

Economy Update 2009

The Credit Crunch and the Great Economic Contraction of 2008



Introduction:

“Global recession makes world less safe.”

“Europe’s recession forecast to persist to 2010.”

“Signs of deepening recession erodes confidence.”

“Eurozone unemployment leaps to 10-year high.”

“U.S. unemployment highest since 1994.”

These headlines from the *Financial Times* tell their own story. Most of the world’s major economies are in their worst recession since the end of World War II and in some cases the recession is starting to mirror the Great Depression of the late 1920s and early 1930s. Figures 1 to 3 illustrate the extent and global dimension of the current recession by plotting real GDP for the Euro Area, the United Kingdom and the United States from the second quarter of 2006 to the first quarter of 2009. In each case real GDP starts to decline from late 2007/early 2008 indicating negative growth rates for most economies in Europe and North America. Also, as shown in Figure 4, the decline in real GDP has been matched by rising unemployment across the industrialised world.

Figure 1 Euro Area Real GDP 2006Q2 - 2009Q1

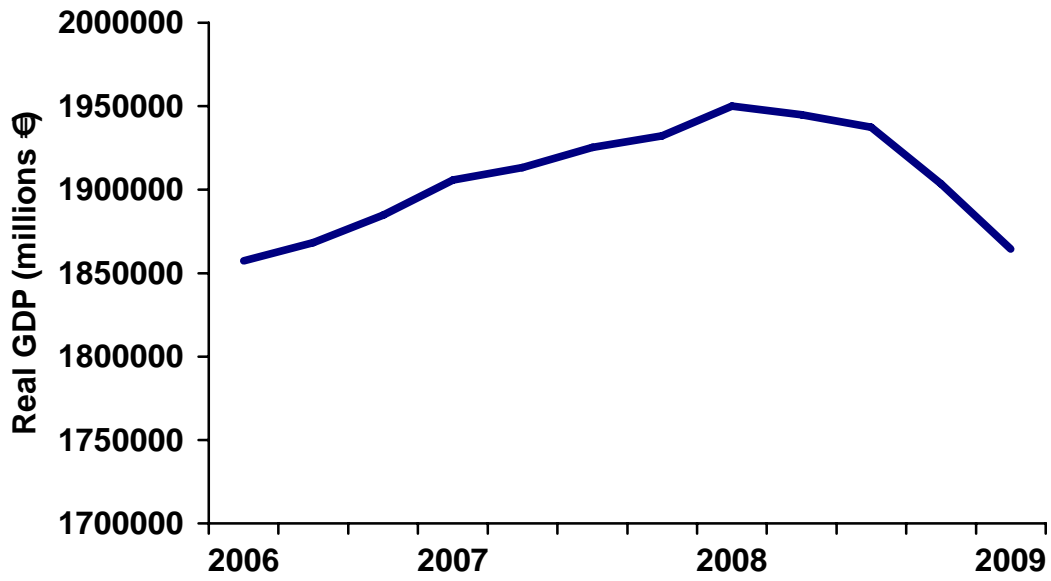


Figure 2 U.K. Real GDP 2006Q2 - 2009Q1

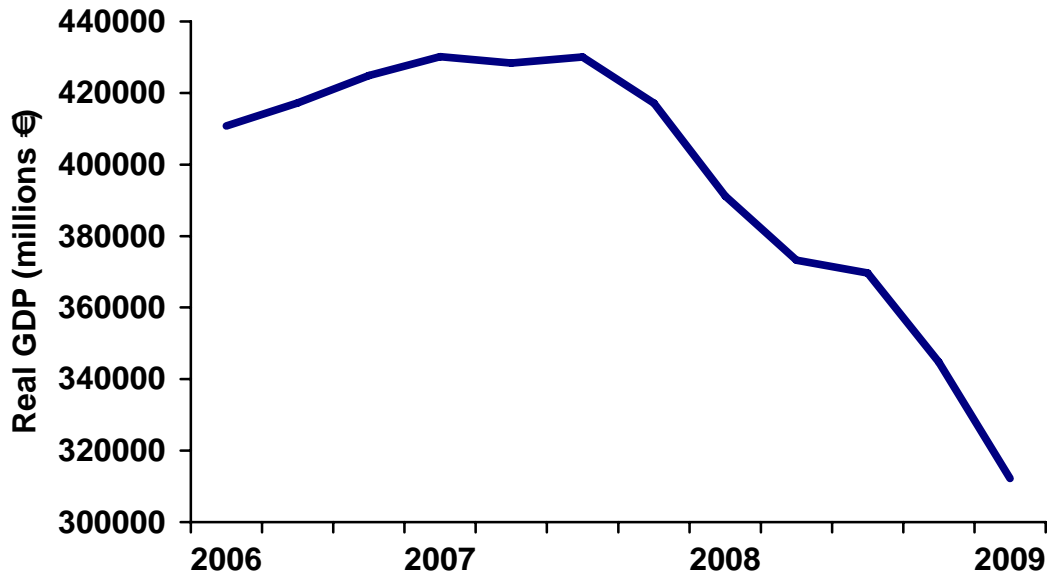


Figure 3 U.S.A. Real GDP 2006Q2 - 2009Q1

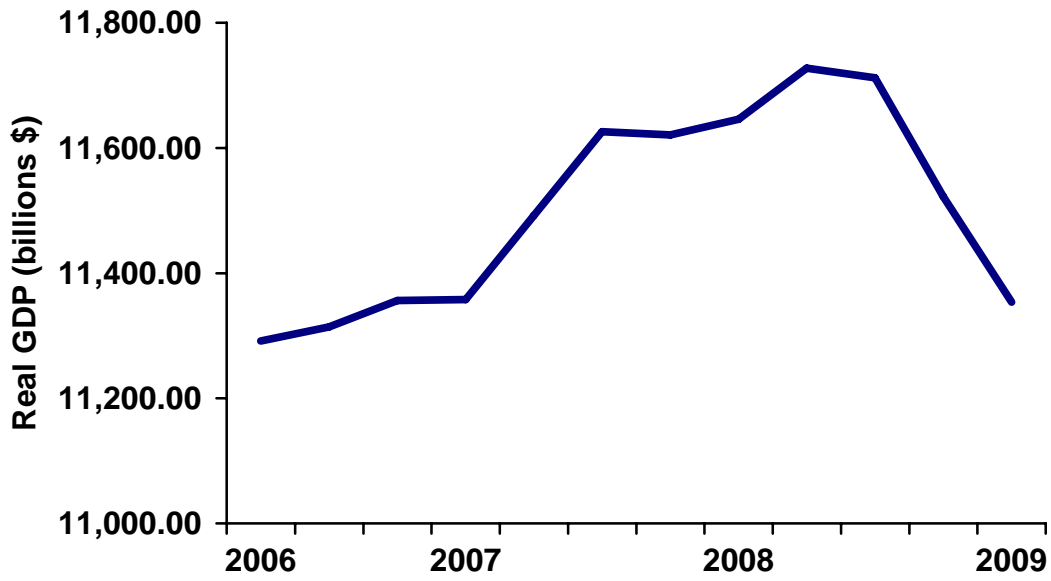
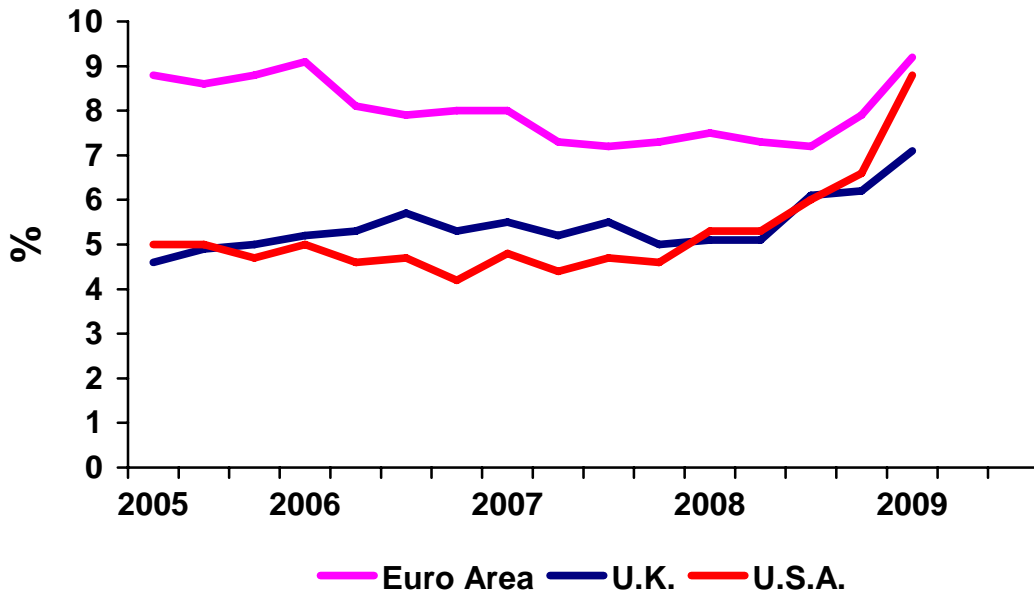


