newhaven research

University of Glasgow

Scotland

The credit crunch & the Scottish housing system

Table of Contents


50 EURO

Executive summary

1 The credit crunch began in August 2007. It is a worldwide phenomenon, but was triggered by the securitisation (bundling up and onward sale) of large amounts of very risky mortgage loans made in the US during a major housing boom. When the US housing bubble burst in 2006, colossal amounts of securities based on the repayment streams from these mortgage loans and traded between financial institutions or used as collateral for interbank loans could not be priced leading to a drying up of interbank lending.

2 Over the subsequent 15 months the true scale of the financial mess gradually became apparent, with current estimates of $1.4 trillion of bad debt held by banks worldwide. As the extent of the problem emerged, concerns grew about the soundness of financial institutions that owned a large proportion of these 'toxic debts' (as a proportion of total assets) and also about those that depended heavily on wholesale money markets (loans from other banks) to fund their retail banking activities (lending to companies and households). In September and October 2008, these concerns developed into a generalised panic regarding the fundamental soundness of the international financial system as a whole. The ensuing turmoil in international money and stock markets triggered a massive cross-country programme of Government interventions to shore up the banking system, involving the complete or part nationalisation of banks in many countries, recapitalisation of bank balance sheets, purchase of 'troubled assets' and provision of guarantees on wholesale and retail lending activity by central banks. This policy response appears to have marked a turning point in the crisis with real prospects now emerging of a return to more normal conditions in the financial markets, albeit that this will take time as deleveraging continues to work through and trust is rebuilt.

3 UK economic growth has been affected by the financial crisis. Growth slowed to zero over the second quarter 2008 (April – June) and is expected to be slightly negative for the final two quarters of the year (the technical definition of a recession). Overall, current economic forecasts are for real growth of 1% in the UK economy for 2008 as a whole, and for slightly negative growth for 2009 (a fall of less than 1%). Real growth is forecast to return from around the middle of next year. However, there does remain a real risk of poorer economic performance than is forecast, particularly if general panic returns to the financial markets. The Scottish economy has been less volatile than the wider UK economy in previous downturns and there is no reason to believe that this will not be the case this time.

4 The UK and Scottish housing systems have been negatively affected by the credit crunch and subsequent slow down in economic activity. House prices are falling, the overall volume of sales taking place has reduced considerably, and UK Government initiatives to promote more and cheaper mortgage lending have yet to bear significant fruit. August and September were particularly bad months for mortgage lending activity. Worst hit by the credit crunch has been the Scottish and wider housebuilding industry.

5 Repossessions are expected to increase over the coming months, but from a historically low base, and to levels nowhere near those seen in the last housing market slump of 1989-1993. Moreover, the wider real economy is currently in much better shape all round than it was during the last recession in the early 1990s and housing market conditions in Scotland are less concerning than they are in other parts of the UK.

6 The Scottish housing market is not likely to return to something like normality in terms of levels of trading activity before 2010. A number of housing policy responses to the credit crunch have been announced to date in Scotland including accelerated capital spending on affordable housing from within existing budgets for 2008-11, more support for mortgage rescue, extension of shared equity funding schemes and encouragement for Registered Social

Landlords to purchase unsold stock or land from developers. We believe more needs to be done in the short term to support the housebuilding industry, and in the long term to prevent the emergence of future housing bubbles or at least reduce their size. While the latter largely falls to UK policy makers, current market conditions raise fundamental questions regarding the appropriateness of current Scottish housing policy strategic goals.

7 In the **short term**, the Scottish Government should look for ways to support the use of property the housebuilding industry currently cannot sell for private renting, and to temporarily lift the burden of affordable housing contributions based on Section 75 agreements. We do not think further promotion of owner occupation to marginal groups is a sensible approach to further support the industry.

8 Government should also explore co-insurance or the use of public funds to support mortgage protection payment insurance as short term priorities, and looks for ways to secure extended lender forbearance on mortgage arrears.

9 In the **longer term**, both the UK and Scottish Governments should critically rethink the policy emphasis given to promoting owner occupation to groups in society that are vulnerable to and poorly equipped to cope with economic and housing market volatility, and the UK Government should look at ways to reduce future housing market volatility, including the adoption of taxation of housing capital gains to reduce speculative house purchase activity.

10 The credit crunch has introduced a difficult period for the Scottish economy and the Scottish housing market, but the scale of the problems should not be sensationalised and the policy response should not simply be more of the same. If the crunch serves to initiate a reappraisal of housing policy purpose, and the adoption of mechanisms to at least reduce the scale of future housing market volatility, some good may yet arise from it.


←1-9
WALL ST
←1-9
WALL ST

1 Introduction

1.1 The world changed on 9 August 2007. Before that fateful month arrived, financial markets seemed to be doing what they do best for themselves and the wider economy, and the outlook was widely assumed to be for more of the same.

1.2 Intimations of something not quite right had begun to emerge in the United States in April, when New Century Financial, a company specialising in providing sub prime mortgages[1], filed for bankruptcy protection. Then in June an investment bank called Bear Stearns found it difficult to raise money by the sale of mortgage-based bonds owned by its mortgage hedge funds (Morris, 2008). It was in August however, that things went really wrong (Soros, 2008):

- Short term credit markets froze after a large French bank, BNP Paribus, suspended three investment funds worth 2 billion because it could not value the assets in the funds
- The European Central Bank (ECB) pumped €204 billion into the eurozone banking system over a five day period. The US Federal Reserve and Bank of Japan took similar steps, and the US discount rate was cut by 0.5%.

1.3 The source of the problem was quickly diagnosed as 'sub prime' mortgage lending in the US (OECD, 2008; European Central bank, 2008). Loans made to homeowners had been bundled together by the organisations making the initial loans and sold to other financial institutions. Some of these bundles contained poor risk, with the underlying borrowers unlikely to be able to meet the loan repayments involved. As the scale of that risk became evident, financial institutions concluded they could not determine a price at which to trade these bundles and, as they were frequently offered as security for short-term loans between banks, the latter dried up.

[1] A glossary explaining the various technical and financial terms used in this paper can be found on page 65.

1.4 Initially, it was assumed that the problem was containable. Early estimates of bad debt caused by poor risk mortgage lending in the US put the scale of the problem at around $20 billion. By November however, these estimates had risen to around $500 billion. Today, some estimates put the overall scale of bad debt in the international banking system to be around 1.4 trillion ($1,400,000,000,000) US dollars (IMF, 2008f).

1.5 This paper explains what has happened and assesses the implications for housing in Scotland.

1.6 In the next Section, the origins of the problem are outlined in more detail, and developments in financial markets between August 2007 and October 2008 are summarised.

1.7 Section 3 looks at what has happened to UK housing markets over the past year, and what current expectations are for the UK housing system, the UK economy, and their Scottish equivalents.

1.8 Section 4 looks at policy responses to date, both to the credit crisis generally, and specifically to its housing system effects.

1.9 Section 5 considers what further steps have been suggested and might be taken to address the ongoing problem. Some concluding comments are then offered in a final Section.

2 The unfolding credit crunch

The nature of a credit crunch

2.1 In essence, a credit crunch is a rapid fall in the general availability of loans[2], which is often coupled with a rapid rise in the cost of borrowing. Investment capital becomes difficult to secure and normal economic activity, which depends on the flow of credit to finance it, becomes disrupted.

2.2 These adverse financial conditions can result from a number of causes.

- Much bank lending is based on collateral provided by the borrower. Where the value of actual or potential collateral falls, or there is perceived to be a risk of this happening, willingness to lend also falls
- More generally, banks are expected to meet minimum capital liquidity requirements in the form of capital reserves. The liquidity requirements are based in part on the assessed level of risk of default associated with the assets (including loans) banks hold. If the level of risk increases, so does the amount of capital in the form of money or near money it is necessary for banks to retain, restricting their ability to undertake further lending
- A credit crunch can also be directly induced by Government policy, particularly where Government is focused on control of inflation. Under these circumstances, Government will raise the Bank of England base rate through 'open market operations', drawing money out of the economy by the sale of 'repos' to other banks.

2.3 The present crunch has complex roots. [3]

[2] Including mortgage loans secured on properties.

[3] Most agree the problem was primed by liberal Government monetary policy through the years that Alan Greenspan was Chairman of the US Federal Reserve, a policy that served to underpin the US housing boom that preceded the crunch (Brummer, 2008), but underlying real housing market fundamentals, as for instance identified by Barker in the UK, also played a major role in specific countries. Morris (2008) however argues the *"2000s real estate bubble may be one of those rare beasts conjured into the world solely by financiers, which is confirmed by the fact that housing bubbles also occurred in the United Kingdom, Australia, Spain and other countries where residential lending became unusually loose".*

Globalisation and financial innovation: Sowing the seeds of the current crisis

2.4 The fundamental role of banks is to intermediate between those with savings wishing to earn a return on them and those with a requirement for loans they are willing to pay for. When it works, intermediation reconciles the conflicting objectives of the two parties (savers want attractive returns and liquidity; borrowers want cheap funds and longer term repayment vehicles) and plays a vital facilitating role for the real economy and economic growth.

2.5 Intermediation need not be wholly organised by one financial institution as the process actually involves a number of conceptually separate services (Matthews and Thompson, 2008).

