

Policy Panel

1. Kevin Nixon

By way of introduction, I should mention a little bit about the Institute for International Finance (IIF), to give you an idea of who I am representing. We have about 470 members across 70 countries. Banks make up about 55 per cent of our membership; much of our membership is made up of buy-side firms, including insurance companies. Many of our members are in emerging market countries. So we are not just an association of large banks. Having said that, all the major global banks are members of the IIF and are represented on our board.

I will look at wrapping up the last couple of days of discussions from an industry perspective and also throw out some extra thoughts on the impact of regulation. I will start with a couple of high level points, and then give some specific examples.

I think it is clear from what happened during the global financial crisis that reform was necessary. But while it is important that we try to address what was bad about the financial system before the crisis, we don't want to get rid of what is good about the financial system.

Another important point that sometimes gets lost in the public commentary is that regulation, almost by definition, is a barrier to entry. Barriers to entry increase inefficiency in the market, which means that when introducing regulation you have to balance this loss of efficiency against the goal of the reform agenda, which is to increase the resilience of the system. Importantly, institutions will still fail, so we need to find a way of dealing with that in a way that does not rely on taxpayer funding or have systemic impacts. There was a bit of talk about failed regimes earlier and I want to touch on that later.

Another important aspect of the debate around financial regulatory change is that we are not currently in the desired steady state and the transition to that steady state matters as much as the desired steady state itself. In particular, there will be implications for the allocation of resources and credit flows, both in the steady state and in the interim.

Over the past couple of days, we've spoken about the impact of individual reforms, and it's clear from the discussions that have taken place that there's a real sense that we're embarking on the reforms without really knowing what the impact will be either at the individual or aggregate level. The aggregate effect is not just going to be the accumulation of individual effects but will also be driven by the interaction between individual elements. I think we'll be seeing a lot of concerns and calls for further understanding of this nature in the future.

Another common theme in our discussion has been transparency. It was mentioned in the context of what's happening in the repo and international derivatives markets, where there has been a focus on transparency around data such as trade volume. But even getting trade repositories in place to achieve this level of transparency is proving extremely challenging. Another aspect of transparency that has been discussed is the transparency of the banking system to investors. Two

aspects are particularly important: (1) transparency about what bank balance sheets really look like, for example, the level of encumbrance and risk-weighted assets on bank balance sheets; and (2) transparency about how reforms, which are still being developed and have not yet been fully implemented, will affect bank business models. Not knowing what the final business model will look like, and what the implications might be for credit creation more broadly, means there is a great deal of uncertainty about which banks investors want to invest in.

Now I will turn to more specific reforms. There has been a lot said about collateral over the past few days. I think there are justified concerns about how all the forces on collateral markets are going to work. There are at least two new sources of demand coming from regulation. The first is a desire to increase collateralisation through over-the-counter (OTC) reforms. Returning to a point made earlier, when it comes to OTC derivative markets, moving from a bilateral to a centrally cleared environment reduces the amount of collateral required if participants are paying initial margin in both environments. However, initial margin is not currently standard in bilateral clearing environments, so a big increase in collateral is required to go from the current environment to one where all trades are centrally cleared and initial margin is paid. So while there are relative benefits within the hierarchy of potential approaches to clearing of derivatives and varying levels of demand for collateral, they're all worse than where we are now in terms of the amount of collateral that banks need to hold. That has been spoken about a lot so I'll leave that aside. Then you have repo reforms, perhaps even the central clearing of repos, that would entail all the issues we have with the central clearing of derivatives, proposals on how to reform the shadow banking system and minimum haircuts.

The second new source of demand comes from the need to increase the holdings of high-quality liquid assets on bank balance sheets. In addition to all this, there are the leverage ratio proposals. If the leverage ratio comes to have a more prominent place in bank regulation than risk-weighted assets, it will have the effect of penalising very short-dated holdings of very highly liquid, highly rated securities as well as market making in repos.

Aside from making the system more resilient, we need to make sure that resolution works; in other words ending 'too big to fail'. This has two components. One is ensuring that taxpayers are not on the hook for bank failures and that creditors bear the losses that bankruptcy law says they should. But more than that, it's about doing it in a way that ensures preservation of systemic stability, which means that any bank should be able to fail without systemic impacts. So there's a lot more to resolution than just bail-in, although this is a part of it.