Figure 4 Unemployment Rates 2005Q2 - 2009Q1



The key questions are: what caused the recession; and what are the appropriate policy responses? A popular answer to the first question is that the recession has its origins in the

banking crisis which it is widely believed is closely related to problems arising from mortgage lending in the United States. However, before accepting that argument on a *post hoc ergo propter hoc* basis, we should remember that 80 years after the onset of the Great Depression of the 1930s there are still disputes as to what caused (as opposed to exacerbated) that worldwide decline in economic activity. As John Kay asserted in an article in the *Guardian*, to state that the recession was caused by the so called sub-prime crisis in the US is about as illuminating as to say that the First World War occurred because a Serbian terrorist, Gavrilo Princip, murdered the heir to the throne of Austria-Hungary in Sarajevo in June, 1914.¹

One should be careful not to confuse a “tipping event” with the underlying forces building up to, and released by, the event. Few historians are prepared to argue that there would have been no First World War if it had not been for the navigational error by the Archduke’s driver that brought his passengers (for the second time that day) close to the wretched assassin.

It is worth remembering that about twenty years before the problems described as the sub-prime crisis occurred, a very similar crisis originating in precisely the same sector of the US economy occurred. This is usually described as the S&L Crisis of the late 1980s. S&L refers to Savings and Loans institutions, the main source of housing finance in the US. It was precisely the same sector of the economy in which the sub-prime crisis emerged in 2007. Poor lending decisions caused failures among the S&Ls, and this was accompanied by a wave of small bank failures. In 1989 there were 531 bank failures across America. The world economy, however, did not enter a severe contraction as a consequence.

The level of bank failures in the US between 2007 and 2009 was much higher than in previous years, but did not even approach the peak value of the previous crisis². However, it should be pointed out that the potential extent for cumulative failures underlying problem may have been disguised by the reaction of the authorities to the gathering storm in the

¹ “The crisis was caused by sub-prime mortgage lending in the US only in the same sense that the first world war was caused by Princip’s [assassination](#) of the Archduke Franz Ferdinand at Sarajevo.” *Guardian*, 23 March 2009; available at www.guardian.co.uk/commentisfree/2009/mar/23/recession-globalrecession

² There was a strong regional variation: in some states, particularly Georgia, there was a wave of collapses in what were very small banks, but this is probably best seen as an acceleration of the trend in the US towards concentration in the banking sector since the abolition of the ban on interstate banking.

financial sector in 2008-9. In the US to some extent the exposure to the problems of the investments in property markets caused what were effective failures that were disguised as shotgun acquisitions with the blessing or involvement of the US authorities. These occurred when major “too big to fail” institutions got into trouble (more on this later). Examples are the forced sale of the banking operations of National Mutual (assets with a book value of \$300 billion plus) to JP Morgan for \$1.9 billion, the merging of Wachovia into Citigroup, costing the US taxpayer \$42 billion, offset by \$12 billion in shares in Citigroup and the merger of Merrill Lynch and Bank of America.

Returning to the question of the link between the banking crisis and the recession, in retrospect we can see that some form of general slowdown affecting economies across the world was probably inevitable. Why? (a) There were already signs that several of the larger OECD economies were experiencing a fall off in the rate of growth of GDP, and (b) the explosive growth of the Chinese economy, at an average rate of around 11% per annum for several years was clearly unsustainable. What was not inevitable was that the slowdown should take the form of the most severe contraction since the Great Depression. It seems reasonable, therefore, to accept provisionally that the precise timing and the severity of the downturn in general, should be seen as reflecting the crisis in the financial markets that originated in the US and spread in a matter of months around the globe. In the case of the worst hit economies in Europe, Iceland and Ireland, domestic factors reflecting the activities of the banking sectors exacerbated the situation. In Ireland, previously seen as the “Celtic Tiger”, the show-case for the economies of the Eurozone, inappropriate macroeconomic policy coupled to microeconomic initiatives to expand the already large construction sector made things even worse. To add to the country’s woes the strengthening value of the euro against sterling and the dollar, worsened a competitiveness problem for an economy that was already over-heating. For Ireland it was a case of a perfect economic storm, from which it will probably take the best part of a decade to recover.



The Roots of the Financial Crisis

If the international financial crisis is correctly assigned a major portion of the blame for the severity of the recession, it is helpful to consider why the problem in part of the US housing market spread such economic misery across the world. It is now well established that there are two separate, but mutually reinforcing factors involved, both of which are related to a set of failures at the microeconomic level, and which have been considered in Chapters 12 and 14 of the micro section of the text. In what follows we will look at how the concepts developed in those chapters help us to understand how the crisis started and spread.



