SEACEN HIGH-LEVEL SEMINAR ON GLOBAL LIQUIDITY AND IMPACT OF CAPITAL FLOWS ON EXCHANGE RATES IN EMERGING ASIA

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SUMMARY AND SEMINAR PROCEEDINGS

By

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Synopsis

Since the Global Financial Crisis (GFC), Emerging Asia has been affected by a number of major global developments, such as Quantitative Easing (QE) in the major advanced economies (AE), the retrenchment of global banks, the reassessment of emerging market economies (EME) by global financial markets against the backdrop of heightened uncertainties in the real economies.

The result has been changing capital flows. These ranged from a surge of inflows into EMEs in the immediate aftermath of the GFC, to a reversal in mid-2013 and early 2014 when signs of a tapering of QE in the US emerged. Recently, capital has been flowing back into selected emerging markets. The resulting exchange rate volatility and domestic liquidity management in recipient countries triggered a plethora of policy reactions.

The policy reactions varied, depending primarily on countries' macroeconomic fundamentals. The choice of policies was mainly determined by the idiosyncratic functioning of countries' economies as well as national priorities. The policy choices were exchange rate policy (accepting or resisting exchange rate changes) or balance sheet policy (accepting higher foreign exchange reserves or providing foreign exchange reserves during outflows). Monetary policy stance could stay unchanged or react to capital inflows. Sterilization and issuing central bank securities for such operations was widely used as well as reserve requirements (RR) on foreign liabilities. Bearing in mind the possible damage of increased liquidity to domestic financial stability, central banks resorted to tightening/loosening of micro and macro-prudential regulations. Emerging markets in Asia (EMA) were leading in the application of macro-prudential instruments. As last resort, some countries imposed capital controls to drive a wedge between international

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and domestic interest rates. These comprised price-based measures as well as administrative controls.

1. Session 1: Asia's Response to Capital Flows since the GFC

The keynote address outlined the fallout of QE as well as policy measures taken in EMA. Similar to other EME, the EMA region was also exposed to a series of external financial shocks. These shocks created sharp swings in capital flows with significant impact on exchange rates and domestic financial conditions. Policymakers have been developing a framework for managing capital flows to maintain macroeconomic and financial stability. At present they need to prepare for further QE tapering and an eventual interest rate hike.

Capital flows bring benefits as well as bear risks for EMA. The benefits are greater economic opportunities and cushion against shocks. They allow a smoothing of economic cycles as well as a diversification of risks. The risks are loss of macro-economic stability, damage to the financial system as well as the risk of sudden reversals. Procyclical capital flows aggravate these risks. Most recently capital flows have become more volatile, posing serious challenges for macro-economic management in EMA.

Advanced economies can cushion these shocks through fully flexible exchange rates, because of deep, liquid and broad financial markets. Australia also shared this view that a freely floating exchange rate is a valuable shock absorber. It has run current account deficits (financial account surpluses) for most of its history, driven by private savings and investment decision. Although this fundamental pattern is no cause for concern, RBA keeps a close eye on signs of potential distortions or vulnerabilities.

While this approach is suitable for AE, this cannot be replicated in EMA, as financial markets are shallow, not resilient enough to large fluctuations of capital flows. They are vulnerable to wide exchange rate fluctuations due to lack of deep foreign exchange markets, risk tolerance and industrial diversification. Exchange rate flexibility can be problematic, as an appreciation can cause loss of competitiveness, and depreciation can aggravate an external debt problem as well as lead to a build-up of inflationary pressure.

Therefore, EMA countries resort to a combination of policy measures to cushion the shocks. They include macro-economic measures, such as special reserve requirement and sterilization, micro-prudential measures such as limits on banks' external borrowing, macro-prudential measures, such as limiting credit growth, capital flow measures, such as driving a wedge between domestic and international interest rates and finally structural measures to strengthen the supply side of the economy. EMA have applied macro-prudential measures more extensively than Latin America, while they used capital flows measures less extensively than Latin America.

The GFC and the QE measures adopted in its wake created global financial volatility. Immediately following the GFC, outflows from EMA caused forex liquidity problems in some countries like Korea, where swap arrangements with the FED calmed the markets. The adoption of QE by the FED led to capital flowing into EMA, leading to appreciation pressure, which some called 'currency war'. The first signal of tapering in 2Q2013 generated outflows from vulnerable EMA. QE had a larger impact on the financial markets than on the real sector, creating a build-up of financial imbalances. The impact of QE1 was larger than that of QE2.