In terms of funding markets, the current direction of the bail-in debate is going to have two high level effects. One is that because of the desire to protect depositors, which has been highlighted by recent events in Cyprus, there has been a move towards having a minimum layer of securities contractually subject to bail-in. There will be a regulatory mandate in place in every major jurisdiction that will require banks to issue a layer of (potentially contractually) bail-in-able bonds. What their price should be is unknown, but the market will determine this. These developments will require changes to bank balance sheets. For some banks, the changes will be very small. But for the large number of banks that are deposit funded, which has been promoted as a good business model based on regulatory changes such as the Liquidity Coverage Ratio (LCR), they will need to issue significant volumes of this bail-in-able debt. The impact on markets is clearly that there will

be some crowding out of other debt issuance that would otherwise have been expected. There's a question mark over what this does to the bank's balance sheet and business model.

Within the bail-in debate there is also a hierarchy of what preference is given to which creditors. The current proposal in Europe, for example, is that all natural persons will receive preference for their deposits. That is not to say that there won't be a haircut, but rather that they will receive haircuts after everyone else; that is, they will be super-senior creditors. The Europeans are considering carving out small business deposits as well, and the moment that you start carving out more and more creditors, it becomes similar to the secured funding issue presented by Prasanna Gai (in this volume). In other words, more of the failure falls on a smaller group of creditors. The first group of creditors to absorb losses are hybrid investors who are subordinate to the debtholders, and this is well understood. Then there is a layer of bail-in-able securities. But then the question arises as to how this will change behaviour and, more specifically, whether some classes of investors are more likely to run.

These are all areas where policymakers could probably spend more time considering some of the developments and implications we have talked about over the past day and a half, before finalising these policy changes. But unfortunately, given what happened in 2007–2009, the drive to deliver significant policy changes are the imperative.

There is still a large amount of work to do on understanding the implications of Basel III. For example, there are important questions around the calibration and phasing in of the net stable funding ratio (NSFR). The NSFR by definition reduces the amount of maturity transformation that the banking system will do. Of course, maturity transformation is the mainstay of what the banking sector has been doing for several hundred years. Again, in a purely efficient market you may not get the outcomes you want in terms of stability, so there may be a case for policy intervention. But I think this is the area where we need to do a lot of work to understand the impact and trade-offs associated with introducing regulatory change.

On the transparency side, another element of the Basel III framework that doesn't get a lot of attention in commentary or debate is LCR disclosure. This is very much a two-edged sword. A lot of stakeholders and a lot of commentators want to see enhanced LCR disclosure; they want to know exactly what the liquidity position of a bank is at any given time. However, there is a real risk in doing that. If a bank is announcing weekly LCR statistics, and announces this week that its LCR is 109 per cent, 108 per cent the next week, and 107 per cent the week after, the following week it will be going to the central bank looking for lender of last resort as the likelihood of a run will be high. There's a real sense that you need to calibrate not just the reforms themselves, but also how to communicate the positions associated with those reforms. Again, these transmission mechanisms and response functions need to be thought through very carefully.

The leverage ratio is another example. If the leverage ratio becomes a more binding constraint, then you will start requiring capital against any asset, regardless of its riskiness. This clearly provides incentives to stay away from holding high-quality liquid assets, participating in repo markets, trading short-dated government bonds and things like that. Some of that business may move to other sectors, but there is a transition element as well.

On OTC reforms, it is also worth mentioning that there is a bias towards standardised derivatives, which go through central clearing and have a lower capital requirement as a result. The initial

margin on non-standardised derivatives that are not centrally cleared will be much higher. This creates a number of issues for end users because they do not have the same access to private interest rate swap markets for hedging portfolio risk as banks, fund managers and debt management offices. For end users that have to use hedge accounting, dates and coupons must be matched exactly to exposures. If those non-standardised derivatives are made more expensive, we are yet to see what that means for things like asset swap markets and cross-border financing.

We are hearing from our emerging market members that the impact on cross-border financing, a lot of which requires cross-currency swaps, is already being felt through constraints on infrastructure finance. Emerging markets need to draw in capital from outside their jurisdiction, and they are concerned about their ability to continue to do that if cross-currency swaps used for hedging become prohibitively expensive. This problem is particularly acute at the moment as European banks are moving back towards their home jurisdictions, and so we are seeing a drop in syndicated lending.

With all of these things, it's not that the reforms aren't necessary, because they clearly are; we do need to manage counterparty risk on OTC derivatives, we do need to make sure banks have adequate liquidity resources, and we do need to make sure banks can fail without systemic impacts. However, we also need to do more work on understanding what the transmission mechanisms involved are to guide how we change the financial system. That has been one of the main topics of discussion at this conference.