- Identification of someone suitable to actually lend to (known as loan origination)
- Design of financial instruments (securities) that appeal to savers. This can be something as simple as a bank deposit account, or something much more exotic. This activity raises the necessary money and is known as loan funding
- Administration and enforcement of loan conditions (known as loan servicing)
- Loan holding (known as loan warehousing).

2.6 Major innovations in banking took place from the late 1970s onwards, driven by globalisation of finance markets and developments in computer technology. Important within these were both the development of 'securitisation', in this context essentially the separation (or 'unbundling') of the services that collectively comprise intermediation, and the design of ever more sophisticated financial instruments as part of the process[4].

2.7 In the housing market, securitisation involves taking a number of individual

[4] A basic introduction to bond markets and securitisation, to be read with the main text, is provided in Annex 1.

mortgage loans made directly by an institution to individuals, and parcelling these up for onward sale as a security to another investor. What this other investor buys is a future stream of income from the composite security. The loan originator sells its interest in the revenue stream from the initial individual loans for a capital sum and receives a number of arrangement fees in the process, including from the initial mortgage borrowers and the secondary investor.

2.8 Two other processes complicate the situation further.

- The first is that from (say) 100 mortgage loans made, more than one security can be developed. Moreover, more than one investor can be persuaded to buy a slice of any given security and securities once developed can themselves be parcelled up and further sliced and diced. The advantage of this (in theory) is that it offers the potential for investors to pick finely tuned packages of risk and return according to taste (as the poorer quality underlying loans involve a higher rate of interest being charged)
- The second is that the investor now has an asset (the security it bought from the originator of the loans) that it can itself subsequently use as an asset to borrow against. In this way, the initial lending to mortgage holders can be 'leveraged', or used to secure additional debt. This 'funding' advantage of mortgage bonds is a key reason why securitised mortgages have been both so popular and have been proselytised around the world by many financial analysts as **the** way to fund owner-occupation.

2.9 Moreover, banks developed ways of buying such securities through 'structured investment vehicles' that meant they did not have to be disclosed on their accounts as liabilities, allowing them to ramp up lending levels on a given capital base without incurring regulatory intervention.

2.10 These new investment techniques initially injected considerable liquidity into the housing systems of developed economies, and 'internationalised' mortgage lending through the appetite of the international financial system for trading in these forms of bonds. Being able to pass mortgages on, once agreed, injected liquidity into the mortgage lending process by offering a way in which banks could rapidly adjust their holding of mortgage assets. More generally, securitisation facilitated expansion of the use of wholesale money markets (lending between banks) to finance retail market activity (loans to individuals to purchase homes, as well as for other purposes, and to businesses). However, these advantages came with considerable potential disadvantages also.

2.11 One of the advantages of having the various aspects of the intermediation process 'bundled' is that a single institution continues to face the consequences of bad decision-making at each step in the process. For example, if a bank fails to undertake due diligence on a borrowers ability to repay a loan before making it, but continues to hold the loan, it then suffers directly as a consequence, either through a direct loss of income (loan default) or through higher costs of enforcement. It therefore has an incentive to ensure each loan made is sound. Separation of the various services in intermediation lessens this incentive. It introduces what is known as 'moral hazard'.

2.12 In the US housing market, which experienced historically unprecedented boom conditions over the period 2000 – 2005[5], this hazard played out with increasing vengeance. Lenders increasingly relaxed their mortgage lending standards (Dell'Ariccia et al, 2008), ultimately to the point where negligence and even criminal activity were involved. Emphasis on 'sub prime' and 'Alt-A' mortgage lending was followed by increasing incidence of 'jumbo' and 'liar' lending, where little control was placed on the amount being loaned relative to income, and household reported incomes were simply being taken at face value. Potential borrowers were sought out using increasingly aggressive and inappropriate methods, and offered apparently tempting deals such as 'teaser rate' loans at low initial rates of interest (often with interest rolled up into outstanding capital debt). Often, little effort was made to ensure borrowers understood what they were signing up to, and in some instances outright deception was being practiced. The honesty of appraisal (mortgage valuation) techniques was also frequently called into question in the race for easy and low risk profit. This was all masked between 2001 and 2005 by rising house prices (as distressed borrowers could sell up and move on) and falling interest rates (limiting the initial increase when teaser rates ended), but thereafter the full scale of the

[5] Brummer (2008) notes that between November 2001 and April 2005 housing and related industries created around 788,000 jobs across the US, some 40% of the total increase in employment over the period. Annex 2 provides more detail on the US housing market experience during this period.

moral hazard problems built up in the US housing market through unbundling became abundantly clear[6].

2.13 The second major disadvantage of the financial innovations seen over the last 30 years is that they introduced enormous product complexity into an essentially low level regulatory environment. In fact:

"the newly invented methods and instruments were so sophisticated that the regulatory authorities lost the ability to calculate the risks involved. They came to depend on the risk control methods developed by the institutions themselves. The latest international agreement on the capital adequacy requirements of banks – Basel 2 – allows the largest banks to rely on their own risk management systems. Something similar happened to the ratings agencies who were supposed to evaluate the creditworthiness of the financial instruments. They came to rely on the calculations provided by the issuers of those instruments" (Soros, 2008)

2.14 As Soros correctly goes on to note, this was a shocking abrogation of responsibility by regulators around the world.

The storm breaks

2.15 The US housing market bubble burst in early 2006 (Greenspan, 2008). A major factor in this was a significant increase in US interest rates on the back of a policy driven rise in the US Federal discount rate, which increased from 3.5% in February 2005 to 6.25% by June 2006 amid growing fears about the level of inflation.

2.16 Once the US housing market turned downwards, arrears and foreclosures on subprime mortgages began to increase rapidly. However it took the financial system some months to realise what had happened, and demand for mortgage backed securities remained extraordinarily high for some months after house prices stopped rising (Brummer, 2008). Increasing default rates on mortgages, affordability problems associated with the resetting of mortgage rates at the end of 'teaser' periods and falling house prices on the properties affected abruptly led (around the start of 2007) to widespread recognition that the securitised assets had been wrongly priced. Specifically the risks associated with subprime loans contained within these securities had been systematically

[6] Some of the behaviour engaged in by loan originators beggars belief. For example, Morris (2008) records the situation where in 2005 and 2006 black "affinity marketing" mortgage brokers fanned out through the poorer areas of New York City, targeting homeowners with substantial equity in their homes. *"Edward Jordan, a seventy-eight-year-old retired postal worker, has owned his home since 1975 and was just a few years from paying off his mortgage. He was approached by a broker who told him that he was overpaying; she could get him a rate of only 1percent. Jordan sought out another broker, who confirmed that that was so, and placed a mortgage for him with Countrywide. Total fees were $20,000…After the deal was closed, Jordan, who had trusted the brokers, discovered that the interest rate would quickly escalate to as high as 9.95 percent. When he complained to the Countrywide, the firm's loss mitigation group offered him an interest only alternative, but at a higher rate, and with steadily escalating principal, so monthly repayments would eventually rise to several times Jordan's income. Jordan, who lives solely on his pension, is now afraid he will lose his home. He also happens to have a credit score of 800, which places him among the 13 percent best credit risks in the nation. On any construction of the deal, he was robbed by Countrywide".*

under-priced and their assessed value fell precipitously as a result. Worse yet, some of the securities involved initial mortgage lending that had been so repeatedly sliced, diced and repackaged, that no one could actually work out what they were actually worth. Financial institutions that had used these securities to raise loans from other banks now found that they were unwilling to continue accepting them as collateral for new loans being sought.

2.17 Thus began the subprime crisis. A horrific experience for many US households caught up by sharp practice in the midst of a massive housing market bubble was then translated through the structure and operation of financial intermediation into a global banking problem. No one quite knew which banks were holding which securities when the merry-go-round stopped, and the banks themselves had little idea of what they held was actually worth. Two British satirists, Bird and Fortune, beautifully and frighteningly parodied the situation:

"Imagine, if you can, an unemployed black man sitting on a crumbling porch somewhere in Alabama in his string vest and a chap comes along and says would you like to buy this house before it falls down and why don't you let me lend you the money? Then this mortgage is bought by a bank and packaged together on Wall Street with a lot of other similar debts. Somehow this package of dodgy debts stops being a package of dodgy debts and starts being what we call a structured investment vehicle. I buy it and then I will ring up somebody in Tokyo and say 'look I've got this package do you want to buy it?' and they say 'what's in it?' and I say 'I haven't got the faintest idea' and they say 'how much do you want for it?' and I say 'a hundred million dollars' and then they say 'fine' and that's it. That's the market[7]."

