INDUSTRY WATCH

THE LIQUIDITY GAP ROADWORKS **BUILDING A IN PROGRESS BETTER CAPITAL MARKET FOR YOU**

Six years on, what has been the impact of the safeguards that were put in place since the Lehman crisis of 2008?

Certain events leave an indelible mark on our lives. For people working in the area of finance, Lehman Brothers going into Chapter 11 on 15 September, 2008 clearly falls into this category. The global financial crisis was a watershed moment, dramatically changing the operating environment for financial markets, with the authorities tightening the regulatory framework appreciably since then. This has affected financial markets profoundly, and perhaps in ways unintended by policy makers. The new regulations, for example, aim to reduce market volatility and risks to intermediaries. However I would argue that not only are these safeguards yet to be tested, it remains unclear whether or not the current regime could dampen the negative impact of the next financial crisis-when it happens.

This article focuses on some of the key changes introduced since the Lehman crisis and the impact they are having on economies and financial markets, particularly in Asia. It also discusses the potential pitfalls and unintended consequences of some of these changes, as well as offers broad solutions to combat the challenges arising from the evolving financial landscape. Asian banks in most jurisdictions are currently more than adequately capitalised with respect to Basel III. However, as they are called upon to support the region's economic growth over the next decade, they are likely to run up against capital constraints.

Bonds will grow at the expense of loans

The Basel III regulations were introduced with a view to shoring up banks' capital to ensure an adequate cushion against economic shocks and a potential deterioration in bank portfolios. This was meant to reduce contingent liabilities on governments and taxpayers, and to reduce pressure points in the economies where banks operate. These regulations may be more relevant to (and perhaps designed for) developed markets (DM), where banks on average had lower capital levels relative to those in emerging markets (EM) prior to the Lehman crisis. However, their impact is being felt in both markets. The introduction of Basel III in various jurisdictions-and its anticipated introduction in others-has By Kaushik Rudra

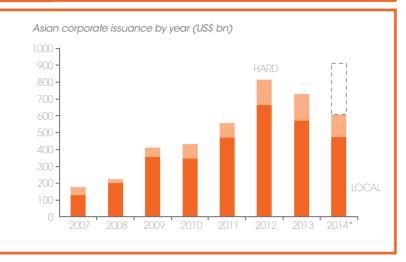
prompted banks to preserve scarce capital by reducing leverage and shedding risk assets. As a result, lending has come under pressure. This is particularly true for European banks, whose capital levels were low to start with.

While EM banks (and Asian banks in particular) are well capitalised, they are also likely to see an impact on their loan markets over time. Asian banks in most jurisdictions are currently more than adequately capitalised with respect to Basel III. However, as they are called upon to support the region's economic growth over the next decade, they are likely to run up against capital constraints. This will force them to make a tough choice between preserving capital (and thereby reducing lending) or continuing to lend but risking running short of capital. I believe banks are likely to choose the former option, causing them to scale back (or at least not increase) their loan exposure. A clear unintended consequence of this reform is the crowding out of corporates, particularly small- and medium-sized enterprises, from the loan markets. I expect many of these companies to turn instead to the corporate bond markets, a shift that is already evident in record issuance levels in both local-currency and hard-currency corporate credit markets (refer to Figure 1). This is likely to increase the size of the region's corporate bond markets over the medium-term as corporates seek longer-term (and arguably, less covenantheavy) funding. Basel III implementation is likely to accelerate this transition towards corporate bond-market financing and push more corporates, especially higher-rated ones, to access bond markets directly rather than borrow from banks. Within Asia, I expect the biggest growth in China and India; the former is likely to represent more than 50 percent of the Asian corporate credit market over the next few years (refer to Figure 2).

Disappearing market liquidity

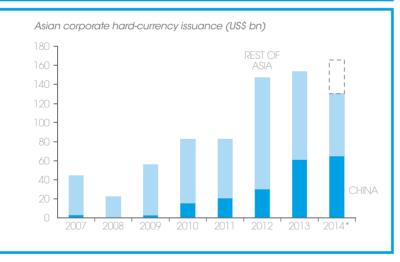
The Dodd-Frank Wall Street Reform and Consumer Protection Act-better known as Dodd-Frank-was a response to the global financial crisis of 2008. Its intention was to prevent another collapse of a major financial institution like Lehman Brothers. Dodd-Frank includes major areas of reform and hundreds of pages of regulations and rules. The law subjects banks to a number of regulations, with the possibility of breaking up banks if they are deemed to be 'too big to fail'. The Volcker Rule, part of Dodd-Frank, prohibits banks from owning, investing in or sponsoring hedge funds or any proprietary trading operations for their own profit. The rule on proprietary trading has had a profound impact on secondary-market