Regulatory Failure and Failure of Regulatory Reform

Regulation is used when there is a market failure that can be corrected by collective action laying down rules and restrictions on firms, or individuals' behaviour. Unfortunately, regulation can be badly designed or perverted by the actions of those being regulated. Changes in regulatory regimes can have adverse effects. Then market failure is replaced by regulatory failure (see Chapter 14). Regulatory failure has been a feature of financial markets, and not just in recent years. In 1986 the UK Government deregulated the London Stock Exchange in order to restore London's pre-eminence as a global financial sector. This is described generally as London's Big Bang. The consequences of deregulating the stock exchange spilled over across the entire financial sector and completely changed its operations as the traditional boundaries between what the functions performed by the various categories of financial intermediary were weakened or disappeared. In particular, one consequence of this was to change how banks operated. The old dividing line between banks that, in effect operated the monetary system (deposit takers and low risk lenders), and investment or merchant banks (borrowers of money market funds and investors in riskier assets) disappeared. Mergers and consolidations across sectors followed, and the financial sector increasingly became dominated by a small number of large multi-product financial institutions. Mutual funds were privatized as profit seeking intermediaries made the traditional mutual form of organization uncompetitive. Successful risk-taking became the goal of financial intermediaries in general rather than being the preserve of specialist risk-taking firms.

The example of London was followed in New York, culminating in the repeal of the Glass-Steagall Act of 1933 in 1999. Tokyo and Frankfurt changed, too, but German and Japanese banks had traditionally been heavily involved in direct investment in private sector firms, so in some respects the deregulation impact in those centres was less than in London and New York.

The rationale for the wholesale deregulation of the financial sector was based on the belief that the sector had been beset by problems of regulatory failure by national governments, the solution to which was radical deregulation aimed at integrating financial markets across the world:³

The problem is to get governments off the backs of banks and to let financial markets grow without burden of excessive regulation. “The proper role of government policy should be to make markets as resilient and efficient as possible. Government policymakers should get rid of the traditional bottlenecks of overregulation, overtaxation, and overprotection, and let markets work” (Lindsey 1993: 168). In almost every country, the financial sector is one of the most highly politicized and regulated parts of the economy. “In no other sector of the economy, with the possible exception of foreign trade, have governments intervened so broadly, so consistently, and with such telling effect – usually bad”. (Cameron 1972:9)

This quotation encapsulates the widely held view at the time that banking suffered from being over-regulated, not that this necessarily damaged the interests of banks or their shareholders. As we know, regulatory capture is a source of protection from competition.

³ James Dorn: *Financial Deregulation in a Global Economy*, **Cato Journal**, Fall 1993, vol 13, no.2. References are to R. Cameron (ed) , **Banking and Economic Development: Some Lessons from Economic History**, New York, OUP 1972 and LB Lindsey, *Economic Challenges of the 1990s*, **Cato Journal**, vol 13, no.2.

However, replacing a regime where financial firms are subject to strict regulatory control and supervision to one of “light touch regulation” carries its own potential disadvantages.

While it could still be said that in 2008 the US had too many overlapping regulatory bodies overseeing the various parts of the financial sector it was clear that they had failed to foresee and try to avert the consequences of the expansion of business in the so-called sub-prime sector (some of which itself was caused by legislated pressure on banks to extend credit to higher risk, lower income borrowers).

Similarly, in the UK the Northern Rock crisis was in part a consequence of a financial intermediary financing its loan book by resort to wholesale funding from short term money markets rather than from more stable deposit finance. The UK Financial Services Authority did little or nothing to limit the use of such funding by lending institutions, effectively allowing the firms concerned to increase the debts they carried relative to their equity and liquid reserves. In Canada, by contrast, a much tighter regulatory regime restricted the ability of banks to do this, and as a consequence, when the confidence crisis broke, Canadian banks were not as greatly affected by the collapse of inter-bank lending at the time of and after the Lehman Brothers collapse in 2008.



Information Economics and the Crisis

Over-leveraged and over-extended, banks across the world were now hit by the second set of problems. We looked at the basis for these problems in Chapter 12, dealing with information in markets. Information is rarely “perfect” in the sense that each side of a transaction possesses full access to all relevant information about the good or service in question and/or the other party to the transaction. This does not prevent trade and exchange from taking place, but it does mean that there are unavoidable costs involved in engaging in efficient trades. Information is valuable and costly, and we saw that parties to a transaction will acquire information up to the point at which the marginal benefit from acquiring information equals the marginal cost of resources spent acquiring it.

A core concept that arose here was that of information asymmetries. We saw that, for example, in insurance markets information asymmetries lead to statistical discrimination, and



that this means that potentially beneficial trades do not take place, with a consequent loss of economic surplus.



Adverse Selection and Moral Hazard

Insurance and other financial markets are peculiarly exposed to two consequences of information asymmetries: adverse selection and moral hazard, and there are cases where regulation or political intervention can exacerbate these. The sub-prime mortgage market is a good example of this, and the consequences that flowed from these effects were enormous.