A train wreck in slow motion

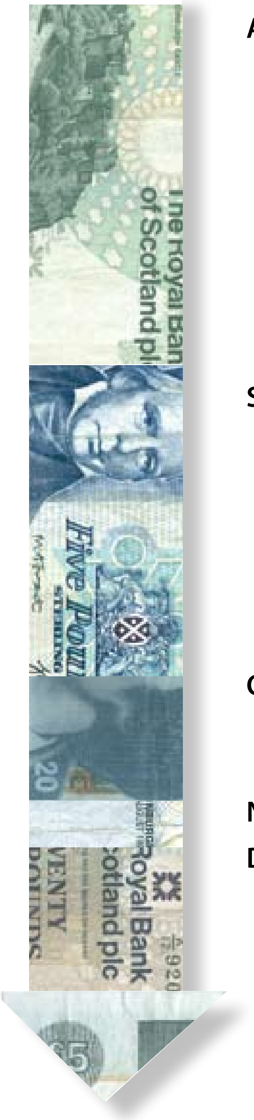
2.18 The credit crunch has been publicly unfolding since August 2007. Initially seen as a problem of lack of short-term inter-bank lending, with little long term implication for the real economy and world economic growth, in October 2008 it became more one of a general crisis of confidence in the international banking system. Increasingly there was generalised fear of bank insolvency, talk of recession deepened (and in some places was replaced by talk of depression), and the possibility of a self-perpetuating liquidity trap increased[8]. Deteriorating financial market conditions culminated in announcements between 8th and 13th October of massive co-ordinated Government interventions in the banking system. The major developments are summarised in Table 1[9]:

[7] http://edmondson.blogspot.com/2008/09/super-finance.html.

[8] In the USA there is now evidence of car loans becoming more difficult to access, wider worries about student loans and more generalised concerns about the shrinking availability of consumer credit.

[9] This table draws on the excellent BBC website: http://news.bbc.co.uk/1/hi/business/7521250.stm. The table does not include the details of a significant number of other smaller banks that have failed – in the US in particular. For the latter, see: http://www.fdic.gov/bank/individual/failed/banklist.html

Table 1: The Credit Crunch Timeline



2007

August	BNP Paribus, suspends three investment funds worth 2 billion as it cannot value their assets
	The European Central Bank (ECB) pumps €204 billion into the eurozone banking system over a five day period
	The US discount rate is cut by 0.5% to 5.75%
	In the UK, mortgage availability begins to fall and cost to rise for those judged as poor risk borrowers
	German regional bank Sachsen Landesbank is sold to the larger Landesbank Baden-Wuerttemberg
September	The LIBOR rate rises to its highest level since 1998, and a significant gap opens between LIBOR and the Bank of England base rate
	Northern Rock seeks and receives emergency support from the Bank of England. A run on Northern Rock begins and continues until Government guarantees savings in the bank
	The Federal Reserve cuts its main interest rate again to 5.25%
	Bank of England injects £10 billion into the markets
October	Swiss bank UBS announces $3.4 billion losses from sub prime investments
	Citigroup announces losses totalling $9 billion
November	The number of mortgage approvals in the UK falls to a 3 year low
December	Bank of England cuts the base rate by 0.25% to 5.5%
	The Federal Reserve, European Central Bank (ECB), Bank of England, and the Swiss and Canadian central banks agree co-ordinated action to offer billions of dollars in loans to banks. The ECB alone injects $500 billion.

2008

January

Global stock markets suffer their biggest falls since September 2001

The Federal Reserve cuts its discount rate to 3.5%

February

Bank of England cuts the base rate to 5.25%

G7 leaders estimate worldwide losses from the collapse of the US subprime mortgage market could reach $400 billion

Northern Rock is nationalised

March

The Federal Reserve injects $200 billion into the markets to improve liquidity and cuts rates further to 2.5%

Bears Stearns is acquired by JP Morgan Chase in a deal involving $30 billion of central bank loans

April

20% of mortgage products are withdrawn from the UK market within a 7 day period; 100% mortgage lending dries up.

IMF warns potential credit crunch losses could reach $1 trillion, and that the effects are spreading from sub prime assets to other sectors including commercial property, consumer credit and corporate debt

Bank of England cuts the base rate to 5% and announces a £50 billion plan to help banks (the 'Special Liquidity Scheme)

Royal Bank of Scotland announces a £12 billion rights issue and a £5.9 billion write off of bad debt

The housebuilder Persimmons reports sales falling by a quarter from the beginning of the year and CML reports new mortgage approvals in March as the lowest monthly number since records began in 1999

Nationwide and Halifax both report the first annual house price fall in 12 years (1%)

The Federal Reserve cuts its main interest rate to 2.25%

May

UBS launches a $15.5 billion rights issue to cover losses now estimated at $37 billion

June

Barclays announces a £4.5 billion share issue

July	US mortgage bank IndyMac collapses
	Countrywide Financial is acquired by Bank of America
	HBOS secures £4 billion through a difficult rights issue
	Annual UK house price inflation is now -8.1% according to Nationwide
August	Office for National Statistics reports the UK economy at a standstill
	Nationwide estimates house prices as 10.5% down on a year earlier
	Now infamous remarks made by the UK Chancellor on economic prospects
September	UK Government announces a one year rise in stamp duty exemption from £125,000 to £175,000
	Nationwide 'merges' with the Derbyshire and Cheshire Building Societies
	Fannie Mae and Freddie Mac are nationalised by the US Government
	Merrill Lynch acquired by Bank of America
	AIG effectively nationalised by US Government, through an $85 billion loan
	Lehman Brothers files for bankruptcy
	HBOS acquisition by Lloyds TSB announced
	Washington Mutual acquired by JP Morgan
	Fortis is partly nationalised in a £8.9 billion deal involving the ECB and the Governments of the Netherlands, Belgium and Luxembourg
	Bradford and Bingley nationalised
	Glitnir bank (Iceland's third largest) nationalised
	Wachovia (fourth largest US bank) acquired by Citigroup, which will absorb $42 billion in losses
	Dexia is supported in a £5 billion deal involving the Governments of Belgium, France and Luxembourg
	Ireland announces it will guarantee all deposits in Irish banks for two years
	UK Government raises the limit on guaranteed bank deposits to £50,000
	Bank of England extends its Special Liquidity Scheme from 21 October 2008 to 30 January 2009

2008

October

US Government agrees a $700 billion deal involving the US Treasury being allowed to buy bad debts from troubled banks, after a fraught process that injected fresh panic into financial markets

France calls for an emergency EU bail-out fund for stricken banks

Germany announces a £38.7 billion plan to save Hypo Real Estate, one of its biggest banks

Iceland nationalises banks and secures a €4 billion loan from Russia. Iceland's second largest bank, Landsbanki, is taken into receivership, freezing internet savings accounts of UK customers

Denmark, Greece, Portugal and Germany announce a 100% guarantee on bank savings

Bank of England widens the range of collateral it will accept at 3 month repo OMOs to make it easier for UK banks to get funds, significantly extending the support the Bank is offering to other banks in light of ongoing interbank lending collapse

The FTSE 100 index suffers its biggest one day fall since the crash of 1987

The gap between Bank of England base rate and 3 month Sterling LIBOR widens to a record 1.9% against a more typical pre-crunch 0.1%

Spain announces all bank accounts up to €100,000 will be guaranteed, and the establishment of a €30 billion fund to support its financial system

US Federal Reserve announces it will buy commercial paper securities from corporations after lending by banks to corporations contracted by $95 billion in a week – effectively making direct business loans to the private sector

UK Treasury announces it will make £50 billion available to 8 of the UK's largest banks and building societies in return for preference shares in them. Other banks can also apply, and participants will be required to extend normal lines of credit to homeowners and small businesses. In addition the volume of short-term loans available from the Bank of England is doubled to £200 billion, and £250 billion in loan guarantees is made available at commercial rates to encourage interbank lending. The overall package therefore involves both fresh capital and a virtually unlimited source of liquidity

2008

October IMF estimates banks had written off $760 billion by the end of September, but estimated final losses on the global banking system will be of the order of $1.4 trillion. It estimates banks will have to raise a further $675 billion world wide on top of the $430 billion already raised. Moreover, IMF estimates the UK may need to mimic the US plan to buy up toxic loans and that this could add £110 billion to the rescue bill on top of the measures already announced

The Reserve Bank of Australia cuts base rate by 1%

Bank of England cuts base rate by half a percent to 4.5%. Five other central banks (US Federal Reserve, ECB, and the central banks of Canada, Sweden and Switzerland) make a cut of the same size, while China makes a cut of 0.27%. The US central bank rate now stands at 1.5%

Lloyds TSB, Barclays, RBS and Halifax all announce they will pass the base rate cut on to borrowers in full

The Government injects £37 billion into RBS, HBOS and Lloyds TSB, assuming a likely 60% stake in RBS and a 40% holding in the, to be merged, HBOS/Lloyds TSB. This is associated with a number of rules and requirements for part-nationalisation. The CEOs and Chairs of RBS and HBOS resign. Barclays opt for a private re-capitalisation

Similar recapitalisation policies are followed elsewhere in Europe following international meetings and President Bush announces a $250 billion recapitalisation (or part-nationalisation) programme in the USA

Initially, at least, stock markets around the world respond positively to the intervention programme, though subsequently fall back again. More positively, LIBOR and base rates have shown evidence of limited convergence.

2.19 While the crisis will continue to unwind over the coming weeks and month, the policy developments of October 2008 mark a defining moment in the crisis and it is expected that subsequent negative developments will be less frequent and less unsettling.

2.20 It is impossible to say yet what the final impact of the credit crunch will be on the world economy, or the economy of individual countries, with any certainty. However the effects on the UK and Scottish economies and housing systems can be considered to date, and available views on what the prognosis for these entities may be, can be examined.