There are a range of things I could talk about in more detail, but the key point I'd like to make is that the financial system will be very different from what it is now. In general, as discussed over the past day and a half, we don't really fully understand what the impact of the new system will be. I think we have some sensible clues to watch out for, but I also think we need to monitor the new system very closely. So I think the regulations as they are developed and finalised should be seen as a work in progress, and calibrated as we understand more about the impact they are having on the system and get more data about what's going on as well. Not only do we need data on the structure of the system, but we need to accumulate data on the impact of the reforms as they evolve.

2. Richard Portes

The role of this panel is to intermediate between authors and discussants and the group as a whole. As many maintain that all our problems since 2007 result from failures of intermediation, this is a difficult assignment. I shall focus on issues where more research is needed – that is my role as an academic.

The conference has gone beyond 'Liquidity and Funding Markets' to broader regulatory issues, and my remarks will do so as well. I start with some general matters.

A complication that came up frequently in our discussions is endogeneity. For example, Piti Disyatat stressed the endogeneity of capital flows with respect to the demand for intermediation. Again, the VIX is sometimes taken as an exogenous determinant of capital market flows, but of course it is endogenous to any risks or volatility generated by these flows. In another example, some

conjecture that excess demand for 'safe assets' led to the creation of private-label assets that were supposedly safe, as certified by the ratings agencies. But it is not obvious that German Landesbanken were looking for 'safe assets' when they bought large amounts of US structured securities – rather, they were looking for yield and found it convenient (though not necessary) that the ratings agencies provided comfort.

We have had much discussion of partial equilibrium versus general equilibrium models – as economists do. I fear we have not made much progress here. I myself am often content with partial equilibrium if I can reasonably believe that the feedbacks are second-order. I think we are sufficiently aware of these problems not to ignore them. Building general equilibrium models of the financial system is a daunting task.

I would flag for research the cyclicity of variables that were central to our discussions: haircuts, margin requirements, the value of collateral and its velocity of circulation. We are clear that these are important questions, but we are very unclear on the empirical evidence.

There are major data puzzles that have arisen. I was struck by Grahame Johnson's figure that showed 'activity-based' shadow banking peaking in 2007 at a level only slightly higher than it was over 1999 to 2003. This runs counter to the conventional wisdom of an explosion of shadow banking activity during the period leading up to the crisis. The lessons: a lot depends on the definition of shadow banking (no surprise, but still ...); and here, as elsewhere, our data are very poor. Prasanna Gai's paper provokes me to ask the regulators whether they have any reliable data on asset encumbrance and haircuts – if not, why not?

Political economy issues loom large for me, even in a conference with a title that sounds rather technical. Grahame Johnson pointed out a conflict between the desire of regulators for more collateralisation with safe assets; fiscal policies oriented towards reducing issuance of government debt, the ultimate safe asset; and monetary policy trying to induce private sector portfolio substitution towards risky assets. These are not just technocratic desiderata. Also political is the pushback of the big banks against moving OTC derivatives trading to exchanges or at least CCPs – the banks have resisted, with fierce and hugely well-funded lobbying, because they make so much money from opacity in these instruments and transactions. Trading is dominated by an oligopolistic handful, and they have been very successful with delaying actions. I can recall a well-informed academic who works in this area telling me in the middle of 2009 that all credit default swaps (CDS) contracts would go through CCPs by the end of that year. Well-informed but naïve.

We have heard several references to the concerns of banks about the stigma associated with seeking help. But the US experience with the Troubled Asset Relief Program (TARP) suggests that the regulators can neutralise this resistance if they are willing simply to override the bank lobby and treat it as an undifferentiated collective (partly because it is hard to tell which banks are the most fragile). Some may need help, all must accept it. A final pervasive political economy issue is cross-border jurisdictional conflicts. These go beyond turf battles to high-stakes confrontations or – even worse, perhaps – simple unilateral actions that disregard common interests. Repeated conflicting actions from the United States and the European Union do not arise from insufficient consultation or lack of information, but rather a search for perceived competitive advantage or an unwillingness to put sensible compromises to hostile domestic constituencies. On the

global scene, we have heard from Alex Heath about the concerns of ‘peripheral’ countries that the regulators will constrain global banks in ways that hurt their interests relative to those of the ‘core’ countries.

