The current banking crisis: an evolutionary view

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Abstract:

Banking has from the beginning balanced the conflicting forces of profitability and safety. Looking all the way back to the emergence of bank money as the means of payment we can come to some conclusions about what the main factors have been which have brought us to the present situation. Securitisation was the step which allowed banks to mutate into a shape that eventually became monstrous. It began as a solution to the fact that the banks had run down their liquidity to dangerous levels. This process was given a huge boost by the Basel I capital accord. The run-down of liquidity was itself a response to increased competition. The third factor was the speed with which banks developed the later innovations and used these to expand their balance sheets far too rapidly. The early history of banking is particularly instructive on this matter of speed.

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Banking has from the beginning balanced the conflicting forces of profitability and safety. Looking all the way back to the emergence of bank money as the means of payment we can come to some conclusions about what the main factors have been which have brought us to the present situation. The story is far from simple and perforce must be simplified in order to make a few key points. It is derived from English banking history and would need to be modified to apply to other countries. The outlook of this paper emerges from earlier work (Chick 1986, 1993a, 1993b, 2008) and will skip much detail elaborated there.

The conclusion of the paper is that securitisation was the step which allowed banks to mutate into a shape that eventually became monstrous. This step was welcomed by a banking system which had run down its liquidity to dangerous levels; securitisation allowed them to turn their ‘illiquid’ assets liquid. This process was given a huge boost by the Basel I capital accord: the banks’ response was a classic case of regulation-avoidance. The second important element was the opening-up of the banking system to increased competition. The third was the speed with which banks took up the later innovations and used these to expand their balance sheets far too rapidly. The early history of banking is particularly instructive on this matter of speed.

The emergence of banking

The transition from goldsmiths providing safekeeping facilities to bank liabilities serving as the chief means of payment is the fundamental story in banking. It represents a substitution of a claim on what was considered money for the money itself, allowing ‘money proper’ (to use a term Keynes employed as late as 1930) to support more transactions by delaying the moment at which ‘the time of payment [in money proper] does arrive’. The trade-off, of course, is increased risk – the risk that the bank will not be able to fulfil its promise to pay 'money proper' on demand. Call it convertibility risk. It is against this risk that liquid assets were held.

The process of quantifying convertibility risk (or alternatively the extent of liquidity required) was, on the whole, discovered by trial and error. There was plenty of error: between 1750 and 1830, 343 banks failed. The most instructive episode was the Suspension of specie payments during the Napoleonic wars. This lasted from 1797 to 1821. Without the convertibility constraint, the note issue rose by 45 per cent between 1798 and 1809, 170 per cent in the case of notes under £5. The number of banks grew from around 100 in 1780 to 230 by 1797, around 400 by the beginning of the new century, and about 800 by the mid-1820s. 67 banks failed between 1814 and 1816. After Resumption, with substantial liquidity already in the system, a variety of measures encouraged a speculative boom. When the bubble burst, 60 banks failed between July 1825 and June 1826 (Davies 1994). The substitution of claims on coin for coin itself as the main means of payment was not smooth; it took over two hundred years to accomplish.

Once it had been accomplished, the relation of the State to the money supply was fundamentally altered, since the State was no longer the unique supplier. The State had a choice: collaborate with the banks in maintaining the exchange of State money with bank money at par, or regard bank 'money' as none of their business, *caveat emptor*. They chose the former path. This is the fundamental reason for bank regulation (including reserve and capital requirements), monetary policy, deposit insurance and the lender of last resort, all functions we take for granted.

Managing liquidity

Much of subsequent history has to do with the banks learning to manage their liquidity (or their convertibility risk). They established branches, sharing liquid resources around the bank as a whole. They developed correspondent relationships with London banks, which in turn had easy access to the market in seasoned securities at the Bank of England. The discount market provided for placement of excess liquidity 'at call' as well as further access to the Bank. Later they were to deal with each other and with the Bank direct. The risk of a cash drain was reduced by consolidation and pooling and because of the weight of accumulated experience could be estimated quite finely. All these developments allowed the banks to reduce the cushion of liquidity, and the bank credit multiplier increased – all of which was good for profits.