First of all, consider what exactly the sub-prime market was. It was the loan market for people who could not obtain credit on the better terms associated with a better credit record or demonstrated ability to service a loan. By definition lending in that market is higher risk lending than in “normal” credit markets. The loans carry a compensating (to the lender) higher interest cost, and the lender earns a higher return on their money; provided the loans are repaid and the interest rolls in. This higher return is the cost of assuming the risk that the borrowers will default. At the expected rate of default it still is profitable for a lender to lend in the market.

What kind of borrower will seek credit in the sub-prime market? Ask the question another way: who seeks health insurance: someone who knows they are healthy, or some one who has private information that they are likely to become ill? The lender knows that some borrowers will indeed repay, but they also know that if a “good” borrower could get credit elsewhere at a lower price they would do so. They can assume that those seeking credit from them have a higher probability of defaulting than the population from which they came. That is, we are looking at an example of Adverse Selection (as in the case of used cars in the Market for Lemons).

Now, suppose the lender can pass on the risk to some one else. They bundle up the mortgages and sell them (i.e, the liability to service and repay the loans) to another, larger financial institution that is looking for higher yield assets (accepting higher risk) in its

portfolio. The purchaser has less information than the original lender as to the quality of the loans, and decides to deal with this by insuring a proportion of their value with an insurer. At this stage the original lender has off-loaded the risk to two other institutions. The insurer may have funded the insurance contract in effect by seeking re-insurance from specialist firms. The bank that bought the mortgages may have funded the purchase in part or whole by borrowing from the international money market, the lenders in which are therefore assuming an element of risk. But at each stage the real risk cost being assumed in financing the purchase is becoming less and less clear as it is passed on to those who end up carrying it.

Consider a lender in the sub-prime market who is unable to “securitize” his loans, compared with the lender in the example just given. Which of them will take more care about the repayment potential of a borrower? Assuming a lender is generally risk averse the lender who must carry the risk that they have identified will take more care than one who can sell on the loan at a price that reflects the general riskiness of such loans. We expect such a lender to have a higher risk portfolio that he will then sell on profitably. Bundles of loans that can be securitized will contain more “toxic” loans than the average in the sub-prime market. It’s the same with insured bicycles; they get stolen more often. Moral Hazard strikes again.



Structural Changes

What has changed since the S&L crisis of the late 1980s is, in the first place, that mortgage securitization by original lenders has been greatly extended. This in turn partly reflected regulatory regime changes that permitted banks to increase their exposure to securitized loans (and supply securitized loans themselves), while the market for these secondary assets and derivatives based on those assets expanded. Financial sector firms increasingly became financial conglomerates, straddling areas of financial activity that, a generation earlier, were dealt with by separate institutions. Inevitably, narrowly defined banks, as understood by the man in the street changed radically. The public might become dimly aware of this as they realized that their bank could now be their mortgage provider, offer life insurance and direct clients to their stock-broking arm, while this last also operated as a market maker, buying



and selling securities in order to increase the net worth of the bank that owned it, as well as advising clients on what to buy and sell.



Efficiency Compatible Incentives: the Principal Agent Problem

Here we see the potential for problems arising from the principal-agent relationship, where the interests of the agent, the advisor, may not be perfectly aligned with those of the principal, the client seeking advice on investment. In the material in chapter 9 we considered how this kind of problem can lead to market failure (the remote office game is an example; the question of how to sell your house is another).

The principal-agent problem also started to affect banking performance through internal remuneration structures which changed radically post deregulation. Payments by results (performance bonus payments are a case in point) on the face of it should align the interests of the management of the bank with those of the shareholders, and lead to a positive sum game result. However, as always, there is no free lunch. Much depends on whether the attitude to risk-taking by executives reflects correctly the desire of shareholders to accept risk. In general, holding riskier assets should mean higher expected returns (but higher potential volatility), but if the calculation of profits permits them to be marked up into the accounts in terms of what is expected to happen, the result can be higher bonuses without higher final profitability. As such this encourages a level of risk taking by the management that might not be what is really desired by the shareholders.

This can cross the threshold between what is legal and what is effectively fraud only too easily. The collapse of Barings through the activities of one of its officers in Singapore in 1995, was an example of a bank that rewarded profitable trades extravagantly and fell down on internal supervision of officers' behaviour, all being possible because it could be done through an overseas subsidiary⁴. The collapse of Enron, an energy and finance conglomerate, in the US followed a similar pattern.

⁴ A simple and easily read account of this variant of the remote office problem can be found at www.riskglossary.com/link/barings_debacle.htm.

We will return to this point later, but at this stage it is worth noting that many commentators believe that the question of incentives and structures in banking have to be addressed in a regulatory response to the financial crisis.



A Liquidity Crisis?