In preparing for the beginning of tapering of QE, EMA are concerned about capital outflows, causing currency depreciation and potential currency crisis. The so-called 'fragile five', two out of which are in EMA, have been particularly vulnerable. Countries which cover their CAD not by FDI but by portfolio inflows are vulnerable as are those with high external indebtedness of the government and corporate sector. In order not to be perceived as 'fragile' by international financial markets, countries should reduce their macro-economic and financial imbalances as well as adopt an appropriate policy mix. In addition, deeper financial markets provide resilience to capital flow fluctuations.

There is scope for regional coordination, such as macro-financial surveillance through AMRO, coordinated capital flows controls as well as exchange rate coordination. Financial safety nets, such CMIM, currency swaps with the FED as well as coordinated positions with the IMF and other international policy making organizations. All this is a far cry from participating in decision making in the de-facto global central bank, the FED. The best result could be that the FED designs monetary policy from a global perspective, not simply pursuing domestic interests.
In a liberalized financial environment, the policy responses to capital flows are rather limited and the mix has to be prudently balanced between exchange rate policy, balance sheet policy and monetary policy measures. These can be supplemented by micro and macro-prudential measures as well as capital flow controls. The width and depth of financial system development as well as the degree of financial integration with the rest of the world profoundly affect the choice of policy mix. Deregulation and liberalization of financial markets provoke instant reaction of financial markets to policy changes.

2. Session 2: Countries' Policy Responses to Changing Capital flows

Given the open nature of EMA, it is undeniable that developments in AE have transmitted financial contagion across geographical borders and different asset classes to this region, resulting in potential financial instability. Countries have reacted differently, choosing a policy mix according to their fundamentals as well as national priorities.

Indonesia outlined the capital flow developments since the GFC. It has received a steady flow of FDI, but recently increasingly portfolio flows which can be reversed easily. The most volatile component has been the banking flows. Regarding policy responses, BI reiterates the 'Impossible Trinity', monetary policy, exchange rates and capital account controls. It stresses applying an instrument mix, consisting of monetary policy measures, macro-prudential measures, supervisory measures and finally capital control measures. BI also stresses that the central bank's task should not be limited to monetary stability but needs to include financial stability. The policy core is the IT regime, which should be supplemented by management of the exchange rate.

The catalogue of policy measures taken by BI since the GFC contains RR on INR as well as forex, minimum holding periods for BI bills, limiting loan-to-value ratios as well as an increase of the down payment ratio, impose limits on off-shore borrowing by banks, as well as limits on the loan-to-deposit ratio. In addition, its plans to pass a new Exchange Act which will give BI greater powers in monitoring as well as regulating forex transactions. So far Indonesia has scored well in comparative indices on capital account openness and containing controls.
India suffered from tapering in mid-2013 in the expected way, outflows of USD 13bn, marked depreciation of the INR, declining stock market index and rising interest rates. RBI reacted by tightening monetary policy as well as loosening various measures, such as the lowering the incremental deposits, liberalizing FDI and banking inflows, providing USD swap facility for banks. As a result of these policy measures, the forex reserves have increased and the INR has kept within the set band. The recent election result has also strengthened the market's confidence in India's economy.

Chinese Taipei noted the increasing share of foreign portfolio investment and foreign currency deposits in capital flows which has been the main driver of volatility of the exchange rate and the stock market. In comparison, the volatility of the NTD against the USD and real exchange rates has actually declined during the recent period and was lower than in other countries of the region. The short-term policy measures of the CBC are enhanced monitoring of the capital inflows, raising the RR on deposits by non-residents, limiting investment of non-residents in government bonds as well as setting a USD cash collateral requirement for securities borrowing.

Thailand also noted the massive and volatile portfolio inflows since the GFC, which resulted in exchange rate swings. Comparing capital outflows since tapering emerged, these were less in early-2014 than in mid-2013. However, they resumed after the recent political turmoil. BOT also specifies exchange rate management under an IT regime: it should curb excessive volatility as well as correct misalignments. The exchange rate management tools applied by the BOT ranged from measuring exchange rate pressure, central bank communication to various forex operations. Use of a flexible exchange rate serves as automatic stabilizer and intervention should only curb extreme movements.

The longer term policy measures to be pursued by the BOT are an enhanced monitoring of capital flows, encourage use of hedging instruments, encourage use of local currency, further developing financial market instruments and strengthen the policy dialogue among central banks.