None of these measures, however, were a defence against a systemic need for liquidity. As Keynes (1930) pointed out, banks expanding their lending is step are not constrained by convertibility risk until it is too late. Then it is the turn of the central bank to provide liquidity to the system as a whole. The Bank of England eventually took on this function. The existence of this safety net further increased banks' confidence in the adequacy of their liquidity cushion.

Taking our story into the twentieth century, two later developments further increased that confidence. First, the Bank in the 1960s, having had much experience of seasonal fluctuations in the demand for cash, developed the doctrine of supplying cash on demand. But it is impossible to distinguish a demand for cash to support increased seasonal purchases from demand for cash for portfolio balance - to match, say, rising deposit holdings which themselves were generated by bank credit. Through this mechanism, the increased demand for cash may actually be a demand for increased bank reserves. It would be automatically supplied. The second mechanism came about after banks started practising liability management, which squeezed their profits and turned them against government securities, as far as they dared. If for other reasons of policy the Bank wished to keep interest rates from rising, they would then supply cash on demand to the banks (in other words buy the securities at no capital loss to the banks). By both these mechanisms, the Bank had become a Lender of First Resort. The banks were able further to reduce their liquidity cushion.

Eventually it was realised that reserves were not even a defence against an individual bank's liquidity problems, once they had become a legal or conventional requirements, for they were not available for use except between reporting dates. They were in fact a tax levied by the central bank or, since short term government securities bulked large, a subsidy by banks to government. They were much reduced, supplemented by 'operational deposits' of a scale to be negotiated between the Bank and individual banks.

Competition

The mechanisms described in the last section are to some extent intertwined with the changing competitive landscape. The banks in the twentieth century had formed a cartel, fixing their lending rate at two per cent over bank rate and the rate on deposits at two per cent under. Under this arrangement it was very unusual for anyone to change their bank: there was no incentive. This gave the banks remarkable security in their deposits. The banks were subject to what looks to us now as a considerable reserve requirement: 8 per cent of deposits to be held in cash and 20 per cent in short-term bills. The building societies were not subject to such requirement, and the banks protested that this was unfair – a protest they might have lived to regret. The Bank of England promulgated Competition and Credit Control (1971), which levelled the playing field: the reserve requirements were lowered and applied to both groups of institutions equally. The cartel was abolished. The idea was that competition would provide the necessary credit control, but of course that did not happen.

The building society movement fulfilled a role once forbidden to banks on the grounds that mortgage lending entailed to excessive risk due to the degree of maturity mis-match. Building societies were 'mutuals', owned by and run for their depositors and borrowers. To match, at least partly, the long-term mortgage loan commitments, the share-holders in building societies were expected to build up their participation before taking out a loan with the same society. Although technically the members of the societies owned shares, these had many of the attributes of bank deposits, though they were thought of as long-term savings. They were attractive because they prepared for a future mortgage and they paid interest.

Notice that the building societies held their reserves in the form of bank deposits, thus creating a pyramid of credit on the monetary base. Building society deposits were a further substitution, just as deposits were a substitute for 'money proper'.

Building society shares were (quite intentionally) imperfect substitutes for bank deposits: they were not designed to be part of the payments mechanism, and as holders, beginning in about the late 1960s, tried to use them for this purpose, they found them awkward compared to bank deposits. Building societies were not banks and so could not grant overdraft facilities. For this reason there were no cheques (the holder had to obtain a draft from the society made out to the third party), and cash points were not permitted. These inconveniences were offset by interest. The restrictions on building society shares were gradually relaxed, and with each relaxation, the banks faced stiffer competition while the ethos of stable saving with the building societies was eroded.

Banks responded by offering interest rates to compete for deposits, depending on the extent to which they wished to expand their activities: that is, they engaged in liability management. The interest payments squeezed profits, and that fact and the push for market share presented incentives to take further risks, including moving into mortgages and other longer-term lending, and continuing to run down liquid assets whenever they could. (In 1981 the required non-operational balances at the Bank were lowered again.)

