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BIS Quarterly Review December 2016 – media briefing

On-the-record remarks by Mr Claudio Borio, Head of the Monetary and Economic Department, and Mr Hyun Song Shin, Economic Adviser and Head of Research, 9 December 2016.

Claudio Borio

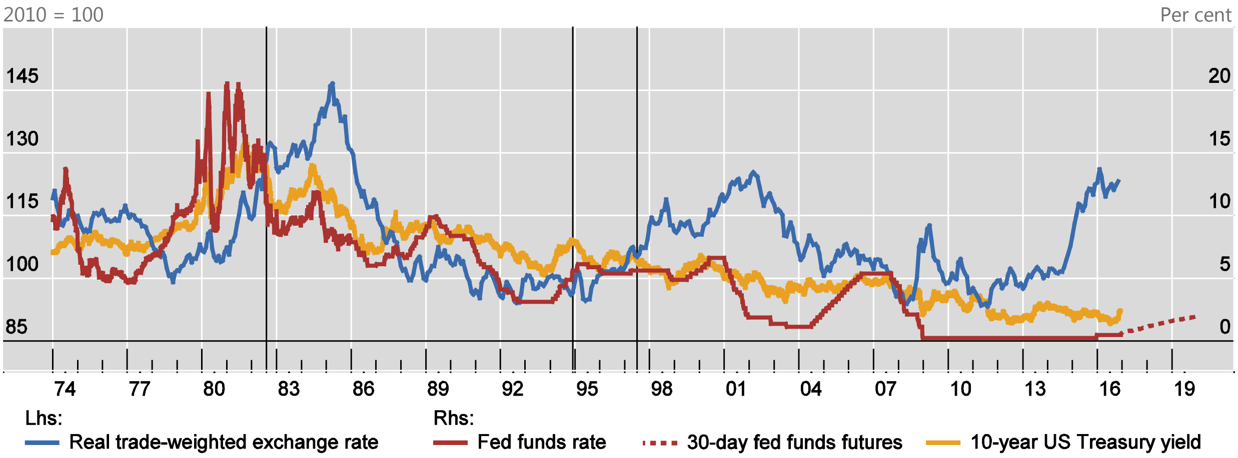
It was looking like a quiet quarter, set to end as it had started. Then, once again, the calm was shaken by a political event that appeared to usher in a paradigm shift in markets. *What* happened in markets is just as important as *why* it happened. And the "*what next?*", including its potential far-reaching impact, is not yet fully understood.

Let me start with the "what". It was, once more, a surprising outcome to an electoral vote that triggered it all: markets, again, were completely wrong-footed. One is tempted to paraphrase Oscar Wilde: to get it wrong once may be regarded as a misfortune; to get it wrong twice looks like carelessness. Just as with the Brexit vote, markets had gone all-in ahead of the US presidential election on 8 November, only to have to cut their losses as events panned out quite differently from what they had anticipated.

Initially, the direction of market movements replicated what had been observed during the campaign as the two candidates' chances of success waxed and waned. Within a couple of hours, the S&P futures plunged by 6%, Treasury yields dipped by almost 20 basis points, the dollar exchange rate (USDX basket) depreciated by 2%, and the price of gold soared by 5%.

But then, everything turned on a dime – the surprise within the surprise. For markets to do an abrupt U-turn, all it took was a conciliatory speech by the president-elect, the anticipation of larger budget deficits linked to tax cuts and some infrastructure spending, and the prospect of less regulation. The extent of the shift was remarkable. By the end of November, US equity markets had climbed to new peaks; US Treasury yields had risen by some 50 basis points, accelerating their gradual rise since the early-July trough; and, equally important, the trade-weighted value of the dollar had increased by 4%, to a 14-year high (see graph). As a mirror image, the price of gold had dropped by 8%.

US monetary policy, bond yields and the dollar



The solid vertical lines indicate: the Latin American debt crisis (1982), the Tequila crisis (1994) and the Asian financial crisis (1997).

Sources: Bloomberg; national data; BIS.

Naturally, events in the largest and deepest financial markets in the world, home to the dominant international currency, had major repercussions elsewhere. Sovereign yields rose in other jurisdictions and, within the euro area, spreads widened. Emerging market economies were especially hard hit, in ways partly reminiscent of the taper tantrum in mid-2013. In fact, exchange rate depreciations and outflows from dedicated bond and equity funds proved even larger than in that episode, although equity and credit markets reacted much less. Mexico suffered most, as the country most exposed to the risk of US trade protectionism and immigration curbs.