This brings me to regulation. There are many puzzles arising from the reluctance of regulators to intervene. For example, one might think that if the regulators were concerned about excess demand for collateral, they would put a much higher priority on CCPs and netting, which reduces the demand for collateral. A related issue is the sheer size of CDS markets and the long chains of transactions that exaggerate the problem, making gross exposure so much greater than net exposure. This matters greatly – one reason cited for the delay in Greek debt restructuring was the concern that it would trigger payouts on huge amounts of outstanding CDS contracts (US\$80 billion gross) with unforeseeable consequences. Of course, when it finally came to that, there was no difficulty in dealing with the US\$4–5 billion of net exposures. Why shouldn’t the regulators simply constrain the volume of these transactions, in any case?

The correct answer to that question is pervasive, intensive lobbying that can spend a million here and there when the stakes are many billions of profits. The lobbyists present this, however, as promoting the general good: the banks – and some academics – say that regulation creates barriers to entry (Kevin Nixon just made this point); that it should not restrict what appear to be Pareto-improving transactions among consenting agents; and that financial innovation and moves towards more complete markets must bring advantages. Such arguments are often very partial equilibrium indeed, ignoring systemic implications, second-best considerations, and egregious cases of concealing or misrepresenting information (e.g. Fabrice Tourré and the London Whale).

We spent some time on collateral and safe assets. Prasanna Gai’s paper should make us ask in each application of collateral requirements, what is the balance between safety and the disincentive to monitoring (moral hazard) that high collateralisation can induce in asset holders? I did not hear any convincing set of principles to guide regulators in drawing the line. I will not go further than my remarks during the relevant sessions on why I believe the ‘safe asset meme’ is highly misleading, as I have made those arguments in more detail elsewhere. No asset is or ever has been truly ‘safe’ – there is a continuum. Only our models require pure safe assets – the financial system can get along very well dealing along that continuum, and the system can generate a range of benchmarks should the need arise. Nor is there a generalised shortage: both supply and demand adjust endogenously to eliminate shortages should they appear at a global level, although there may be some local persistent disequilibria.

One issue on which we can probably agree is that central bank policies regarding acceptable collateral can be harmful. Coming from Europe, I have in mind the incoherent European Central Bank policies that have created instability. They have shifted risk onto national central bank balance sheets; and they have maintained the misplaced emphasis on ratings as a determinant of haircuts, with the consequent risk of vicious circles both for sovereigns and for domestic banks that hold large quantities of sovereign debt. The issue of collateral standards deserves much more attention.

Finally, I want to bring in a longer-term perspective that we seem to have lost. We tend to think of the past couple of decades, in which financial systems and ‘financialisation’ have expanded at an unprecedented rate, as the ‘new normal’. So when the crisis hit, we looked for remedies within that framework. This may be partly because economic history has disappeared from graduate

program teaching in most of the top economics departments. We cite the Chair of the US Federal Reserve Board and a few others as bringing to bear the lessons of the Great Depression. But all too many never learned them. Moreover, economic history progressed greatly when it moved beyond recounting and interpreting events to analysing counterfactuals, and we seem to have lost this lesson. Relevant to the topic of this conference, we should be asking, for example: what if there were no interbank market (after all, the unsecured interbank market has disappeared)? What if there were no money market funds? What if there were no commonly agreed benchmark securities? Indeed, what if US net government debt issuance were to go to zero, as seemed possible as we moved from the Clinton surpluses into the George W Bush presidency? Research should go forward, placing liquidity and funding markets in this broader context.

3. Jean-Pierre Danthine

The Impact of the LCR on the Swiss Repo Market

Franklin Allen's survey for this conference and much of the discussion of the past couple of days have highlighted how fragmented our knowledge of funding and liquidity markets remains, and how many open questions we are thus facing when we attempt to estimate the impact that regulation could have on these markets. At an intellectual level we may be tempted to proceed sequentially and wait until we have satisfactory answers to the main questions before advancing with new regulation. Impatience at the pace of progress on the regulatory front is also understandable, however. It is more than five years since the start of the crisis and, while many steps have already been taken, much remains to be done. The questioning is particularly acute when it comes to the Liquidity Coverage Ratio (LCR), which is the element of regulation I would like to focus on in this contribution. Specifically, I will discuss the key challenges that arise with the implementation of the LCR in Switzerland, and in particular its impact on the Swiss repo market. I will then suggest elements of a potential solution for dealing with these challenges and ensuring that implementation of the LCR does not – paradoxically – decrease the efficiency of the main market source of liquidity.