3. Session 3: Global Liquidity and Impact of Capital Flows on Exchange Rate

This session focused on the concept of global liquidity, its measurement, drivers of liquidity (ease of financing) and the transmission mechanism. It addressed channels of dispersion of global liquidity through different types of capital flows, the volatility of capital flows, from the surge of inflows into EME after the GFC to recent reversals and the impact of capital flows on exchange rates and domestic policy for EME in general and EMA in particular. Finally, generic policy options were screened.

The concept of global liquidity in an environment of liberalized capital flows has attracted the attention of policy makers not only in AE but also in EME. Global market liquidity as such is very evasive and difficult to gauge. Liquidity can be assessed by price and quantity measures. Price indicators provide information on the conditions at which liquidity is provided in the market, while quantity indicators capture how far such conditions translate into the build-up of potential risk.

In line with other liquidity definitions, global liquidity is seen as the ease of financing as well as the factors which drive the supply of funding. Similar to other liquidity definitions, it cannot be measured easily, one can only see ‘its footprints’. Before tackling the measurement problem it is useful to distinguish the two components, private liquidity and official liquidity.

Of these two components, official liquidity which is exogenous to conditions in the financial system is easier to grasp and to measure. It is domestic currency and foreign currency and could be measured by adding up the money supply (such as M2) of major countries. In contrast, private liquidity is created by the operations of banks, non-bank financial institutions and capital markets. It is endogenous to the financial system. It is difficult to measure, procyclical and correlated across markets.

The drivers of liquidity, and thus of ease of financing is determined by the financial conditions in major financial centers. They include the monetary policy of major central banks (US, UK, EU, JP), the risk appetite (another concept difficult to measure) of market participants, the liquidity policies by major central banks, macroprudential policies as well as financial regulation and finally financial innovation.

Global liquidity can be measured by price measures (level versus spreads), quantity measures (stocks versus flows) and either on the asset side or liability side. Both, the BIS and the IMF have provided approaches to measuring liquidity. The BIS measurement consists of global credit aggregates, supplemented by price and quantity indicators. The main indicator is thus based on the asset side, such as credit to non-financials in a given currency outside the currency issuing country. The supplementary indicators include short-term interest rates, indicators of funding liquidity (such as CDS premia) and indicators of risk appetite (such as VIX). The IMF indicators are similar but presented differently, including historical distribution and a 'dashboard' or heat map.

These measurements are a modest start in view of the serious limitations. These are the lack of a theoretical basis, data availability and timeliness, aggregation problems and a constantly evolving financial system.

There are driving forces which spread the global liquidity to different locations. The main ones are: economic growth and the demand for credit, the search for cheap funding, leading to flows of funds, the reaction of financial markets to asset prices changes, including exchange rate changes and finally the relative monetary stances, the deviation from the monetary policy in peer countries, usually the AE.

The transmission of global liquidity into EME passes through 5 observable channels, 3 price channels and 2 quantity channels. The price channels are: because of global liquidity central banks in AE as well as EME set lower policy rates than justified domestically (by Taylor rule). As there is a high degree of substitution across bond markets and yield curves, the bond purchases by central banks in AE and EME affect the portfolio of private bondholders who make adjustments across different kinds of bonds, currencies and the yield curve.

Unconventional monetary policy leads to reactions from market participants, causing exchange rate movements not explained by fundamentals. Market participants either monitor the relative size of balance sheet of central banks or the interest differential. The latter triggers carry trade. Resistance to currency appreciation leads to expanding central bank balance sheets, causing a further market reassessment.

Expected currency appreciation in EMA has led to a substitution of local currency debt by USD borrowing. Most of the funding in USD is provided by non-US banks and corporates who take on a surrogate role of intermediary. This hike in international bond issues by EME corporates has led to capital inflows into EME, which carry various risks (currency risk, maturity risk) in case of reversals.

Net capital flows are one source of demand for the EME domestic currencies. The exchange rate is the price that equilibrates global supply and demand for a currency. This simple relationship is complicated by offsetting trade and income flows, by expectations, by the sensitivity of the exchange rate to changes in demand and supply and to the composition of capital flows.

Monitoring the capital flows, previously the current account balance was of paramount importance. Since the GFC, the focus has shifted to the gross financial flows, the stocks of debt of public and private sectors (households and enterprises) and the cross border financial flows. Whereas previously the flows channeled through the banking sector were most important and well monitored, since the GFC flows through capital markets, such as bonds and stock markets have become the major channel of capital flows.

