the USD and interest rate differentials have adversely affected the BOT's financial position. Differences in the speed of recovery between advanced countries and emerging Asia led to widening interest rate differentials. While the US and European economies require prolonged accommodative monetary policy with extremely low interest rates, East Asian economies have put the crisis behind them and need to raise interest rates to combat growing inflationary pressure.

Given that foreign exchange intervention leads to an accumulation of international reserves, held primarily in G4 currencies with low interest rates, while interest rates on sterilization obligations are consistently higher, this combination results in a negative carry. On top of this, continued appreciation in East Asian currencies also leads to a loss of valuation. Both negative carry and valuation loss have contributed adversely to the BOT's financial position.