The initial perception of the problems facing financial sector firms after the Lehman Brothers collapse was that they were suffering from a liquidity shortage. The availability of funds from short term inter-bank lending simply disappeared. Banks had used this market to deposit funds, surplus to requirements, profitably with banks that were temporarily short of liquidity. After Lehman (and perhaps before it) banks became unwilling to lend funds to other banks with liquidity needs. This was explained as the consequence of a growing awareness of toxic loans (originating in the sub-prime market) buried away in the assets of banks that had invested in securitized mortgages or assets that were derivatives of these toxic assets. If Bank A needed funds because it was over-extended in the sense that it was short of liquidity, and Bank B loaned funds to Bank A, Bank B ran the risk that Bank A might not be in a position to return those funds, if its assets turned out to be insufficient because the market value was less than the book value because the assets contained toxic loans. Even if Bank B knew that Bank A held absolutely no assets exposed directly to the sub-prime problem, the latter might have loans out to, say, a hedge fund that had invested in assets that directly or indirectly contained toxic loans, and so on. To make things worse, the riskiness of assets containing potentially toxic loans was hard to calculate, especially after the original loans had been diced and chopped into derivative assets.

Short of liquidity, banks could only respond by reducing the size of their loan books. As loans were repaid the banks reduced the volume of credit out-standing, using the repayments to replenish their liquid reserves. As a result, firms needing short term credit or working capital found the supply drying up. In the context of an incipient economic recession the consequence was a cut-back in output and employment arising from the reduction in credit

availability. A snowball effect began to gather pace, and the recession started to look like a depression.

This story had two implications. The first was that it was primarily a confidence crisis in banking that needed to be resolved to get the economies moving again. The second was that the provision of liquidity to the banking system and the removal of uncertainty were the necessary and sufficient solutions to the growing difficulties. Both were at best partly correct, and at worst a distraction from the underlying reality, and in at least one case led to a seriously misguided Government response⁵.



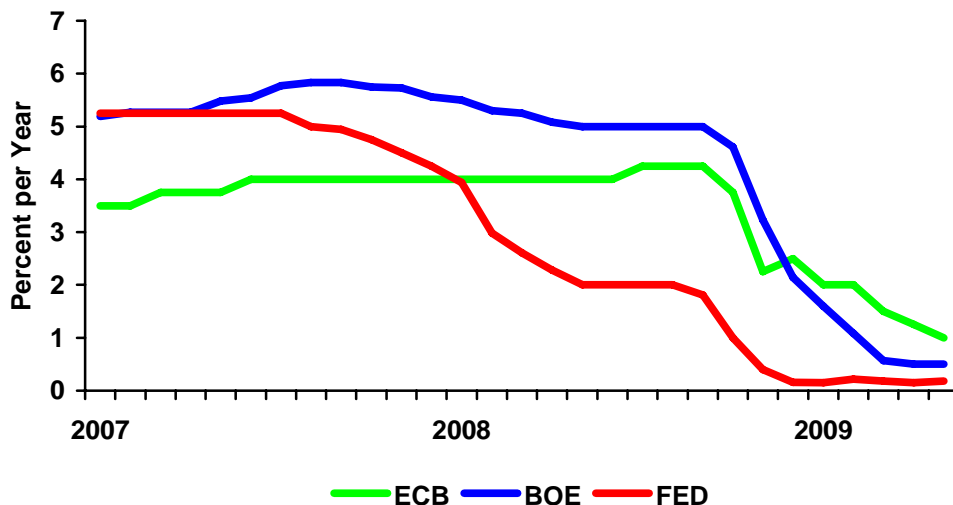
Responding to the crisis

Throughout 2008 and into 2009 most industrialised experienced a classic recessionary gap situation. Using the IS-LM model developed in Chapter 23, we can think of this as leftward shift in the IS curve resulting from a rapid decline in planned aggregate expenditures, caused by a sharp decline in consumer confidence and difficulty in raising credit to finance consumption and investment projects, and the response of policy makers has followed the analysis of Chapters 24 (fiscal policy) and 25 (monetary policy). In most countries, and especially in the US, the fiscal response has consisted of increases in government expenditures and/or taxation cuts in an attempt to reverse the leftward shift in the IS curve – see Figure 24.1.

These fiscal stimuli have been reinforced by a policy of aggressive monetary expansion. In the Eurozone, the United States and the United Kingdom, the monetary authorities initial response to the presumed liquidity crisis was to cut key central bank lending rates and to supply more liquidity to the banking system. Figure 5 illustrates the extent of these interest rates cuts.

⁵ The reference here is to the Irish Government's rushed decision to offer a blanket guarantee by the Irish state covering almost all the liabilities of the Irish banking system in September, 2008. This was a response to the imminent collapse of one bank than was hopelessly exposed to the collapse in property markets in Ireland and elsewhere in Europe, Anglo-Irish Bank plc. The guarantee exposed Irish tax-payers to a potential loss equivalent to over two years' GDP, but also effectively tied the hands of the Irish Government in dealing with the evolving problems of the Irish banking system.