In searching for the source of USD funding, the sharp increase of banks' reserves at the FED is crucial. Banks, both US and non-US banks have boosted their reserves with the FED as a result of QE. However, US banks have been cautious in on-lending their funding to borrowers in the US and abroad. On the contrary, non-US banks have used the USD funding for on-lending to borrowers in EME, notably, in Latin America and EMA.

Nevertheless, the main drivers of on-lending of USD funding have been the global institutional and retail investors, operating in major financial centers as well as off-shore. The additional USD liquidity, made available through the government bond purchases of the FED, has been used to buy international bonds issued by corporates from EME. These in turn have deposited the proceeds from the bond issues with their banks in EME, leading to upward exchange rate pressure and growing central bank balance sheets. The main inventive for the behavior of global investors is the search for yields; for the EME issuers the main incentive is cheaper borrowing.

As predicated, the surge in capital inflows in the aftermath of the GFC has been followed in mid-2013 and at the beginning of 2014 by a reversal of capital inflows. These have been triggered by the FED discussion on 'tapering' of the QE or the prospect of a return to a normal monetary policy. The massive sell-off of EME bonds and equities during these episodes has resulted in depreciating EME currencies as well as a loss in foreign exchange reserves. This has led to a credit squeeze and falling asset prices in EME.

All sectors of the EMEs were affected by these adjustments. Banks booked losses on their bond portfolios, mitigated somewhat by improved yields. However, pressure on households and corporate borrowers might undermine banks' profitability in the near future. Corporates might be affected by tightening credit conditions as well as by the depreciating EME currencies in servicing their USD liabilities. The slowdown in credit might cool an already buoyant housing market in Asia. However, the increased household borrowing as well as the level of household indebtedness might pose a problem.

Policy responses to global liquidity call for a consistent framework that considers all phases of global liquidity cycles, countering both surges and shortages. Strengthening micro-prudential as well as macro-prudential oversight are the pillars of domestic measures. On an international level, public liquidity can make up for the malfunctioning of private liquidity. Shortfalls can be bridged with swap arrangements among central banks. Policy reaction by central banks should be based on communicating their intentions, paying attention to sustainability over time while monitoring risks and resilience.

The policy recommendations for the reversal of capital flows are a loosening of domestic liquidity provision, loosening of macro-prudential measures, attracting more capital inflows and supporting bond and equity markets by domestic investors. In addition, close monitoring of financial system vulnerabilities are recommended (such as risk premia and behavior of asset managers), as well as stress testing exercise based on the recent periods of retrenchment.

4. Session 4: Policy Responses to 'Tapering'

Fear of tapering have, in many Asian countries led to more manageable capital flows and interest and exchange rate levels closer to domestic needs. Bearing in mind that most Asian countries have liberalized the financial sector for all practical purposes, the 'impossible trinity' limits the policy option for central banks.

Allowing exchange rates to move more freely might trigger financial markets reactions leading to higher exchange rate volatility. This might negatively impact export and overall growth, and in case of sustained depreciation stoke inflation. Putting the emphasis on balance sheet policies, the expansion and contraction of central bank balance sheet might have adverse impact on domestic credit expansion and thus on growth. At the same time, the development of asset prices poses a concern, as the development of a bubble as well as a major correction of asset prices would have a large impact on growth. Finally, putting the emphasis of monetary policy on external concerns might lead to an unwelcome domestic backlash.

This session dealt with the policy responses to global liquidity tapering in two case studies, China and Latin America. In China's case, remaining capital controls allow policy makers to pursue policies with national priorities without immediately triggering a backlash from financial markets. In addition, China can promote the internationalization of the RMB in order to reduce the impact of exchange rate volatility on exports and the domestic economy.

In China's view, QE has had negative implications under both, fixed as well as floating exchange regimes. The only difference is where the adjustment burden ends up, on the tradable sector or the non-tradable sector. Because of the size of non-tradable sector in China, most indicators are determined by domestic developments and less so by QE. It is interesting to note that the impact of global liquidity on the Chinese economy was stronger before the GFC than since.

The benefits of QE for China were increased money supply and higher growth. This effect was dampened because of foreign exchange controls. As a result, China's monetary aggregate, M2 rose somewhat, as well as producer prices and asset prices, such as the stock market. On the downside, the capital flows to China, first and foremost in USD have led to an appreciation of the RMB with a negative impact for exporters and the tradable sector.

Assessing the possible impact of further QE tapering, China has been less affected by global liquidity as the economic model has changed, by giving domestic demand a greater role, rather than export driven. Secondly, China is pegging to a basket of currencies, thus reducing the influence of the USD. Finally, the internationalization of RMB will allow China more room to set its own policy priorities.