Liquidity regulation, a means to ensure that central banks are only lenders of last resort

First of all, a question of principle needs to be dealt with. If central banks can provide unlimited liquidity, free of cost, can it be socially optimal to impose costly liquidity rules on market participants? The response to this frequently raised objection lies in the observation that emergency liquidity assistance (ELA) by central banks is in fact costly in at least three different ways.

First, there is a moral hazard issue. Banks that can rely on central banks' unrestricted liquidity provision at any time have no incentive to manage their liquidity risks and hold adequate liquidity buffers. This may lead to excessive liquidity risk-taking.

Second, it is difficult to differentiate liquidity problems from solvency problems. Providing liquidity to an insolvent institution can have very expensive consequences for the central bank.

Third, the provision of ELA to a financial institution may give rise to liquidity problems at other institutions. Contagion of this kind can arise as a result of the opacity and complexity of large financial institutions, making it very difficult for market participants to distinguish between idiosyncratic and systemic liquidity shocks. This may make other institutions with profiles similar to the institution receiving liquidity support suspect in the eyes of the market and may rationalise destabilising behaviour by their counterparties.

For these reasons, there is no doubt in my mind that it is right to insist that banks are capable of standing on their own in the event of significant liquidity shocks. A central bank should be no more than a lender of *last* resort. This principle in itself does not, however, suffice to determine the optimal design of liquidity regulation.

With respect to the latter, a better understanding of the impact of the introduction of the LCR on funding markets and liquidity is crucial. Here, Switzerland may serve as an interesting case study for three reasons. First, a Swiss liquidity regime similar to the LCR has been in place since mid 2010 for the two big banks (UBS and Credit Suisse). Hence, it may be possible to draw preliminary conclusions regarding the impact of such a liquidity regime. Second, under normal monetary conditions, Switzerland has a shortage of high-quality liquid assets in domestic currency (CHF HQLA) as defined in the LCR, due to its large financial sector and comparatively low level of public debt. Third, introducing the LCR is likely to have an impact on the characteristics of the Swiss repo market because of its specific features. On the one hand, Swiss National Bank (SNB) open market operations and interbank repo transactions are conducted on the same repo trading platform against the same collateral basket; on the other, the share of cross-currency repos is large.

Experience with the Swiss liquidity regime for large banks

In Switzerland, a liquidity regime for systemically important banks has been in force since mid 2010. The Swiss liquidity regime is similar to the Basel III LCR. Both are stress-based metrics. The stress scenario underlying the Swiss liquidity regime is more severe, though, which leads to generally more conservative outflow rates compared with the LCR. Moreover, the definition of the liquidity buffer is broader and less focused on government bonds. In particular, there is no differentiation between currencies in the Swiss liquidity regime; hence, the liquidity buffer contains a substantial share of HQLA in foreign currencies.

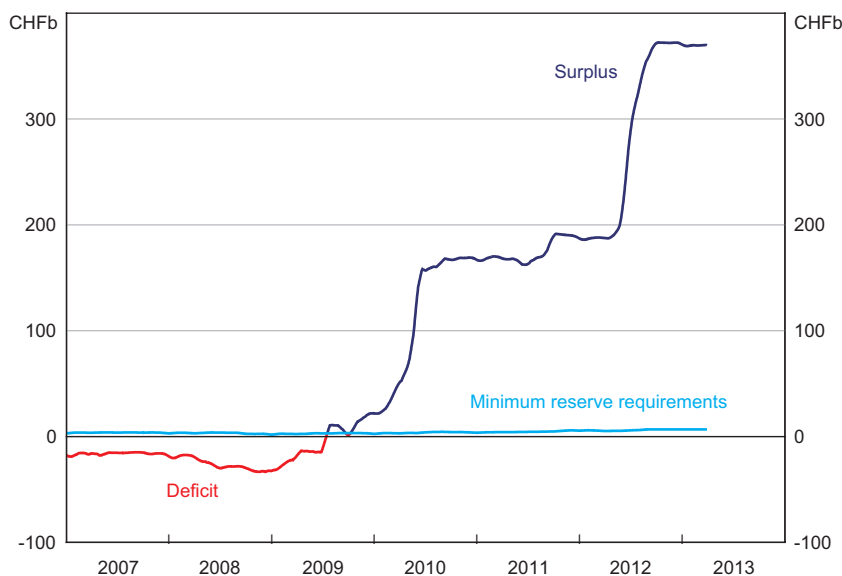
Unfortunately, it has not yet been possible to draw any initial lessons on the potential impact of the Swiss liquidity regime on funding markets and the banks' liquidity positions. This is because the current situation is characterised by very low interest rates and an overabundance of liquidity in the system.¹ As a consequence, the holding cost of HQLA is insignificant and the liquidity constraints imposed by the liquidity regime are essentially non-binding. The Swiss liquidity regime has, up to now, had no significant effect on either the behaviour of the two big banks or on funding markets, liquidity and credit allocation. But this is clearly not a reliable lesson for the more normal circumstances that will prevail again at some point in the future.