3 Housing and macroeconomic consequences

3.1 Multi-directional linkages between financial conditions, house prices and macroeconomic circumstances have long been recognised (see for example Goodhart and Hofmann, 2008; Muellbauer and Murphy, 2008). Equally, it is recognised that large fluctuations in the housing market can have macroeconomic consequences through wealth effects, spending, saving, borrowing, forward and backward linkages into the real economy. But many confuse the financial sector with the broader macroeconomy as a whole. Others assume that difficult times in one necessarily imply difficult times for the other. These simple equivalences are neither accurate nor helpful.

3.2 For one thing, national economies are all on unique trajectories determined by their sectoral composition, productivity, penetration of export markets, public finances, investment levels and consumer behaviour, etc. They are also at different stages of national business cycles as well as confronting different levels of exposure to wider global fluctuations. It is into this mix of economic variables that the financial shock of the credit crunch has to be located, understood and interpreted. For instance, in the UK and Scottish cases, the financial sector has a relatively large impact on the employment and value-added associated with the country as a whole and the urban economies of London and Edinburgh in particular.

3.3 At the level of the UK housing market, some have drawn parallels with current housing market developments and the housing market recession of 1989 – 1993. This again is inappropriate (Stephens et al 2008; Miles and Baker 2008; NHPAU 2008; Whitehead and Gaus, 2007; Gibb, et al, 2008). How then are current economic and housing performance and prospects best characterised?

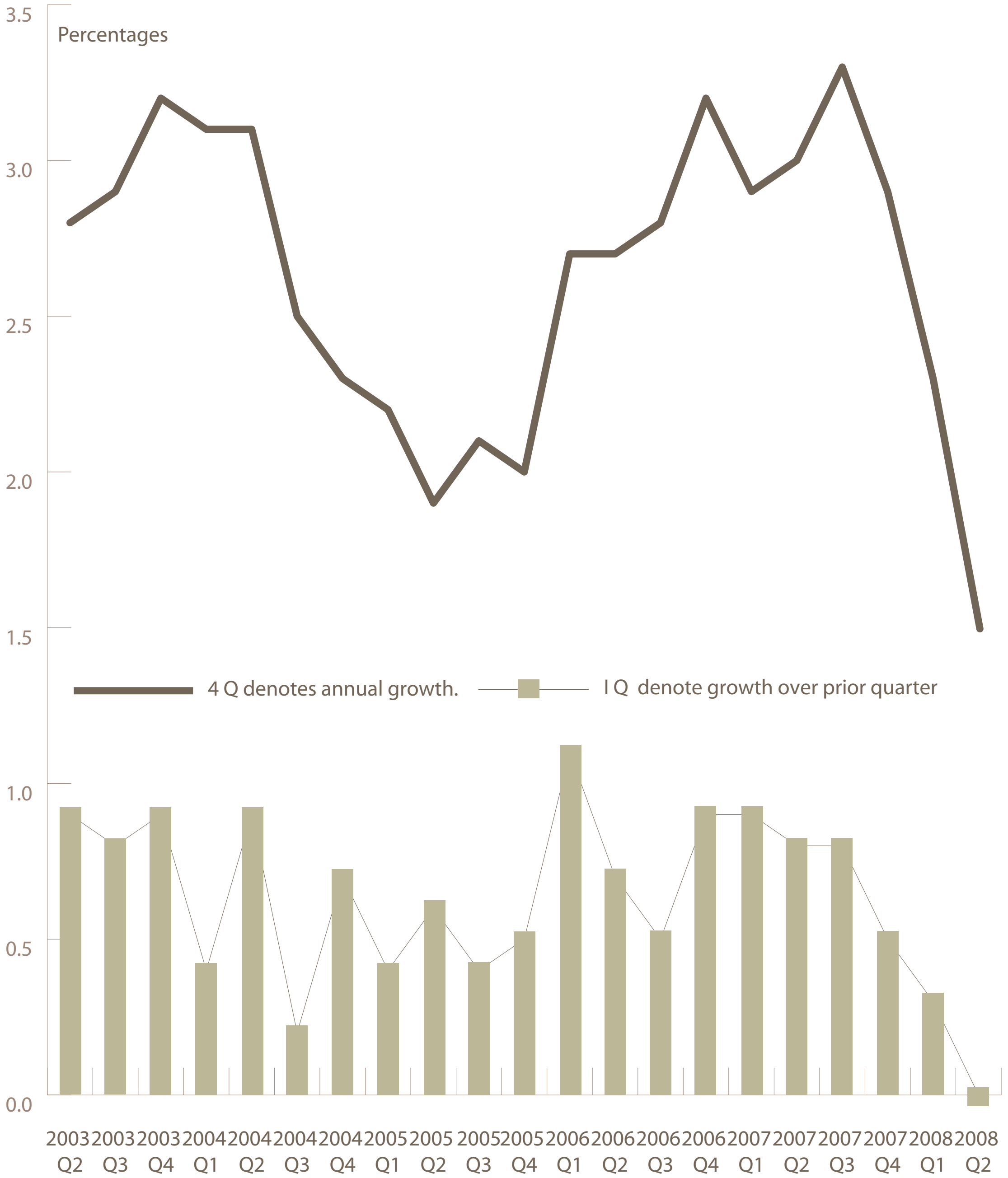
Economic performance and prospects

3.4 Figure 1 summarises actual economic growth across the UK as a whole for the period 2003 (quarter 2) – 2008 (quarter 2).

3.5 It shows that GDP neither rose nor fell in the second quarter of 2008. Compared to quarter 2 2007, it shows that real annual growth of 1.5% had occurred. This is not spectacular performance by the UK economy, but it is not apocalyptic either. What of prospects?

3.6 In August 2008, the International Monetary Fund (IMF) forecast economic growth for the UK on an annualised seasonally adjusted basis of 1.4% for 2008 as a whole, and 1.1% for 2009 (International Monetary Fund, 2008c). These forecasts for growth were broadly in line with OECD figures published in September 2008, of 1.8% for 2008 and 1.2% for 2009, which had been revised downwards from earlier forecasts to allow for a negative impact from residential property price trends (Elmeskov, 2008). The August IMF figures were also in line with the average of independent forecasts for the UK made in July (1.5% for 2008 and 1.3% for 2009) (HM Treasury, 2008a). Independent forecasters of the UK economy also saw prospects after 2009 as more positive, with GDP growth increasing to 2.2%, 2.6% and 2.6% in 2010, 2011 and 2012 respectively.

Figure 1: Real GDP Quarterly Growth* Source: Office for National Statistics, September 2008



3.7 Other notable summer contributions to the debate were those of:

- Fels (2008a, 2008b), who noted that a credit crunch accompanied by a severe house price decline raises the risk of a longer and deeper recession than normal, but pointed to the proactive and aggressive stance of US monetary and fiscal policy as weighing against this possibility. Fels further argued that the typical ingredients for a deep contraction in total economic activity (as opposed to a broad stagnation or a mild technical recession) are not in place (there has been no excessive monetary tightening or over-investment in the corporate sector, oil prices have fallen, and emerging markets are still providing world demand). Fels therefore anticipates a prolonged period of relative economic stagnation in the G7 countries rather than a deep recession
- Miles and Baker (2008), who concluded the most likely outcome is for a period of negligible growth, rather than protracted falls in output. They predict one or at most two quarters of negative GDP growth over the next year, within an overall picture of real GDP growth of around 1.1% in 2008 and 0.9% in 2009.

3.8 More up to date forecasts for the world economy now show diminished prospects in light of developments in September and early October. The latest IMF forecasts were published on 9 October – 24 hours after the UK Government announced its £500 billion support package for the UK banking sector (International Monetary Fund, 2008g).

3.9 The IMF is now forecasting:

- Global real economic growth of 3.9% in 2008 (down from 5.0% in 2007) and 3.0% in 2009, before rising again towards 5%
- Advanced economies in recession in the second half of 2008 and early 2009, before recovering and resuming upward growth
- Stabilisation of the US housing market in the coming 12 months, *"ending the intense drag on growth that has been present since 2006"*
- Output growth for the UK as a whole in 2008 of 1.0%, followed by a fall in 2009 of 0.1% (one tenth of one percent)
- A fall in real UK GDP of 0.3% (one third of one percent) in quarter 4 2008 relative to quarter 4 2007
- An increase in real UK GDP of 0.7% in quarter 4 2009 relative to quarter 4 2008.

3.10 It also comments:

"assuming that the many public initiatives under way are successful in lowering financial market strains and rebuilding confidence, it is the IMF staff view that the still relatively sound non financial corporate balance sheets in advanced economies and resilient domestic demand in emerging economies should support the beginning of a global economic recovery later in 2009, as the effects of the commodity price shocks unwind and housing activity in the United States stabilizes" (IMF, 2008g).

3.11 Similarly the most recent (October) independent forecasts for the UK economy[10] now show an average forecast of 1% growth for 2008, and 0% growth (but equally no decline) for 2009 (HM Treasury, 2008b).