FIGURE 1: CORPORATE CREDIT ISSUANCE HAS **SURGED SINCE 2009**



*As of August 2014; Source: Dealogic, Standard Chartered Research

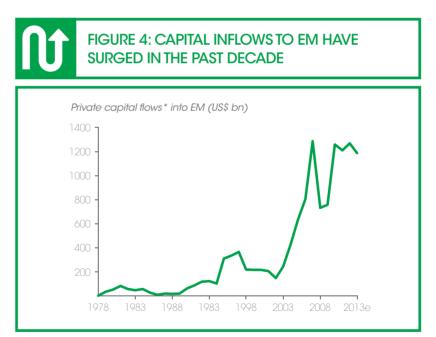




*As of August 2014; Source: Dealogic, Standard Chartered Research

FIGURE 3: SELL-SIDE INVENTORY IS NOT IN SYNC WITH GROWING BUY-SIDE AUM





Includes FDI, equity and debt flows; Source: IIF, Standard Chartered Research



liquidity. With regulations severely restricting how long trading desks can hold securities, bank trading desks have become much less willing to hold securities, even for market-making purposes. With little or no inventory, it is unsurprising that secondarymarket liquidity is a shadow of its former self. New York Fed data suggests that U.S. primary dealers' net position in corporate debt has declined by more than half since the Lehman crisis (refer to Figure 3).

Too much money chasing too few assets

The global financial crisis changed the way investors view emerging markets. Investors globally recognised that they had arguably mispriced risk, assigning too little risk to DM and too much to EM. This mispricing of risk resulted in an under-allocation of portfolios to EM. After the Lehman crisis, global investors tried to correct this misallocation, and increasingly directed funds towards EM

The surfeit of easy money owing to quantitative easing and accommodative monetary policies around the world accentuated the reallocation of funds in favour of EM (refer to Figure 4). The resulting search for yield unleashed a rush for EM assets, and EM bonds, in particular, benefited from these fund flows. In the five years since the Lehman crisis, inflows to EM debt have far exceeded the levels witnessed prior to the global financial crisis (refer to Figure 5). There have been periods when the size of the inflows has exceeded the size of the tradable markets.

Market implications: sidestepping secondary markets

The confluence of regulatory changes and easy money has created three most interesting (and potentially challenging) dynamics in EM financial markets.

Firstly, Basel III will likely cause banks to withdraw (at the margin) from loan markets, consequently increasing corporates' reliance on bond markets. This will result in much faster growth in corporate bond markets. While reliance on bond markets is already prevalent in the developed world, I expect it to accelerate growth in EM bond markets, particularly Asia.

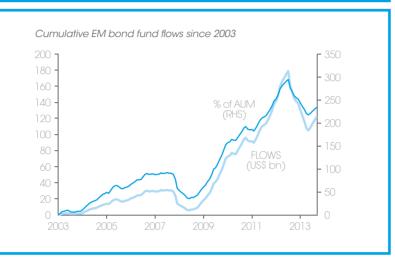
However not all Asian banks are equally well positioned to embark on this Basel III journey. While banking sectors in Southeast Asia are extremely well capitalised, India's public-sector banks and China's banks will need additional capital in order to support the financing needs of domestic corporates; and with capital becoming an increasingly scarce commodity, I expect banks to be more selective in lending to corporates. Banks are likely to favour larger corporates; this could potentially crowd out smalland medium-sized enterprises, resulting in potentially higher levels of stress and defaults in this segment.

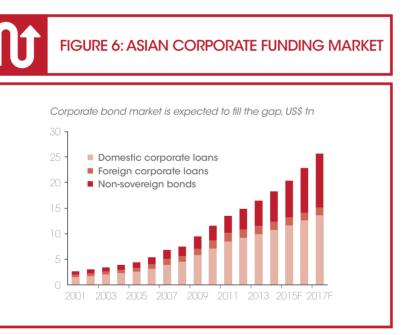
Meanwhile raising capital (via government injections or the equity markets) would allow banks to preserve their lending to corporates. However, if they are unable to increase their capital in line with financing requirements, economic growth in their jurisdictions will likely be lower.

Growth in corporate bond markets is a clear consequence of tighter lending conditions. Corporate bond markets in Asia excluding Japan could grow to around US\$10 trillion and represent around 40 percent of the overall financing mix toward the end of this decade (refer to Figure 6).

Secondly, Dodd-Frank and the Volcker Rule have presaged declining secondary-market liquidity. With banks unable to take proprietary positions, their need and willingness to hold bond inventory is negligible. This means that the trading desks making markets on these are also shrinking in size. This is forcing investors to rely largely on primary bond markets

FIGURE 5: ASSET ALLOCATION TO EM DEBT HAS **RISEN NEARLY THREE-FOLD SINCE 2008**





(new issues) to meet their requirements.

Sell-side banks are much smaller now than they were before the global financial crisis. Trading operations have been trimmed, particularly on the fixed income side, with significant headcount reductions. While this has played out more clearly in the West, it has been a global phenomenon.