All along – and this is especially good news – markets functioned smoothly despite the price gyrations, not unlike what had happened at the time of the Brexit vote. This puts into perspective another event that had already interrupted the market calm during the quarter: the sterling flash crash on 7 October. In a matter of seconds, the currency lost no less than 9% vis-à-vis the dollar in thin Asian markets, only to retrace much of that loss subsequently. Still, just as with previous extraordinarily sharp but short-lived market moves, this one caused few ripples. We do not quite fully understand the cause of such unusual price moves, although no doubt ultra-fast large-volume automated strategies play an important role – one may legitimately wonder what the economic value of these strategies really is. But as long as such moves remain self-contained and do not threaten market functioning or the soundness of financial institutions, they are not a source of much concern: we may need to get used to them. More generally, the resilience of markets is a tribute to the efforts made to strengthen the capital and liquidity of financial institutions and to encourage better pricing of liquidity risk: stronger institutions make for more robust market liquidity.

So much for the “what”; what about the “why”? Developments during this quarter stand out for one reason: for once, central banks took a back seat. To be sure, financial markets had to work out how central banks would respond to the surprise developments: expectations of a policy rate hike by the Federal Reserve in December firmed, followed by additional, albeit historically gradual moves. Hence the upward adjustment in the path of expected short-term rates implicit in the yield curve and the rapidly narrowing gap between what markets expect and what the Fed projects. But it was not central bank utterances or policy decisions that, fundamentally, triggered the market moves. It is as if market participants, for once, had taken the lead in anticipating and charting the future, breaking free from their dependence on central banks’ every word and deed. In itself, this is healthy.

And so we come to the "what next?". Are we facing a market overreaction or a paradigm shift? Hard to tell at this stage: the uncertainties involved are too large. What is surprising is that it took just one political event to seemingly dispel, in one fell swoop, the market's belief in a future of persistently ultra-low interest rates, secularly low growth and disinflationary pressures. These events could finally represent the long-awaited beginning of a welcome normalisation process from the extraordinary post-crisis conditions. But the jury is still out, and caution is in order. And make no mistake: bond yields are still unusually low from a long-term perspective (see graph).

In the meantime, it is possible to identify some of the possible implications, should the shifts towards higher interest rates, a steeper yield curve and a stronger dollar persist and intensify. The road is bound to be bumpy. It could not be otherwise, given the point of departure. Banks and the financial sector would generally benefit from higher rates and a steeper yield curve, although there would be capital losses in the near term. This would be a welcome boost to the banking industry in many advanced economies, which is still struggling to overcome market scepticism, produce sustainable profits and leave the crisis fully behind. The surge in US bank stocks is a telling sign of a brighter perceived outlook, even if it also reflects expectations of laxer regulation in the sector. At the same time, non-US financial institutions that are heavily reliant on dollar funding may have to adjust. And emerging market economies are likely to come under further pressure. Especially vulnerable would be those where the domestic financial imbalances accumulated over the previous prolonged financial booms coincide with the higher foreign currency debt burden induced by dollar appreciation and higher rates. None of this need happen tomorrow; events unfold slowly but at an uneven pace. And it is uncertain how intense the strains might turn out to be. But all this bears close watching. Hyun will elaborate on this point in a moment.

Looking further ahead, the most worrying signs relate to the risk of greater protectionism. Those signs have been multiplying in recent years, and prospects have darkened considerably with the most recent political events. There would be no winners, only losers. Lower global growth, and possibly higher inflation, would benefit no one.

Hyun Song Shin

Emerging market economies (EMEs) have faced challenges from a stronger dollar, rising advanced economy bond yields and fund outflows. As Claudio has noted, so far the impact has been much smaller than during the taper tantrum, but the recent developments come at a more advanced stage in the US monetary policy tightening cycle. And respite from volatility stemming from easier monetary conditions in other advanced economies may be harder to come by in the months ahead.

What are the implications for financial stability and for the real economy in EMEs?

We can take comfort from the shift from short-maturity bank borrowing towards longer-maturity debt securities issued by EME borrowers. True, EME corporates face around $120 billion of maturing international debt securities denominated in US dollars in 2017. However, given the long maturity of the instruments, this is only around 10% of the total outstanding amount. In this respect, borrowers may be less vulnerable to a "sudden stop" arising from the inability to roll over maturing debt. That said, precisely because of these longer maturities, bond prices have become more sensitive to yield changes. Thus, lenders are more exposed to market risk. In the jargon, investors face greater "duration risk". If investors react to rising yields by selling and exiting the market, their reactions may amplify market disruptions.

More generally, what happens in financial markets does not always stay in financial markets. Financial disruptions can have a real economic impact. Even if a country has large foreign exchange reserves, companies may find themselves short of financial resources and may cut investment and curtail operations, resulting in slower hiring and output growth. This undermines the narrative of faster growth in EMEs, adding impetus to the exit by investors and completing the feedback loop. Thus, even central banks with a large stock of foreign exchange reserves may find it difficult to head off a slowing real economy when global financial conditions tighten.