Figure 5 Central Bank Key Interest Rates, Monthly Averages January 2007 - May 2009



European Central Bank: Refinancing Rate

Bank of England: Base Rate:

Federal Reserve: Federal Funds Rate.

Sources: www.ecb.int, www.bankofengland.co.uk, www.federalreserve.gov,

In the United States and the United Kingdom central bank lending rates were just over 5 percent in late 2007 but were cut to less than 1 percent by early 2009. Likewise in the Eurozone the ECB cut its refinancing rate from 4.25 percent in August 2008 to 1 percent by May 2009.

However, these actions did not result in a resumption of credit to borrowers. The authorities then began aggressively to buy in securities from the markets to increase the monetary base. Credit growth still refused to resume. By late 2008 it was clear to most that the banking crisis was not simply a liquidity crisis in the sense of banks with plenty of funds refusing to lend to other banks. The crisis reflected a deeper problem. This in turn was reflected in what was happening to bank share prices, which led a sharp slump on world stock exchanges.





Banks and property

We have noted that over the last 20 years the financial sector changed significantly as the vertical divisions between different types of institution weakened or disappeared. One consequence of this was the increased involvement of retail banks in direct lending to finance real estate development. Even when this was not done by retail banks themselves, the banks became exposed to property markets through subsidiaries or loans to funds. A significant proportion of this exposure in Europe reflected investment in US securitized mortgages. BNP Paribas had to suspend three property funds in summer, 2007, as a consequence of their holding large tranches of sub-prime assets. But apart from these “toxic” assets, the banks had moved into providing development finance for property developers. The value of these loans to the lending institutions depended on the value that could be realized from the assets on which they were secured, i.e., property prices.

By mid 2007 evidence was available that in Europe, as in the US, the decade of significant and continued price increases for real estate was at an end. Britain, Ireland, France and Spain led the field for price increases in Western Europe, while property prices had also been strong in many eastern European countries that benefited from foreign investment in property. Property company shares were weak on stock exchanges. Losses for banks on their loan portfolios were inevitable, and as a consequence of the involvement in property lending were likely to be large. If these losses were realized, the consequences for the banks were very serious, since losses on this scale would mean a collapse in their equity and reserves, on which rested their ability to maintain the credit extended to customers. In effect, the banks faced being bankrupt because they had made loans that were not likely to be repaid. That is not a liquidity crisis. It is a systemic asset collapse crisis. What banks would need was not access to short term funds for liquidity purposes but equity or equivalent injections of capital to cover losses on their loan books, only a fraction of which could be ascribed to the problems of the US sub-prime market.

This brings us to another aspect of the causality of the recession. The problems flowing from the property market (of which the US sub-prime market was only one part) can be seen as a proximate cause of the catastrophic losses of the banking sector when the property boom across so many countries collapsed. However, there is also a causal link between the

activities of the banks and what happened in those property markets. Historically, high risk property development (at least in traditional Anglo-Saxon capital markets) relied on intermediation by specialist finance houses rather than on the narrow banks (ordinary retail banks) that in recent years became involved by providing funds financed by resort to short term borrowing in money markets. In the same vein, post deregulation, the emergence of broad spectrum intermediaries based on the narrow banks meant that the equity of those banks (and their deposits) were now exposed to property market risks through the activities of subsidiaries. Since it was always open to developers to use the traditional sources of finance we can safely assume that using the retail banks, directly or indirectly, was more advantageous, involving lower financing costs or lower risks to developers. Put another way, it is plausible to argue that the deregulated (or poorly regulated) banking system helped underpin the rising property prices of the decade up to 2007. Sub-prime crisis or no sub-prime crisis, increased use of bank finance for commercial development projects in property markets was something that was bound, sooner or later, to end in tears.



Too big to fail: sowing dragon's teeth?

No monetary authority in Europe or the US was prepared to contemplate a simple failure by one of the large clearing banks in the course of the crisis of 2007-2009. Instead, various steps were taken to shore them up, varying from outright nationalization (Northern Rock, Anglo Irish Bank are examples) to recapitalization by the tax-payer (Lloyds, RBS) to subsidized recapitalization (the US Government permitted a number of banks, for a small sum, to issue Government guaranteed bonds to cover losses) and shotgun mergers (e.g., Lloyds and HBOS).

The reason for this set of responses was that in the authorities' eyes the banks involved were "too big to fail". This didn't simply mean too many depositors would lose their money; in general deposits were already covered by state insurance of one form or another. It meant that given that the liabilities of the banks concerned were a large proportion of the money supply, and that their activities were on a scale such that closure would seriously compromise the operations of the monetary system, and that the ripple out effect on other banks could

trigger cascade insolvency across the system, the costs of failure were simply too great to be accepted.