As these operations generate lower income, bank income pools have been reduced. This has increased cost pressure on banks, resulting in lower compensation and reduced hiring by the sector, making the sector a less attractive destination for fresh graduates entering the job market.

Declining secondary-market liquidity is also forcing investors to rely largely on the primary markets to meet their portfolio needs.

Thirdly, the readjustment of EM risk premiums and the surfeit of easy money after the Lehman crisis have resulted in a surge of fund flows to EM, particularly EM debt. As a result, EM debt portfolios have grown manifold in the five-year period since the crisis (refer to Figure 5). With global asset managers continuing to increase their Assets Under Management (AUM) allocation to EM debt, the buy-side is likely to continue to grow.

Buy-side AUM, particularly for EM and Asian portfolio managers, continues to grow, and is significantly larger than that of sell-side institution trading desks. This means that secondary-market liquidity cannot fully support the trading flows of the buy-side. As highlighted above, buy-side firms have to rely on primary issuance to meet most of their portfolio needs. Given their size and relatively poor secondarymarket liquidity, it is very difficult for the buy-side to accumulate meaningful positions (in terms of portfolio returns) via the secondary markets.

Decreased liquidity from sell-side banks in the secondary markets is giving rise to a new breed of 'buy-side to buy-side' brokers. These new intermediaries are linking buy-side institutions to each other and bypassing sell-side banks altogether While this is helping buy-side institutions to bypass secondary-market liquidity constraints, the rise of a new breed of unregulated institutions servicing the buy side could also pose new challenges.

Buy-side firms are starting to use credit default swaps (CDS) to express more tactical views. CDS liquidity tends to be better, allowing these investors to get in and out of trades much more easily. CDS are generally less balance sheet-intensive than cash bonds. and therefore more palliative for sell-side banks. While buy-side brokers and CDS trading are being used fairly extensively in other jurisdictions, their use in Asia has been limited to date.

Thin liquidity has made markets one-dimensional

the surge in issuance over the past few years. However, with sharply reduced secondary market liquidity and bank trading unable to support these investors' increased positions, there is potentially no exit for these EM bond portfolios. While EM is a legitimate asset class that is here to stay, it is unhealthy for markets to have no exit. In my conversations with global investors, I repeatedly hear that market liquidity is significantly worse today, even more than the post-Lehman crisis 'dark days' of late 2008 and early 2009. If investors want to reduce their positions, there is limited scope for them to do so via the secondary markets. This is unhealthy, and could result in a serious market crisis should investors need to get out of their positions. It increases the risk of a disorderly sell-off.

How do we mind the liquidity gap?

Market participants have recognised these issues for some time. The key question is whether regulators are also thinking of these issues. They appear to be. The European Central Bank and the

Growth in EM portfolios dovetails well with

Sell-side institutions need to manage scarce market liquidity very carefully so as to limit potential damage to the P&L and capital. This means secondary liquidity is unlikely to improve soon. Given these regulations and the asymmetric riskreward for sell-side institutions, these institutions have no incentive to step in and provide ample liquidity during periods of market stress.



Analytics & Hadoop

So much data. So little time. So easy.

Bank of England have both cited lack of secondary-market liquidity in bond markets as a source of potential concern in their latest financial stability reports. The hope is that the authorities will look into the unintended consequences of these changes and take steps to address some of the challenges emanating from poor secondary-market liquidity across different markets.

Meanwhile, market makers must deal with the impact of these measures in their own ways. Sell-side institutions must manage scarce market liquidity very carefully so as to limit potential damage to the P&L and capital. This means secondary liquidity is unlikely to improve soon. Given these regulations and the asymmetric risk-reward for sell-side institutions, these institutions have no incentive to step in and provide ample liquidity during periods of market stress.

Buy-side institutions are managing this new environment with measures of

their own. Portfolio managers are maintaining higher cash balances and are largely staying close to their respective benchmarks. Moreover, given poor secondary-market liquidity, their ability to build meaningful positions via the secondary markets is limited. Instead, they are using the rapidly growing primary markets to deploy their cash. Given the size of buy-side firms (AUMs have grown rapidly at a time when the net position of the sell-side has decreased markedly) and poor secondary-market liquidity, they have a limited ability to make significant portfolio changes via the secondary markets. That said, buy-side firms are starting to turn firstly to non-traditional providers of liquidity (as highlighted above), and secondly, do more CDS trades (relative to cash trades) to express tactical views, in an attempt to bypass the secondary-market liquidity constraints of the sell-side.

Kaushik Rudra

is a Managing Director and Head of Rates & Credit Research at Standard Chartered Bank. The views expressed in this article are the author's own and do not represent those of his organisation.

What good are massive amounts of Big Data if you can't analyze it all? Or if you have to wait days and weeks to get results? Combining the analytical power of SAS[®] with Hadoop lets you go from data to decisions in a single, interactive environment - with the fastest results and greatest value.

Read the TDWI report sas.com/tdwi