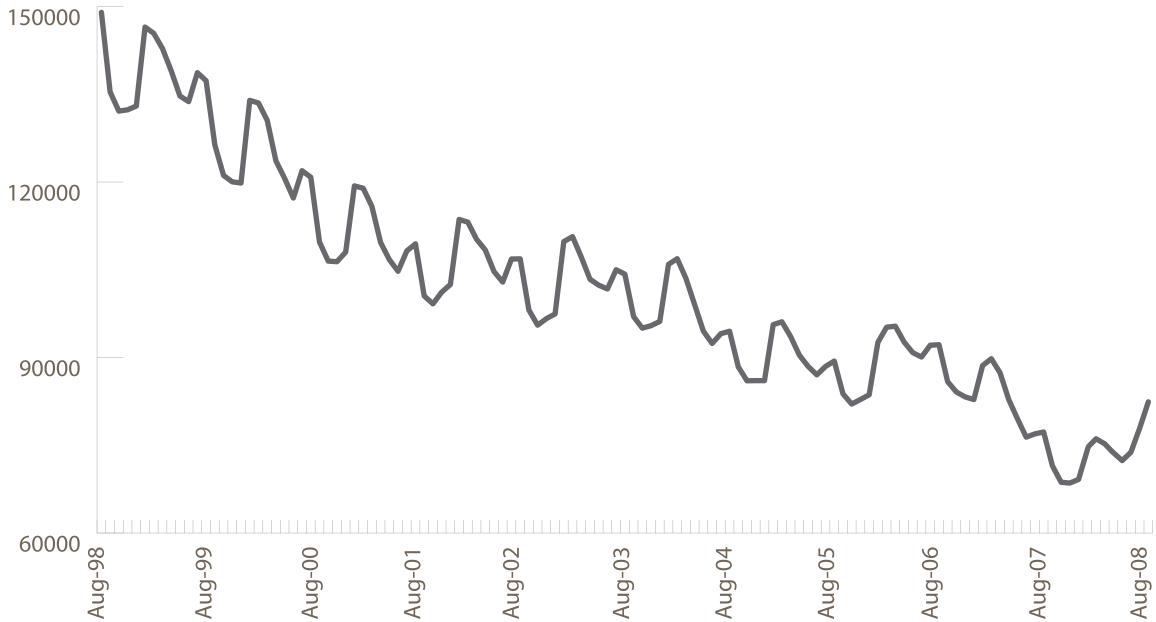
3.12 Turning to the picture in Scotland, many Scottish economists believe (see below) that historically Scotland has held up better in downturns than the rest of the UK, but lagged behind in growth periods, partly because of its sectoral composition and large public sector. Nicol et al (2008) note that over the year to March 2008 GVA increased by 2.1%. Berry and Dewar (2008) conclude that the evidence to date of any impact of the credit crunch on the Scottish economy is mixed:

"Within sectors it is notable that construction, which accounts for almost 7% of total Scottish GDP and grew strongly between 2001 and 2006, has declined for five successive quarters and by 2007 Q4 was 4.6% below the peak reached in 2006 Q3. Financial services, accounting for over 8% of GDP and also one of the fastest growing sectors in recent years, declined in 2007 Q2 and Q3 but recovered a little in Q4. Nonetheless Financial Services output for the year increased by 2% on the previous year."

3.13 Berry and Dewar note that while measuring only a subset of those unemployed or seeking work, the claimant count provides an up to date indicator of conditions in the labour market. Data for the decade August 1998 – August 2008 (see Figure 2) shows significant long-term reductions in the count, although there has been an upturn since May 2008 in the Scottish figures[11].

[11] The most recent labour market statistics published by ONS on 15 October 2008 show a claimant count unemployment rate of 3%, an International Labour Organisation (ILO) unemployment rate (the preferred measure) of 4.7% (compared to a UK rate of 5.7%), and a Scottish employment rate of 76% - significantly above that of almost all EU countries: http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=15084.

Figure 2: Claimant Count Scotland (August 1998 – August 2008) Source: NOMIS



3.14 Independent forecasts for the Scottish economy (compiled in June 2008) average to 1.7% growth for 2008, 1.6% for 2009, and 2.2% for 2010[12], broadly on a par with those being made for the UK as a whole around that time, and were accompanied by some comforting observations:

"The economy also appears to be less susceptible to interest rate movements than other parts of the UK, with consumers less indebted and housing markets less stretched. This provides some insurance against the sort of shocks that have triggered recessions in other parts of the UK over the last 25 years" (Experian, 2008).

"On the upside the solidity of the Scottish labour market and lower levels of stress in the housing market may buoy Scottish consumer spending and result in a less gloomy outcome than the central forecast" (Scottish ITEM Club, 2008).

"Given that the Scottish economy does not suffer the same volatility as the UK (in cyclical terms) there is little expectation of a sharp contraction in Scottish growth. It is more likely that activity will slow gradually and recover in early to mid 2009 rather than towards the end of 2008. Further shakedowns in financial markets or prolonged price

[12] These forecasts are based on estimates constructed by Cambridge Econometrics, Fraser of Allander Institute, the Scottish ITEM Club, and Experian, and were provided by the Scottish Government Office of the Chief Economic Advisor.

*inflation have also been considered. Overall the central expectation is for little further serious adverse impacts from the financial markets" (*Low, 2008).

3.15 Even so, Scottish economic prospects will undoubtedly have diminished since the summer, although at time of writing, no later forecasts specifically for Scotland were available to us.

3.16 In general terms therefore risks to Scottish, UK and indeed world economic growth have been increasing (International Monetary Fund, 2008a-g), forecasts have been ratcheting downwards somewhat, and labour market economic data appear to confirm a slowdown in Scottish economic growth. That said, it is important to stress that current forecasts do not reflect anything like meltdown in the UK or Scottish economies. Rather, a technical recession appears to lie ahead, the length and depth of which is unclear at the moment, but the majority of current forecasts are for this to be short and shallow rather than deep and protracted.

Housing market performance

3.17 Turning from the economy in general to the housing system in particular, increasingly warnings are emerging of ongoing and enduring problems.

- The National Housing Federation (2008a) reports CML statistics indicating repossessions in the UK will increase to 45,000 homes in 2008, up 66% on the 2007 figure of 27,100
- McAteer (2008) warns up to three million fixed-rate and discounted mortgage deals will end in 2008 and 2009, leading to payment shocks of 20-50 per cent for many people
- Lazenby (2008) argues dependence on Section 106 agreements for new affordable housing provision in England means social housing build rates are going to be badly hit
- Thorpe (2008) notes a significant reduction in the number of financial institutions willing to remain in the social housing market
- In Scotland, Homes for Scotland (2008) estimate at least 15,000 jobs may have been lost in the housing development industry to date with many more under threat.

3.18 These predictions are disconcerting, and to the extent they are accurate the underlying problems they represent for individuals are deeply distressing. However, it is also important to interpret them in an appropriate aggregate context.

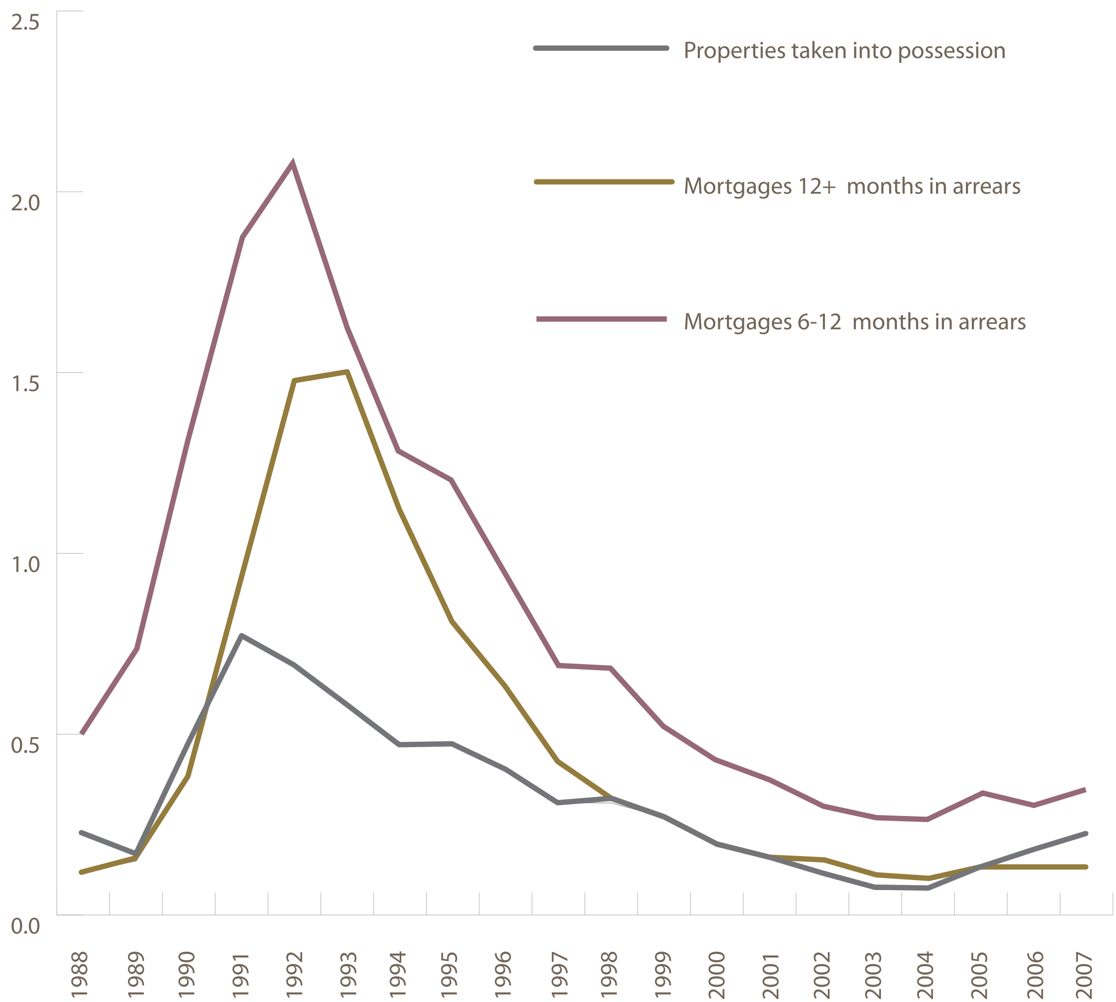
3.19 For example, Figure 3 shows that, even though the data seems to be at a turning point, repossessions remain at a low level historically.