That argument is hard to rebut. The difficulty is that the sanction of potential failure is a major mechanism in ensuring that banks behave prudently. Remove it and the downside associated with risk-taking is greatly reduced. That is predicted to weaken any financial institution's degree of risk aversion as evidenced by its behaviour. Furthermore, the knowledge that a bail-out to avert failure is likely will encourage the management of a bank that has had a bad loan experience to adopt a "double or quits" approach to lending decisions. This is a classic incidence of the moral hazard problem, and points to the need for tighter regulatory control for banks that are deemed to be too big to fail⁶. The alternative is an increased likelihood of a failure event that triggers off a costly (to the tax-payer) bail out.



Re-regulation?

Assuming that permanent nationalization of major banking institutions is ruled out (as opposed to temporary nationalization as part of restructuring banks after failure events) the experience of the credit crunch and its consequences for economic activity create a case for going some way to turning the clock back on the deregulation issue. One suggestion is that we should revert to a structure with "narrow" banks, regulated and safe, and carrying out simple retail banking functions of a low risk nature, and "other" intermediaries that execute high risk functions. This would in part reverse one of the consequences of the 1986 Big Bang in London. These narrow banks would remain "too big to fail" since they would be large and they would constitute the main structure of a country's financial structure, their liabilities its money supply, and their lending predominantly low risk and/or short term, and financed by deposits rather than by access to wholesale money markets. The remaining institutions would not be "too big to fail" even if they were very big indeed. The idea would be that high risk, high return financial transactions would be confined to such banks, with those involved accepting the risk implications or laying them off.

⁶ See the interesting piece by Martin Wolf in the Financial Times, 23 June 2009, pointing to the consequences for incentives and risk taking by banks with a small ration of equity to total liabilities, "*Reform of regulation has to start with incentives*".

The difficulty with this suggestion is (a) defining what would be within the ambit of the “narrow” banks, and (b) there would clearly be a loss of economic surplus by prohibiting multiple financial service provision by financial intermediaries: we would lose much of the efficiency gains flowing from the 1986 deregulation. However, this may be a price that is worth paying.

An alternative is to recognize that high risk institutions need a large equity base both for solvency reasons and to reduce moral hazard problems. Consequently regulation should first concentrate on ensuring that equity is sufficient to support the activities of all the financial intermediaries. At the same time, and recognizing that failure is still possible, procedures for dealing with the failure of a “too big” bank involving keeping its “good” operations functioning while forcing shareholders to shoulder the costs/losses and winding down the “bad” business of the intermediary through a transfer to a “bad bank”.

Common to both these positions is the need for a widening of the role of the regulators to include regulation based on dealing with systemic risk. Prudential regulation traditionally concerned limiting the individual banks’ customer’s exposure to risks to the banks’ solvency arising from the activities of the banks. However, the Credit Crunch has highlighted the fact that we are exposed to systemic risk arising from the performance of individual bank behaviour. A major bank in trouble can undermine the entire system. Hence regulators need to be empowered to supervise the behaviour of banks with a view to systemic consequences, rather than simply to the implications for a particular bank’s balance sheet. For example, even if a bank had plenty of room to lend to, say, the property sector given its loan book profile, the regulator might need to be able to restrict such lending by reference to overall lending to that sector.

At the end of June 2009 substantial steps were taken to adjust the regulatory regimes in the US and Europe to the needs that have emerged as a consequence of the Credit Crunch. In the US the Obama administration proposed, inter alia, the following:

- (a) establishing the Fed as a systemic risk regulator, with special powers to oversee “too big” banks;



- (b) extending a regulatory regime to cover derivatives, including retention by the issuer of any securitized asset of a minimum exposure to the risk associated (cf., the sub-prime securitization problem);
- (c) setting up procedures to permit winding up and divestiture of the Assets of non-bank holding companies that control financial assets (i.e., orderly winding up procedures).

The EU agreed to establish the European Systemic Risk Council to undertake macro as well as micro prudential regulation. This is to comprise the governors of the EU's central banks, and will probably be chaired by the president of the ECB. However, its role is weaker than that of the Fed, since it will issue recommendations for actions to the central banks of the various countries rather than regulate directly. Supervisory Authorities are to be set up to ensure regime harmonization in regulation, and to resolve disagreements between home state and host state regulators (for example, disagreements between the Bank of England and the Banque de France concerning liquidity requirements for a British bank operating in France). Also, unlike the US, there is no equivalent power to that of the Fed to share the burden of a failure across the system. If a bank fails in Britain, the financial fallout will be confined to Britain.

In the UK the 2009 Banking Act requires that banks of systemic importance prepare plans for winding down in the event of failure.

In the EU (including, with some amendments, the UK) a regulatory regime is being extended to cover hedge funds and similar alternative investment vehicles along the lines proposed in the US.