There was really only one source of liquidity left: the banks' 'illiquid' assets, their loans. Following a technique developed in the USA in the 1970s, UK banks began to securitise their assets. In the Berlin conference in 1990 I characterised this as the 'sixth stage of banking' (Chick 1993: 84):

> In one sense [securitisation] represents a complete change in the traditional style of banking; but it can be seen as a logical development of the paring down of liquidity that has occurred steadily through [earlier stages of development]. Devising assets that can be sold if required but which are more profitable, perhaps, than the government securities that used to play such a major role in banks' contingency plans, leaves the banks less vulnerable than they were when ultimately completely reliant on the lender of last resort.

Pretty bland stuff, isn't it? Although there is a little phrase about a 'complete change in the traditional style of banking', there is no sense of alarm. I saw securitisation solely in terms of a release of liquidity. And although Basel I had been put in place the previous year, I said nothing about it.

With the wonderful trick of hindsight it all looks very different.

The great mutation

It was, indeed, a 'complete change in the traditional style of banking'. The role of Basel I in encouraging it has received, to my knowledge, no comment in any of the vast literature on the present crisis. Basel I was designed to discourage an asset side which was too heavily weighted with risky assets. The result was to take these assets off the balance sheet. It was a classic case of banks avoiding regulation and probably would have happened even without the gradual erosion of liquidity. Everything else that has dominated the discussion of the crisis follows from that. Once the banks learned to sell their assets on, the ever-narrowing interest rate spreads could be regarded as a minor problem while they made their income from fees. Most important among these fees from the point of view of the present story is the origination fee. There was now an incentive to originate as much lending as possible. In parallel, there was no incentive to choose good borrowers or monitor the performance of the loan.

These elements of 'old-fashioned' banking were now someone else's problem, hence the sub-prime loans, teaser rates, ninja loans, etc.

The new 'originate and distribute' model proved very profitable, not least because the credit rating agencies underestimated the risk of the new assets by a proportion which will remain unknown for a long time yet. Technology allowed the generation of ever more sophisticated instruments and a network of insuranace contracts. There is no need to go over the details.

So profitable was the new model that the banks found deposits an insufficient basis for their funding and began to borrow their funding from other financial institutions. This created another systemic risk and rather changed the concept of liquidity: from being an asset 'more certainly realisable at short notice without loss' (Keynes 1930) held against a cash drain, it appeared on the liability side of banks' balance sheet also, in the form of the probability of being able to roll over the short-term borrowed funding without a sharp rise in cost. Many building societies, meanwhile, 'demutualised', became banks, to join in the fun. Those that didn't were regarded as dozy, outdated relics of another, more lacklustre era.

Lessons

1. Speed kills. The first part of our story took more than 200 years. The transformation of the banks from institutions that at least *could* be sound into monsters out of control took at most forty years, dating from Competition and Credit Control, or twenty, starting with Basel I. Innovations are risky. To be profitable they must create claims on an asset further up the hierarchy: deposits are claims on cash, CDOs are claims on the collateral: the principle is the same. It is vital that not all the claims be exercised at once, for they cannot be fulfilled; there are more claims than underlying assets. Therefore one must proceed to issue them gradually, until one knows from experience what the market will absorb.

2. Liquidity matters. Until the credit bubble burst, liquidity had fallen out of discussion. Note that the Basel agreements are not concerned with it. There was a general perception that liquidity was handled by markets and that markets sort everything out; therefore liquidity was not a problem.

3. Secure funding matters. This is mildly ironic, for the original liquidity problem was the instability of deposits – the threat of cash drain. Under the cartel, deposits became very secure; then liability management made them more volatile again. But these problems pale against the volatility of funds borrowed from professional investors, which had become important before the crisis.

4. Responsibility for lending matters. The originate-and-distribute model is responsible for many of the abuses that characterise many banks' practices in recent years. This banking model is a mutant which is endangering the species.

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On 5 November 2008 the Queen opened the New Academic Building at LSE. Faced with a display of dramatic graphs concerning the present crisis, she asked: 'If these events were so big, why did everyone miss them?' The luckless Professor Luis

Garicano had to respond. He said, ‘At every stage, someone was relying on somebody else and everyone thought they were doing the right thing.’

> Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally. (Keynes, 1936: 206)

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