3.20 As to mortgage rate resetting, Miles and Baker (2008) provide a useful calculation that reminds us again that we are not in the same situation we were in 1989:

"In the two years from mid-1988 to mid-1990, the average interest rate on the stock of mortgages increased by around 550bp [basis points]. With a stock of mortgage debt to GDP of a bit above 0.5, this generated a decline in available income to those with mortgages that was worth about 2.9% of GDP. Now the stock of mortgages is worth around 0.85 of annual GDP so that a given change in the average interest rate of mortgages reduces the available income of those with mortgages by more (relative to the size of the economy). Over the period from mid-2006 to date the average cost of existing mortgages has risen by a relatively small amount – Bank of England figures show that the effective mortgage rate of the outstanding stock of mortgages is up only around 50bp between mid-2006 and mid-2008. But a substantial number of mortgages will reset this year. It is likely that those mortgages that do reset will now have interest rates 100-175bp higher. There will also be a not insignificant tail that will reset with rates a lot higher than that. Overall, it seems likely that by the middle of next year the average interest rate on the stock of outstanding mortgages might be 100bp or so higher than three years ago. The resulting hit to disposable income would be only around 30% as large as the impact in the early 1990s (-0.85% of GDP versus -2.87%). Even if the average interest rate on mortgages were to rise twice as much as that (by 200bp), the hit to disposable incomes, as a fraction of GDP, would still only be around 60% of the scale of the impact in the early 1990s."

Figure 3:
UK arrears and repossessions as a percentage of outstanding mortgages 1998-2008

Source: DCLG Live Table 545



3.21 Brandon (2008a) sees opportunity for the social rented sector rather than threat. In a further paper, Brandon (2008b) notes a slowdown in social housing starts in England of 37% over the previous year. Stothart (2008) and Thorpe (2008) conclude there to be no drying up of private finance for the social housing sector generally, although there is increasing anecdotal evidence of associations experiencing problems in this regard, and more generally of the cost of finance increasing.

3.22 Looking at house price trends (figure 4) DCLG evidence shows that, at the level of the UK, prices were still rising in the second quarter of 2008.

3.23 The rate at which prices rose varied across the UK, and indeed in Northern Ireland annual house price growth was negative in the second quarter – but after a period of much greater growth than seen in other parts of the UK. Annual price rises were stronger in Scotland than in any other part of the UK in the second quarter of 2008, with annual growth of 6.6%.

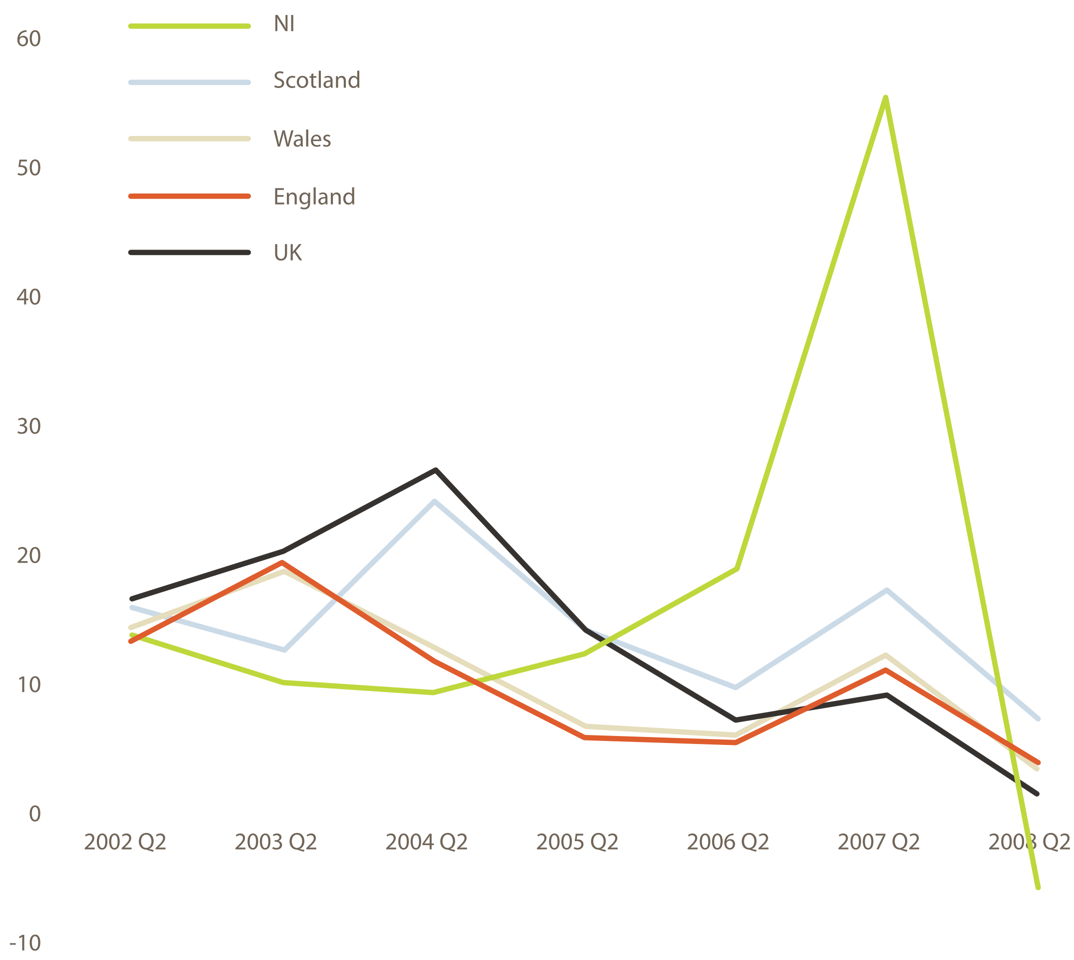
3.24 The most recent quarterly data on house prices from Nationwide[13] show an annual (Q3 2008 on Q3 2007) house price fall for the UK as a whole of 10.3%, with prices in Northern Ireland continuing to show the steepest correction, but still only back to where they were in the third quarter of 2006[14]. Scotland is reported to have experienced a 7.1% annual fall in house prices in Q3 (the lowest annual rate of decline in the UK). The Nationwide commentary notes:

"All sub-regions within Scotland have now seen average house prices fall below their year-earlier levels. This represents a change from the previous quarter, when Aberdeen and its surroundings managed to maintain price growth in positive territory. With respect to the major conurbations, house prices in Glasgow are down 8% from a year earlier, while those in Edinburgh are down 3%. The largest price drop has been measured in Renfrewshire & Inverclyde, with a fall of 10% over the last 12 months."

13 http://www.nationwide.co.uk/hpi/review.htm

14 The latest (September) data from Halifax also shows a 12.4% annual fall for the UK as a whole: http://www.hbosplc.com/economy/HousingResearch.asp