The international use for RMB as trading currency has expanded rapidly to match China's importance in global trade. The use as reserve currency is still moderate but also growing rapidly. The strategy for internationalization of the RMB is threefold: first, enlarging the RMB use area, in particular with neighboring countries; second, further develop trade settlement in RMB and finally, provide investment opportunities for RMB held as official reserves.

Although fundamentals were somewhat different in Latin America (LA) than in EMA, policy responses have largely been similar. In LA there is a higher resistance of inflation, a positive output gap and persistent current account deficits. In addition, financial markets are less developed than in EMA. During times of inflows, upward pressure on the exchange rate could be accommodated as long as competitiveness was not at risk. Once this point is reached, central banks start buying forex, injecting local currency liquidity and sterilizing by issuing local currency bonds. Central banks thus buy low-yield forex while issuing high-yield domestic liabilities. These costs have to be borne either by the central banks or the ministries of finance.

The inflation targeting regime has served LA central banks well. Appreciation was a welcome anti-inflationary instrument. This policy can continue until the export sector feels the pressure. The improvement in terms of trade, particularly for commodity exporters can prolong such appreciation phases. Lowering rates to deter inflows might stir up inflation again. This strategy was made possible by the existence of margins of maneuver: if and when the limits of tolerable inflation or competitiveness were reached, more proactive policies could be called for. The measures taken by Brazil and other LA countries include barriers to inflows of portfolio investment, such as taxes or RR.

The current situation in LA is characterized by slowing GDP growth, significant CAD, reserves still at historically high level, modest domestic currency depreciation, low levels of international competitiveness. Inflation is edging up, but still under control. The recent outflows were beneficial for LA central banks, as the loss in forex was matched by a reduction in local currency liabilities and thus the quasi-fiscal loss diminished.

5. Panel Discussion: Asian Policy Response to Tapering

The final panel discussion addressed the following issues: firstly, what is the optimal policy mix to minimize volatility of exchange rates? Secondly, following ample global liquidity, given that some central banks have actively intervened in the foreign exchange market, what would be the consequences of an accumulation of sizable foreign exchange reserves? Thirdly, what would be the effect on equilibrium rates and policy responses following potential unwinding and tapering of QE on EMA in the near future?

The BIS scans Asia's policy responses to tapering. The key to understanding relocation of investments from EMA to AE are the behavioral patterns of retail and institutional investors. It is noteworthy that retail investment has been far more volatile than funds placed by institutional investors. This is the case for both, investment in bonds as well as equities. Very often, retail investors have to follow strict investment guidelines, closely monitored by customers.

The recommended policy responses to tapering are divided into macro prudential measures, capital flows measures as well as enhanced monitoring. In practice, however, loosening these various measures might be of limited effectiveness (compared with tightening). The BIS also provides a table on various capital flow measures taken since the GFC. It clearly shows the predominance of micro-prudential measures, such as controlling flows through banks.

China mentioned as risks of rising global interest rates that the real estate bubble might burst, that shadow banks and local governments might be pushed to default and that the ER might become more volatile. Chinese authorities have reacted by expanding the RMB floating band and by addressing domestic problems, such as controlling shadow banks and curbing local government debt. They might resort to short-term control if need arises. In the medium term they will press on with financial reforms, further opening of the economy and allowing the private sector to play a greater role.

The scenario of further tapering from 'taper tantrum' to 'lift-off tantrum' is shrouded in uncertainty. When will interest rates start to rise, how will the FED communicate its policy stance and how will the markets react? Financial markets are prone to over-reaction. The authorities in EMA have made their financial system more robust, but they need to be vigilant with respect to monetary and financial developments, signaling a build-up of vulnerabilities.

EMA economies are affected differently by external shocks as they have different vulnerabilities and different transmission mechanism. Policy measures are taken according to national priorities. The feasibility of common policy responses is low while the need for communication and exchange of information in EMA is high.

Central banks in EMA need to define a ranking of objectives, balance dealing with conflicting objectives, choose the right way to communicate with the public and watch carefully that they do not get over-burdened. Central banks should communicate well but not become predictable.

During tapering, a wholesale retreat from EME is unlikely. As financial markets have already discounted expected policy changes, major disruptions could be avoided. Markets will choose investment in countries with strong fundamentals. In turn, countries need to find their own solutions, strengthen their fundamentals, build up buffers during good times and avoid vulnerabilities.