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BIS Quarterly Review December 2014 – media briefing

On-the-record remarks by Mr Claudio Borio, Head of the Monetary & Economic Department, and Mr Hyun Shin, Economic Adviser & Head of Research, 05 December 2014.

Claudio Borio

Once again, the financial market scene was far from uneventful during recent months. Volatility spiked in mid-October. Stock prices fell sharply and credit spreads soared. US Treasuries were exceptionally volatile, at least intra-day – even more than at the height of the Lehman crisis. And yet, just a few days later, the previous apparent calm had returned. Volatility in most asset classes had sunk back down to the depths of the previous two years. And as benchmark sovereign yields sagged once more, the valuation of riskier assets recovered at least part of the lost ground. So, what is going on?

It is too early to say what exactly triggered these sharp, if brief, price swings. As we speak, researchers and market regulators in the United States and elsewhere are sifting through tons of data to understand every market heartbeat during those turbulent hours on October the 15th. That said, some preliminary reflections are in order. No doubt, one-sided market positioning played a role, as participants were wrong-footed. But is there more to it?

It is, of course, possible to draw comfort from recent events. Those who do so stress the speed of the rebound. At the same time, a more sobering interpretation is also possible. To my mind, these events underline the fragility – dare I say *growing* fragility? – hidden beneath the markets' buoyancy. Small pieces of news can generate outsize effects. This, in turn, can amplify mood swings. And it would be imprudent to ignore that markets did not fully stabilise by themselves. Once again, on the heels of the turbulence, major central banks made soothing statements, suggesting that they might delay normalisation in light of evolving macroeconomic conditions. Recent events, if anything, have highlighted once more the degree to which markets are relying on central banks: the markets' buoyancy hinges on central banks' every word and deed.

The highly abnormal is becoming uncomfortably normal. Central banks and markets have been pushing benchmark sovereign yields to extraordinary lows – unimaginable



just a few years back. Three-year government bond yields are well below zero in Germany, around zero in Japan and below 1 per cent in the United States. Moreover, estimates of term premia are pointing south again, with some evolving firmly in negative territory. And as all this is happening, global growth – in inflation-adjusted terms – is close to historical averages. There is something vaguely troubling when the unthinkable becomes routine.

Looking ahead, two major developments in the period under review are likely to leave a profound imprint on the financial and macroeconomic scene.

The first concerns exchange rates. As macroeconomic conditions have diverged across the key currency areas, so have the actual and expected monetary policy stance. The ECB and the Bank of Japan have loosened policy and indicated that more easing may well be in the offing; by contrast, the Federal Reserve has stopped purchasing assets and has been hinting at an interest rate hike at some point in 2015. This has already triggered sizeable exchange rate shifts. The US dollar has appreciated relative to the euro and the yen as well as more generally.

The second concerns the sharp drop in the oil price, alongside a milder one in that of other commodities. In fact, the 40 per cent fall since June 2014 is the third largest in the last fifty years, exceeded only by that following the Lehmann default and the breakdown of the OPEC cartel in 1985. Part of the drop reflects demand factors, not least softening growth in China. But much of it reflects unexpected increases in supply. This is surely good news for the global economy. That said, there are bound to be winners and losers, and the drop may disproportionately affect some regions of the world, possibly compounding domestic vulnerabilities.

These developments will be especially important for emerging market economies. The spike in market volatility in October did not centre on these countries, unlike at the time of the taper tantrum in May last year and the subsequent market tensions in January. But the outsize role that commodities and international currencies play there makes them particularly sensitive to the shifting conditions. Commodity exporters could face tough challenges, especially those at the later stages of strong credit and property price booms and those that have eagerly tapped equally eager foreign bond investors for foreign currency financing. Should the US dollar – the dominant international currency – continue its ascent, this could expose currency and funding mismatches, by raising debt burdens. The corresponding tightening of financial conditions could only worsen once interest rates in the United States normalise.

Unfortunately, there are few hard numbers about the size and location of currency mismatches. What we do know is that these mismatches can be substantial and that incentives have been in place for quite some time to incur them. For instance, post-crisis, international banks have continued to increase their cross-border loans to emerging market economies, which amounted to \$3.1 trillion in mid-2014, mainly in US dollars. And total international debt securities issued by nationals from these economies stood at \$2.6 trillion, of which three quarters was in dollars. A box in the



Highlights chapter of the Quarterly Review seeks to cast further light on this question, by considering the securities issuance activities of foreign subsidiaries of non-financial corporations from emerging markets.

Against this backdrop, the post-crisis surge in cross-border bank lending to China has been extraordinary. Since end-2012, the amount outstanding, mostly loans, has more than doubled, to \$1.1 trillion at end-June this year, making China the seventh largest borrower worldwide. And Chinese nationals have borrowed more than \$360 billion through international debt securities, from both bank and non-bank sources. Contrary to prevailing wisdom, any vulnerabilities in China could have significant effects abroad, also through purely financial channels.