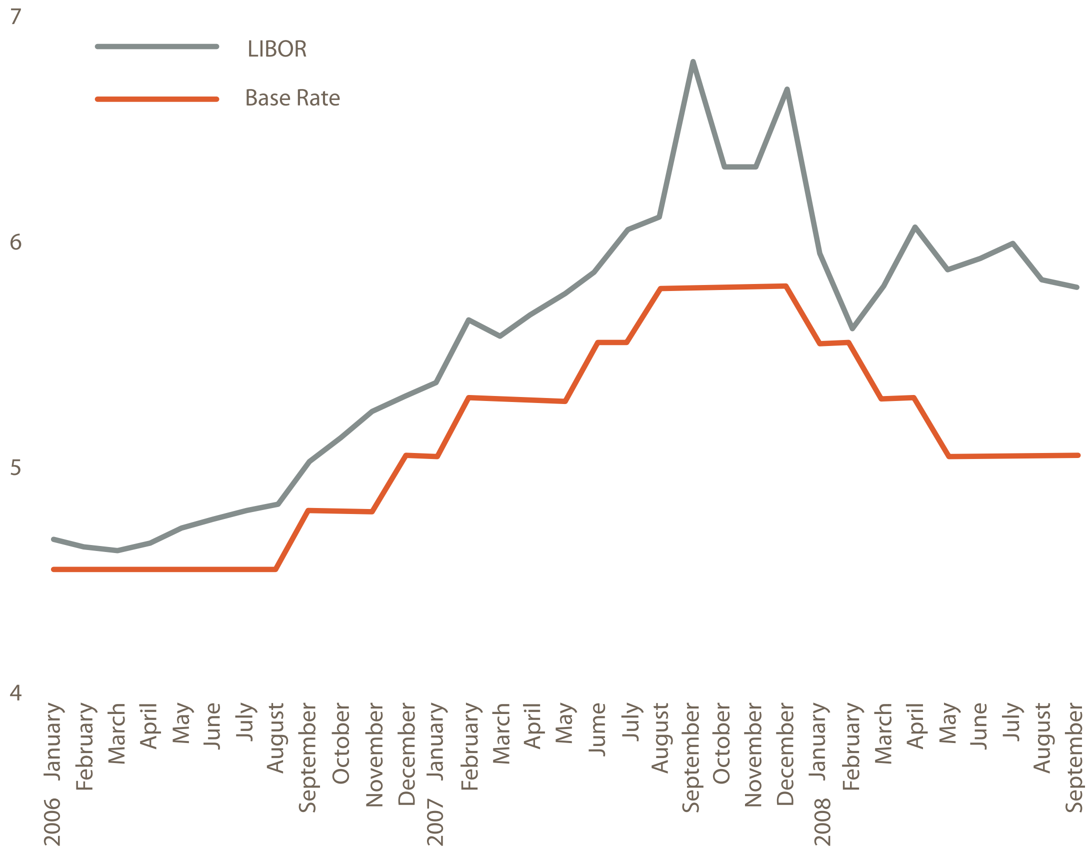
Figure 4: Mix Adjusted House Price Index (2002 = 100): 2002 (Q2) – 2008 (Q2) (Annual Percentage Change) Source: DCLG Live Table 591



3.25 House price falls clearly reflect conditions in the mortgage market. Stephens et al (2007) note that most UK mortgage lenders had come to rely heavily upon wholesale (interbank) funding by the time the credit crunch hit, citing Bank of England figures showing the median UK commercial bank to be funding about 44% of its business from wholesale markets (up from 27% in 2000)[15]. One of the most immediate impacts of the crunch was on LIBOR – the rate at which banks lend to each other. Historically, LIBOR has shadowed the Bank of England base rate fairly closely, but the crunch effectively derailed this relationship (Figure 5).

Figure 5: Bank of England Base Rate and 3 Month LIBOR

Source: British Banker's Association

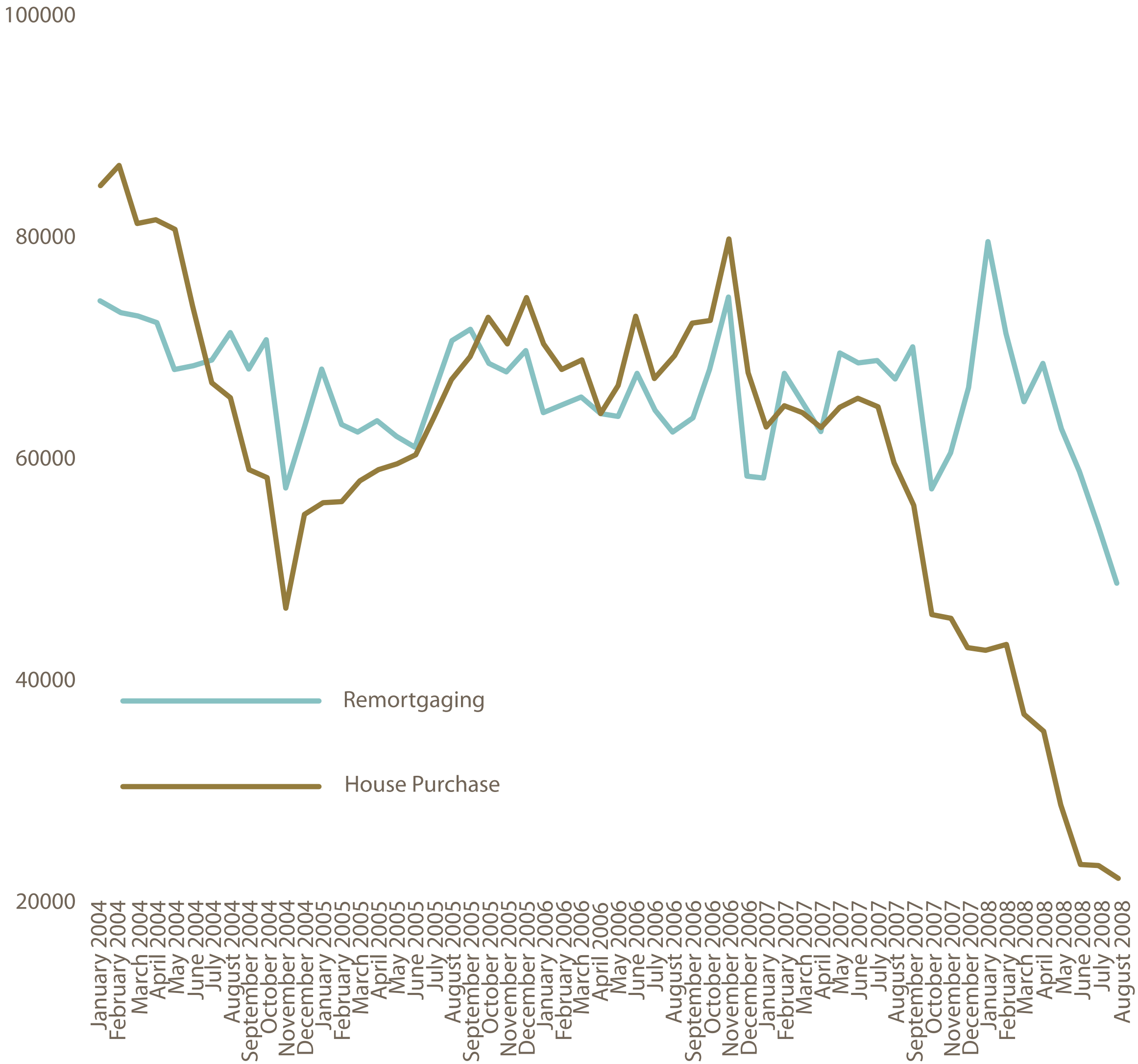


[15] HM Treasury suggest secondary market funding accounted for 31% of mortgage lending across the UK in 2006 and that the outstanding stock of residential mortgage back securities was £201 billion in the UK, with covered bonds accounting for a further £49 billion (HM Treasury, 2008c). Stephens et al also report that about 20% of the stock of UK mortgages at the time were funded via securitisation.

3.26 Figures 6 and 7 show the effect of seizure in the wholesale money markets on the number and value of UK mortgage loans up to end August 2008.

Figure 6: Number of loans approved by Month (Seasonally adjusted, UK)