How much of a cushion is provided by currency depreciation? This is precisely the question raised in the **special feature by Jonathan Kearns and Nikhil Patel**. The traditional textbook argument is that currency depreciation is expansionary, other things being equal, as a depreciation is associated with an increase in net exports and an expansion in output. This is sometimes called the trade channel. But exchange rates also operate on the economy through a financial channel, if foreign currency debt creates vulnerabilities to slowing growth resulting from currency depreciation.

The intensity of the financial channel depends on the sensitivity of domestic balance sheets to the exchange rate, while the strength of the trade channel depends on the reactions of trade to exchange rates.

The authors find that the financial channel largely offsets the trade channel for EMEs. The offset is weaker for advanced economies, where the textbook trade channel dominates. For 13 out of 22 EMEs, the sum of the debt-weighted exchange rate (DWER) and NEER elasticities is *positive*, meaning that an equal appreciation of both exchange rate measures would be *expansionary*, contrary to the textbook prediction. Both the trade and financial channels are more prominent in Asia than in Latin America. And the financial channel is stronger for EMEs that hold more foreign currency debt.

Going beyond these macroeconomic mechanisms, structural aspects of FX and derivatives markets can have important implications for market functioning and financial stability. These markets have been evolving rapidly in recent years. The other special features in this issue of the Quarterly Review provide insights into how these markets have changed, based on the **latest BIS Triennial Central Bank Survey of foreign exchange and over-the-counter derivatives**. There are three underlying themes.

The first theme is the significant changes in the role and composition of participants in global FX markets, as documented in the **special feature by Michael Moore, Andreas Schrimpf and Vlad Sushko**.

Hedge funds, non-financial end users and smaller banks have reduced their market presence. At the same time, dealer banks have adjusted their business models, in view of their reduced capacity to warehouse risk exposures and to engage in proprietary trading. In the process, a handful of top-tier dealer banks have consolidated their position as liquidity providers, attracting further customer flows, including from other banks.

How the evolving FX market affects risk-sharing is still uncertain, but this is a matter of first-order importance. Any major changes to liquidity conditions might have consequences for market risk and the effectiveness of the hedging strategies of corporates, asset managers and other foreign exchange end users.

The second theme is the evolving role of EME currencies. While global FX turnover fell for the first time since 2001, to $5.1 trillion per day in April 2016, a number of EME currencies, especially the Chinese renminbi, have become more prominent. Renminbi turnover has approximately doubled every three years over the past decade and a half, now reaching over $200 million a day, making up 4% of the global turnover total.

At the same time, FX market development differs considerably across EMEs. The **special feature by Robert McCauley and Chang Shu** identifies three distinct paths taken by EME currencies viewed through the lens of the market for non-deliverable forwards (NDFs), contracts which allow hedging and speculation in a currency without providing or requiring settlement in it.

In one path, exemplified by the Korean won, NDFs have gained in importance in the context of a policy regime with restrictions on offshore deliverability. In a second, exemplified by the liberalised rouble, NDFs have maintained a relatively minor role amid financial sanctions and policy uncertainty. In the third path, uniquely followed by China, the currency has become more international within the overall framework of capital controls. For the renminbi, *deliverable forwards* (DFs) have been displacing NDFs offshore.

The evolution of EME derivatives markets is closely related to FX market developments, as shown in the **special feature by Christian Upper and Marcos Valli**. Average daily turnover in FX and interest rate derivatives, measured in domestic currency, expanded by 25% between the 2013 and 2016 surveys, albeit with large differences across currencies. The largest and most rapidly growing market is the one for contracts on the renminbi exchange rate and associated interest rates on the renminbi. This activity grew by 50% from 2013 (55% when measured in local currency) to reach $150 billion a day in April 2016.

Large as these amounts may seem, they are relatively modest when set against GDP or proxies for hedging needs, as measured by international trade or investment. On all those measures, even EMEs with relatively developed and deep derivatives markets sustain lower turnover than most advanced economies.

Finally, the third theme is monetary policy as a driver of not just FX movements, but also derivatives markets. The global interest rate derivatives market was heavily influenced by hedging and position-taking against the backdrop of changing expectations about US monetary policy, as argued in the **special feature by Torsten Ehlers and Egemen Eren** on the interest rate derivatives market. From 2013 to 2016, turnover measured in notional amounts nearly doubled for US dollar-denominated interest rate derivatives, while it halved for euro-denominated contracts, reflecting the low and stable rate environment in Europe. At the same time, activity in longer-dated US dollar swaps remained subdued, reflecting the reduced hedging demand from the US government-sponsored enterprises (GSEs). Thanks to asset purchases by the Federal Reserve, the GSEs hold less duration risk, reducing the need to engage in dynamic hedging. The upshot is that there is less potential for the mechanical snapback in long-term interest rates.