¹ The exchange rate floor to the euro introduced in September 2011 is an exceptional monetary policy measure taken by the SNB against the background of deflationary risks and excessive appreciation pressures on the Swiss franc observed since 2008. It has led to significant foreign currency purchases by the SNB.

Implementation challenge 1: Shortage of domestic currency HQLA

Let me now turn to the challenges of LCR implementation: first, the issue of a shortage of local currency HQLA. In this regard, Switzerland has been, until recently, a typical example of a jurisdiction that would need to have recourse to specific implementation options envisaged within the LCR framework to deal with such a shortage. However, as a consequence of the SNB's monetary policy at the zero lower bound and the ensuing massive injection of liquidity into the system during the crisis, Switzerland has moved from the traditional regime of liquidity deficit to one of a very large liquidity surplus (Figure 1).² This has reduced the shortage of CHF HQLA. This situation, however, should not be interpreted as a new steady state. If, at some point in time, monetary policy considerations induce the SNB to reduce the liquidity surplus, the universe of CHF HQLA will be affected again. In the case of a temporary reduction, the choice of instrument (e.g. reverse repos or SNB Bills) will determine whether or not a reduction of CHF HQLA results. In the case of a permanent reduction, a corresponding decrease of CHF HQLA will occur, by definition. However, the impact of monetary policy decisions on the universe of HQLA should not influence the choice of the appropriate balance sheet size for the SNB, or the future monetary policy framework. Consequently, the structural shortage of CHF HQLA should be taken into account when implementing the LCR.

Figure 1: Structural Liquidity Position of the Banking System versus SNB 30-day moving average



Note: Deficit/surplus relative to minimum reserve requirements

Source: Swiss National Bank

² A structural liquidity position of the banking system is defined as net claims on, or liabilities towards, the central bank. If the banking system has net liabilities to (net claims on) the central bank, it is in a structural liquidity deficit (surplus).

Implementation challenge 2: Impact on Swiss franc repo market

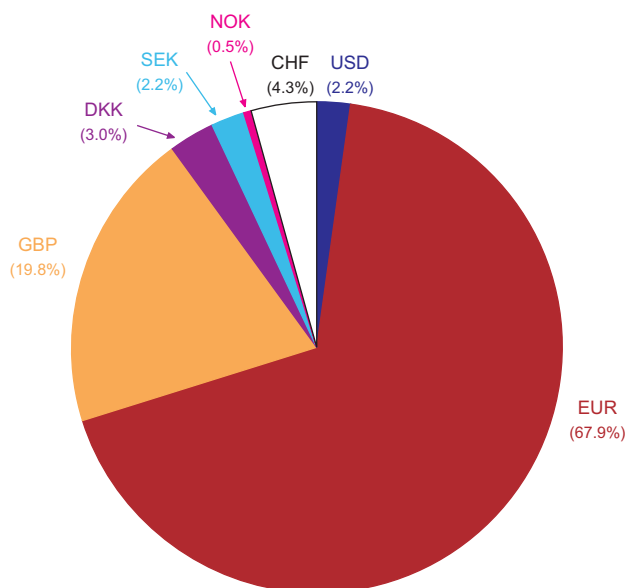
The potential impact of the LCR on the functioning of repo markets is the second key challenge. Whether or not the LCR poses a problem in this regard crucially depends on country-specific repo market characteristics, such as the collateral standard and haircut practices. In particular, in repo markets where liquidity is primarily provided against domestic government bonds, the effects of introducing the LCR will be small or even non-existent, as both the cash and the security are considered to be of the highest quality (Level 1) in the LCR rulebook. This will, however, not hold true for repo transactions against Level 2 assets or non-HQLA. In the latter case, different haircuts apply. Typically, when one compares the LCR haircut schedule with haircut policies applied by central banks and on international repo markets, one finds that market haircuts tend to be higher for Level 1 assets and lower for Level 2 assets relative to the LCR haircuts. This is partially explained by the fact that the haircuts applied in the LCR are computed to account for price changes at a 30-day horizon in stress situations. By contrast, haircuts applied by market participants correspond to the price changes that can be expected in normal times over shorter horizons.