Let me now pass on to Hyun Shin, who will go into more detail about the special features in this issue.

Hyun Shin

Let me take over and discuss the special feature articles in this issue of the BIS Quarterly Review.

In the first article, my colleagues Bob McCauley and Tracy Chan take on one of the perennial questions in international finance: namely, why so much of the world's foreign exchange reserves are held in US dollar-denominated assets. More than 60% are held in US dollars, and that share has barely budged since the Bretton Woods era of fixed exchange rates to the dollar even though the share of US output in the world economy has declined to less than one quarter of global output.

Bob and Tracy explore to what extent the high dollar share can be explained by a concern by reserve managers to maintain a stable value of their foreign exchange reserves in local currency terms. The idea is that a country holds its FX reserves in dollars if the local currency moves closely with the dollar. Bob and Tracy introduce the notion of a "dollar-zone" of countries whose currencies are relatively stable against the dollar, and they show that a country's weight in the dollar zone explains about two thirds of the variation across countries in the dollar share of their reserve portfolios.

In the second article, Adonis Antoniades and Nikola Tarashev revisit the issue of the risks associated with securitisation, which received a lot of attention during the financial crisis. The practice of bundling loans and then slicing and dicing the claims into tranches of different seniorities received particular attention. It turned out that the mezzanine and senior tranches were much more risky than investors had bargained for.

With signs of the beginnings of a revival of securitisation discussed briefly in the Overview chapter, the question of the true risk of securitised claims is back on the agenda, and this piece is well timed.



Adonis and Nikola show that no matter how simple the underlying loans are, the slicing and dicing of claims into tranches of differing seniorities introduces a so-called “cliff effect” into the mezzanine tranche. The idea is that total losses on the securitised piece are highly sensitive to measurement error in the default risk of the underlying claims. Since we cannot banish uncertainty completely, such sensitivity to small errors in measurement means that calculating the appropriate amount of capital as a buffer against loss is subject to large uncertainty. The problem is even more severe when the securitised assets are sliced and diced once again into further securitised assets through the practice of “securitisations squared”, which was prevalent before the crisis.

The uncertainty about the risk assessment of mezzanine tranches means that any calculation of the prudent regulatory bank capital held for these tranches should be significantly higher than that for the underlying asset pool. By how much higher depends on the nature of this pool.

Nikola is the author of another special feature in this Quarterly Review, this time with Rungporn Roengpitya of the Bank of Thailand and Kostas Tsatsaronis of the BIS. They use bank balance sheet data and a technique called “statistical clustering” to classify banks into broad categories that share similar summary features of their balance sheets. Using this technique, they identify three distinct bank business models: retail-funded commercial banks, wholesale-funded commercial banks, and capital markets oriented, or trading, banks.

Armed with this classification, the authors then investigate how well these banks performed according to a number of yardsticks. During last decade, they find that retail-funded commercial banks displayed the lowest variation in its return on equity, while the wholesale-funded commercial bank was the most cost-efficient.

But they also find that business models are not set in stone. Banks can and do shift their business model over time. In the years before the crisis, they moved mostly from a retail-funded towards a wholesale-funded business model. But the trend reversed in the years after the crisis, with wholesale-funded banks coming to rely more on deposits.

The final special feature continues the recent string of studies from the BIS examining the issuance of debt securities by non-financial corporations headquartered in emerging market economies. The box in the Highlights chapter that Claudio mentioned a moment ago also belongs to this line of research.

I was involved in this latest special feature, and together with Stefan Avdjiev and Michael Chui, we ask how a non-financial company can issue bonds offshore and send the money back to headquarters, and how such transactions might show up in the balance of payments. We dig deep into the balance of payments to find three channels.



Some of the money shows up foreign direct investment, or FDI for short. We often associate FDI with greenfield investment or the acquisition of domestic firms by foreigners. But FDI also includes the loans made by an offshore subsidiary to its parent. For a number of emerging economies, we find that such flows are quite large. Far from being stable or “good” flows, such loans would have more in common with hot money that could be withdrawn if foreign creditors demand their money back.

A second channel is trade credit between companies that arises from delays in paying invoices. Trade credit is typically quite small, but we show that it is large for some countries.

A third channel is cross-border deposits in the domestic banking system. We try to capture such deposits by combining the balance of payments data with the BIS international banking statistics. The BIS data cover only the loans made by banks, and so any difference between the two series should give an indication of the activity of non-banks. These two series tracked each other reasonably closely until the financial crisis, but the gap between them has subsequently widened dramatically, indicating a pickup in external loan and deposit financing by non-banks. There is even reason to believe that this comparison understates non-financial deposits in emerging market economies because of reporting issues in the balance of payments.