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The question I will discuss are whether financial institutions and markets are able to deal with the unwinding as planned and what the mechanisms and incentives should be to effect such an unwinding. In my mind the first part of the question is the most important, and in order to understand it better, we need to look closely at how banks are funding themselves and how that may evolve over time.

I have spent a large part of my career as a bond syndicate manager, and the first question we would ask on any transaction was, "Who is going to buy it?" If we are to replace state sponsored and provided funding for banks we need to be confident that private sector demand and capacity exists.

We are getting some mixed messages as we look at markets. On the one hand, banks' use of the various government schemes is clearly coming down significantly, market measures of risk appetite among investors suggests a degree of normalization, and private sector sources of funding are reopening.

On the other hand, that is only one part of the story, and numerous challenges remain as banks seek to be fully funded on a stand-alone basis. The investor base for bank securities has changed dramatically, the future calendar for refinancing is huge as the duration of liabilities has shortened over the last two years, and banks face a number of difficulties and competing pressures as they seek to grow their deposit bases and long-term wholesale funding. Clearly the extent of these difficulties varies dramatically across countries and regions; the German government's injection of capital into the WestLB bank was a timely reminder that not every country and not every bank is at the same point in the cycle.

Use of government-guaranteed issuance schemes has fallen dramatically and on a month by month basis is down 60 percent from its peak. Nonetheless, we still see issuance under these programs—for example, the Skipton and West Bromwich Building societies' issue in the United Kingdom; and Bank of Queensland, among others, in Australia. In fact, in some areas, issuance has been increasing over the past three months. Any discussion on incentive mechanisms will need to understand whether such guaranteed issuance is driven purely by cost relative to the alternatives.

We see a similar pattern across most of the central bank liquidity facilities—for example, the Federal Reserve's Term Auction Facility for providing credit to depository institutions or the holdings of its Commercial Paper Funding Facility. All show material declines. But the volume of funding which needs to be replaced before usage returns to precrisis levels is clearly huge.

If we turn to our traditional barometers of risk appetite, again we see positive trends: whether we look at LIBOR rates, repos, or bank credit default swaps (CDS). All of these suggest spread compression and normalization. But recent events, such as Greece and the

Dubai World developments, are a reminder of the fragility of investor confidence. And we can see this fragility reflected in the sovereign CDS levels if we look at Greece and the growing concerns regarding its deficit, concerns clearly exacerbated by the events in Dubai.

So, how are the alternatives to state supported funding developing? The maturity of euro commercial paper issuance shows a clear, healthy upward trend. From a low of around 20 days' maturity in September 2008 as the events around Lehman Brothers were unfolding, we now see a level of around 60 days.

We see a similar pattern in covered bond issuance, a trend supported in particular by the European Central Bank's purchase program, which commenced earlier this year. But—and this ties in with my point on the volume of funding required—volumes are still only at pre-2006 levels and, based on our forecasts, are likely to remain there next year. Further, senior unsecured issuance by banks has similarly recovered, but, again, volumes are still not fully at precrisis levels.

We have also seen the ratio of guaranteed to unguaranteed debt shift in the right direction, but we can also see that, for most of the crisis period, guaranteed deals have consistently been larger.

Right now the growth of the covered bond markets and unguaranteed markets is critical because, for the time being, two key markets for term bank funding are effectively gone. The first is the senior bank floating rate note market, where we can see the postcrisis collapse in volumes; and the second is the European asset-backed securities (ABS) market. European ABS issuance levels in 2008 and 2009 do not reflect sales to third parties; they are retained transactions to be used as collateral with central banks.

We have seen a significant shift in the investor demographic. The biggest buyers of longer-dated senior floating-rate notes (FRNs) were banks themselves, benefitting from the 20 percent risk weight under Basel I and using them for liquidity portfolios. An example from January 2007 is a €2 billion issue from a AA-rated European bank, in which one can see that nearly 70 percent of the order book was banks. Going forward, those bank liquidity portfolios will be invested in government bonds. Further, if we look at an order book for the AAA tranche of a UK transaction in prime residential mortgage-backed securities in late 2006, we can see that the dominant investor base was the structured investment vehicles or SIVS who are clearly no longer around. So the message is clear; banks need to cultivate a new investor base for term funding—the so-called real money community of asset managers, insurers, and pension funds—to fill this gap.

We can also see this manifested in the difference between the investor pattern for guaranteed and unguaranteed issuance. In the order books for two U.S. dollar issues by the same large bank in the United Kingdom. What you notice is that the guaranteed deal is dominated by banks, but also that there is huge concentration in the order book with the top 10 allocations accounting for more than 80 percent of the deals. The average order size is large at \$67 million. In some respects what is happening here is that the banks that

have benefitted from an inflow of deposits and liquidity in the crisis have recycled that to other banks through the mechanism of the guarantee schemes.

In contrast, the unguaranteed deal is primarily driven by fund managers and, to a lesser degree, hedge funds. But notice also how granular the demand is, with an average order size of \$23 million and more than 160 orders in the book for a transaction that is 40 percent smaller.

This is a key point—the investor bases for guaranteed and unguaranteed issuance are different and we need to be confident that as we switch off the guarantee schemes that the broader investor base is deep enough and can provide the volume of funding required.

It is worthwhile at this point considering the incentives and disincentives for banks to use the guarantee schemes. Consider France, where the government guaranteed issuance was via the SFEF agency, and Spain. We can see that in France banks were issuing unsecured funding even at points where guaranteed funding came at much tighter spreads; but perhaps more interestingly, in Spain some banks are still issuing guaranteed paper even though covered bonds are pricing at much tighter spreads. The reality is, of course, that the covered bond market is not yet open to all issuers, and therefore an increase in the guarantee cost in and of itself is unlikely to change things. So, although markets are reopening, not all financial institutions enjoy the same degree of access.

Finally, a couple of words on the refinancing burden and other challenges. The redemption profile of bank securities is sizable, and unsurprisingly, the average maturity of liabilities has gone down. We estimate that for European financial institutions, we see 2010 redemptions approaching €700 billion. This represents only outstanding securities and does not reflect usage of central bank facilities. Average duration has fallen from around six years to nearer to four.

Banks have numerous incentives to restore stand-alone funding. One that I have not touched upon is the proposed new liquidity buffers that will penalize short-dated funding—the negative carry of a large liquidity portfolio will be a significant cost to the business. But banks face other external challenges in trying to build wholesale and retail funding. Governments are competing issuers in wholesale markets and can also compete for retail deposits, as we recently saw in the United Kingdom with National Savings.

As highlighted earlier, insurance companies are an important target investor base. The new insurance regime in Europe, Solvency 2, will make it more costly for insurance companies to invest in longer-dated bank bonds. And finally, the fungibility of funding and liquidity between jurisdictions faces potential constraints arising from the likely requirements regarding self-sufficiency of liquidity.