The difference between LCR and repo market practice with respect to haircuts and collateral standard is particularly evident in the case of the Swiss automated repo market, which features the following characteristics. First, it allows for twice-daily margin calls. Second, close to 99 per cent of the transactions in the Swiss repo market, whether interbank or with the central bank, are today – and were in the years preceding the crisis – effected against SNB-eligible collateral (the SNB general collateral (GC) basket). The vast majority of these transactions are not concluded against a specific security from this basket but against the basket itself.³ Third, the securities in the SNB GC basket are predominantly – up to 96 per cent – denominated in non-CHF currencies (Figure 2).⁴ Finally, repo transactions are neutral with respect to the existing Swiss liquidity rules, as the latter rely to a very large extent on non-Swiss franc-denominated assets as well.

3 These GC repo transactions primarily support daily liquidity management. The securities transferred serve as collateral and play a subordinate role, provided certain quality criteria are met.

4 Securities denominated in foreign currency must satisfy stringent quality requirements with respect to credit rating (minimum rating requirement AA-/Aa3) and liquidity properties (minimum issuance volume of at least CHF1 billion counter value).

Figure 2: SNB Repo-eligible Assets by Currency
As at 19 July 2013



Source: Swiss National Bank

Given the frequent margining and the high quality of the assets included in the SNB GC basket, the Swiss repo market has historically functioned with a zero haircut. The LCR rules, however, impose haircuts or restrictions on the use of most of the securities included in the SNB GC basket; in particular, on foreign currency-denominated assets. The implication of this haircut difference is that repo transactions – whether with the central bank or in the interbank market – will not necessarily be LCR-neutral in the future. In other words, any repo transaction against non-CHF government securities will have an impact on the LCR of the institutions involved. As a consequence, not only cash management objectives but also LCR considerations will enter into the decision to conduct transactions on the GC repo market. This is likely to lead to a segmentation of the repo market, as it is plausible that market participants will want to be specific as to the asset or asset class against which they want to trade. This in turn may lead to different interest rate curves, depending on the various asset classes and reflecting the difference in LCR eligibility.

Possible solutions

In order to address the identified lack of CHF HQLA and the high share of collateral denominated in foreign currency, option 2 of the Alternative Liquidity Approaches (ALA) is the natural direction in which LCR implementation in Switzerland is envisaged.⁵

⁵ In order to ensure a level playing field among Swiss banks, banks can apply for ALA option 3 (additional use of Level 2 assets with a higher haircut) instead of option 2 (foreign currency HQLA to cover domestic currency liquidity needs). ALA option 3 may be relevant for banks with no adequate foreign exchange risk management.

Further, to mitigate the issue of LCR non-neutrality of repo transactions, the following setting is considered: while repo transactions with a residual maturity of more than 30 days fully enter into the LCR, repos with a residual maturity below 30 days will be considered LCR-neutral as long as the collateral is part of HQLA – irrespective of whether collateral is denominated in foreign currencies or is classified as Level 2. This LCR neutrality of repo transactions should result in the activity of the repo market in maturities up to one month being largely unaffected. The LCR may, however, imply a change in the collateral standard applied by the interbank market and the SNB.

These adjustments are in the spirit of the LCR and should therefore be compliant with the new international liquidity standard. At the same time, and crucially, they ensure that the Swiss repo market retains its key function both as the main source of liquidity for the Swiss banking system and as an efficient tool for monetary policy implementation by the SNB.

4. General Discussion

A central theme of the discussion following the policy panel was the question of whether substantial progress had been made in terms of improving regulation since the onset of the financial crisis. In response to Richard Portes' statement that progress had been underwhelming, Kevin Nixon responded that liquidity management has improved, bank capital ratios were higher, and resolution arrangements for banks were largely in place. He further stated that for the most part, banks had not attempted to delay further regulation out of self-interest. He gave the example of the central clearing of interest rate swaps, where banks had adopted changes to reduce exposures and improve transparency ahead of mandates being enforced. Another participant agreed that core banks' behaviour changed around 2010 from resisting to embracing CCPs, but suggested that this coincided with their realisation that client clearing on behalf of financial institutions in the periphery was likely to be profitable.

Another theme of the discussion was the need to properly evaluate the effectiveness of the policies and financial reforms such as the LCR that were designed to promote financial stability. One participant observed that financial institutions in Australia and New Zealand had both responded to the liquidity shocks suffered during the financial crisis by increasing their core funding ratios, despite substantially different regulatory responses. In New Zealand, the conclusion from the crisis experience was that banks had been too dependent on short-term market funding and, accordingly, liquidity policies including core funding ratios and net stable funding ratios had been instituted. In contrast, market pressures from institutional investors and rating agencies seemed to have imposed a similar degree of discipline on Australian financial institutions, with specific liquidity regulation to be introduced to longer Basel III timeframes.

In general, participants agreed that the impact of liquidity regulation would remain unclear until the deleveraging process was completed and banks started using short-term funding markets more actively. Mr Nixon added that it was also unclear how different reforms would interact, particularly because it was hard to know what the new steady state would look like. Given this, he argued there was a valid case for ongoing assessment of reforms, with a willingness to make adjustments as necessary if there was evidence of unintended consequences.

Relatedly, another participant considered that the regulatory encouragement for banks seeking funding from domestic markets post-crisis could have unintended consequences for the macroeconomy. Specifically, the participant questioned how current account deficits could be safely funded if not through bank borrowing. One difficulty noted was that, while direct market lending to large companies was not problematic in itself, in stress periods where funding markets shut down, central bank liquidity provision to funding institutions would be less effective if the institutions with liquidity needs were not banks with which the central bank had an existing relationship.

Another issue that was raised in the general discussion was around the scope to develop general equilibrium models of the financial sector that could be helpful in evaluating financial regulatory policy. Noting that macroeconomic models had struggled to model the financial sector, one participant questioned if general equilibrium models were even feasible. It was noted that partial equilibrium models had demonstrated the trade-off between financial efficiency and macroeconomic stability and have accordingly aided policy setting. The best path forward for research was not clear. Professor Portes suggested that general equilibrium models were worth pursuing as they are not hampered by endogeneity issues which he noted had been raised by multiple people over the course of the conference. He added that while the latest generation of general equilibrium (DSGE) models had come in for much criticism, this modelling work was both difficult and important. He gave the example of DSGE models that attempted to integrate rich financial intermediation as frontier research worth pursuing. Network models were also generally regarded as having become a useful tool for modelling the financial sector.

The trade-off between efficiency and stability was raised by another participant, who noted that regulatory bodies had different incentives and therefore weighted these two policy objectives differently. The participant queried the extent to which a local jurisdiction could effectively achieve a position that differed from international settings, given that a lot of regulation aimed at achieving international harmonisation. Another participant responded that this was possible, but had consequences because it often required countries to operate capital controls and hold large volumes of overseas assets. Attention was then drawn to the fact that the resulting global imbalances were widely considered to have contributed to the severity of financial crises. Professor Portes provided a contrary view, suggesting that a trade-off between efficiency and stability wasn't always present. He argued that in a world with multiple equilibria, with no clear mechanism for arriving at a good or a bad steady state, regulation imposed for the purpose of stability could aid efficiency as well.

Another participant questioned the view that the central banks could repeatedly be relied on to provide unlimited liquidity, saying that this activity was ultimately conditional on the fiscal position of the state. Professor Portes argued that concerns about the significant expansion of central bank balance sheets were overdone, and there had been no negative effects as yet. He agreed that fiscal capacity was an important constraint, but suggested this was really a transparency issue. Jean-Pierre Danthine added that this fiscal constraint was particularly relevant in a world where the central bank found it difficult to determine categorically whether an institution was illiquid or insolvent before providing emergency funding.

The discussion also returned to the question of whether regulation had constrained banks' provision of liquidity. Participants specifically pointed to the fact that an LCR could limit the volume of liquidity that banks could provide and regulation on non-banks had reduced their ability to fill this gap. At the same time, there had been an increase in demand for HQLA among non-banks, with the net effect being to increase the price. One participant suggested that the relevant issue was whether supply and demand curves actually intersected at any price. Mr Nixon agreed that demand curves had shifted dramatically, but noted that this price increase could be mitigated to some extent by the ability of financial institutions to use lower-quality assets to access liquidity facilities.

On a practical note, another participant suggested that the relatively simple issue of poor transparency and lack of information was of substantial importance as this led to incomplete markets, externalities and other market failures. Despite this, the participant was sceptical about whether privacy concerns could be overcome. Mr Nixon added that regulators also wanted to promote transparency because this would give them greater access to useful data, but agreed that overcoming legal issues had proved more difficult than originally expected.