Source: British Banker's Association

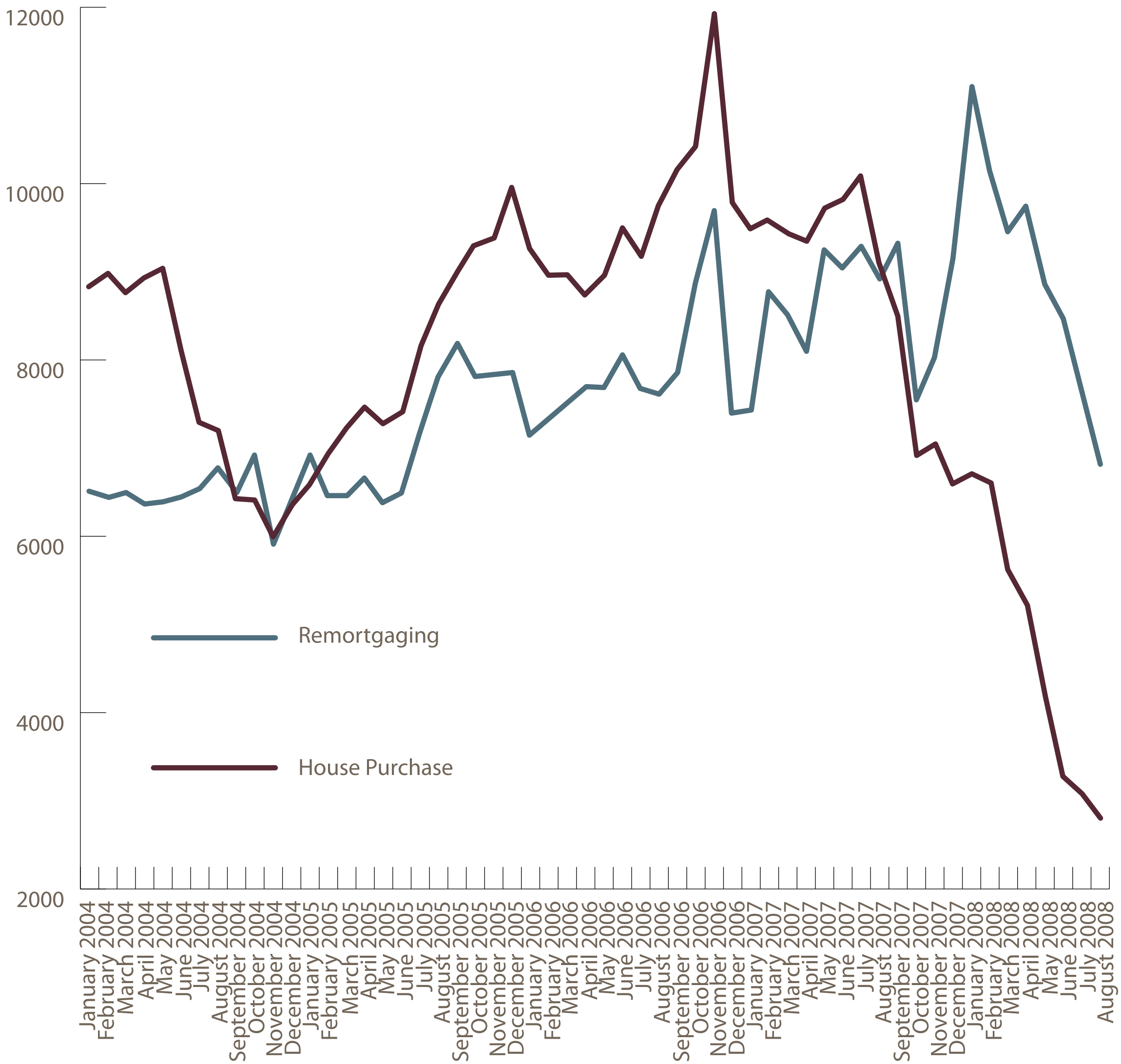


3.27 While CML reported in August that the Scottish mortgage market was faring better that the rest of the UK (CML 2008a), Bank of England mortgage lending statistics for the UK as a whole for August[16] indicated that the number of loans approved for house purchase (32,000) and remortgaging (64,000) were lower than in July, and also lower than the previous six month averages of 49,000 and 88,000 respectively. On a seasonally adjusted basis, gross lending totaled £19.2 billion in August, compared with £21.1 billion in July and £30.2 billion in August 2007. Net mortgage lending fell by 95% in August to £143 million, compared with £3 billion during the previous month and £9.1 billion in August 2008 (CML 2008c). September also produced gloomy figures, with total lending of £17.7 billion 42% lower than in September 2007[17].

[16] http://www.nationwide.co.uk/hpi/review.htm

[17] http://www.cml.org.uk/cml/media/press/1959.

Figure 7: Value of loans approved by month (Seasonally adjusted, UK, £M)



3.28 Table 2a shows the quarterly pattern of the decline in lending to first time buyers in Scotland. It can also be seen that both the overall value of lending and average loan to value ratios have declined. First time buyers have also been facing an increase in interest payments as a percentage of income, albeit to nothing like the levels seen in 1989-1991[18].

3.29 Table 2b shows a fall in mortgages provided to remortgaging households, but shows little change in the proportions being advanced. Again, affordability has deteriorated as a consequence of rising mortgage costs and house prices, but again the increase is comparatively modest[19].

3.30 Other Bank of England survey data confirms that credit conditions continued to worsen steadily over the summer (Bank of England 2008a, 2008c, 2009d)

Table 2(a): Scottish Mortgage Lending 2005-2008 – First Time Buyers

	Number of loans	Value of loans (£m)	Percent advance (median)	Income multiple (median)	Interest payments as % of income
2005 Q2	10,300	690	90	2.57	14.8
2005 Q3	10,800	743	90	2.61	14.3
2005 Q4	9,800	701	89	2.61	14.1
2006 Q1	8,100	586	89	2.64	14.1
2006 Q2	10,200	812	90	2.76	14.8
2006 Q3	10,400	844	90	3.25	15.3
2006 Q4	9,700	813	90	2.86	16.0
2007 Q1	7,600	632	89	2.86	16.1
2007 Q2	9,600	879	90	3.00	17.6
2007 Q3	9,600	897	90	2.99	18.4
2007 Q4	8,500	783	89	2.98	18.9
2008 Q1	6,300	569	88	2.97	18.0
2008 Q2	6,600	622	87	3.01	18.1

Source: CML Table SC2

[18] For the UK as a whole, interest payments as a percent of income rose to 23.7, 26.5, and 21.6 respectively in these years according to CML data.

[19] It is also worth noting the Crosby review established by the Treasury to provide advice on options to improve the functioning of mortgage finance markets concluded in July that there is still good availability of finance for borrowers who can offer significant security (reliable earnings and a borrowing requirement of 75 per cent or less of property value), although the availability of finance to all other consumers is likely to remain considerably reduced (Crosby, 2008).

Table 2(b): Scottish Mortgage Lending 2005-2008 – Movers

Number of loans	Value of loans (£m)	Percent advance (median)	Income multiple (median)	Interest payments as % of income	
2005 Q2	16,800	1,731	75	2.55	13.7
2005 Q3	17,000	1,827	75	2.59	13.5
2005 Q4	15,800	1,725	76	2.65	13.4
2006 Q1	12,000	1,333	77	2.66	13.3
2006 Q2	18,200	2,108	76	2.70	13.7
2006 Q3	18,400	2,217	75	2.73	13.9
2006 Q4	17,300	2,126	77	2.78	14.7
2007 Q1	12,500	1,546	76	2.78	15.1
2007 Q2	18,700	2,377	75	2.80	15.6
2007 Q3	18,900	2,487	74	2.83	16.5
2007 Q4	15,800	2,110	75	2.82	16.8
2008 Q1	9,600	1,231	74	2.80	16.3
2008 Q2	11,900	1,572	73	2.80	16.3

Source: CML Table SC2

3.31 Registers of Scotland transactions data chimes with lending data, with the volume of sales in the second quarter of 2008 showing a decrease of 19.4% compared to quarter 2 of 2007[20]. More recent evidence on transactions was provided to the Scottish Parliament Economy, Energy and Tourism. More recent evidence on transactions was provided to the Scottish Parliament Economy, Energy and Tourism Committee on 24 September. Edinburgh Solicitors Property Centre (ESPC) data indicates that sales in August 2008 were 60% down on a year earlier, with properties taking on average 100 days to sell compared with a previous 60 days. ESPC currently has a stock of around 6,500 properties for sale, which is 60% higher than would normally be expected at this time of year. Similarly Glasgow Solicitors Property Centre is reporting sales down 53% compared with a year ago[21].

[20] http://www.ros.gov.uk/pdfs/2008_08_release.pdf.

[21] Figures quoted in the official report of the Committee session for 24 September: http://www.scottish.parliament.uk/s3/committees/eet/or-08/ee08-1802.htm#Col1024. Other work (Newhaven, forthcoming) points to a rapid build up in properties for sale in the Highlands, similar to that evident in the Edinburgh market.

3.32 Contributors to the Scottish Parliament Economy, Energy and Tourism Committee debate painted a picture of challenging times. However, they were also keen to avoid creating an unduly negative impression.

"There is a danger of our becoming bogged down in doom and gloom and assuming that there are huge mortgage arrears in Scotland. Our level of arrears at this point in the year is no different from last year's level, so there is not the sign of distress that some people imagine that there is" **(Graeme Dalziel, Dunfermline Building Society)**.

"It might reasonably be supposed that the rising cost of money, which has figured large in the discussion, will have a knock-on effect on what people call the real economy. However, from my conversations with all the banks that operate in Scotland, it is clear to me that the banks regard themselves as open for business and open for lending" **(Owen Kelly, Scottish Financial Enterprise)**.

"At Standard Life, we are hearing a lot of noise, but we are not experiencing much difference in activity. Savers and investors have moved towards safer havens, but there is not yet real evidence that less money is coming in" **(John Gill, Standard Life)**.

"The figures that we use are based on house building representing about 15 to 20 per cent of the construction industry. We are considering the knock-on effect that the situation may have on the other 80 per cent of the construction sector, but that part of the sector seems buoyant, which we are happy about. Several major projects are in the pipeline that will, no doubt, come to fruition in the next couple of years" **(Harry Frew, Union of Construction, Allied Trades and Technicians)**.

"Many contractors are predisposed to highlight difficulties rather than to be happy with things that are going well, but at the moment there is more evidence of the latter. The feedback that we get from contractors is that economic conditions are good and plenty of work is available" **(David Wright, SELECT)**.

"Edinburgh and its surrounding area are short of good-value family homes with three or four bedrooms, a bit of land for the dog and somewhere to park the car. When such houses come on to the market, they probably sell better than flats" **(Ron Smith, ESPC)**.

"I echo Ron Smith's point that demand for affordable family homes that have three or four bedrooms and somewhere to park the car is still quite strong" **(Mark Horden, GSPC)**.

3.33 Acknowledging vested interests in avoiding a worsening situation, this is a fairly consistent set of observations on short run market and economic conditions.

3.34 The area where economic conditions appear to have deteriorated most markedly as a consequence of the credit crunch is the housebuilding industry. In England, recent market research by Dresdner Kleinwort (2008) found asking prices of urban apartments in the Midlands and North reduced by 40-50%, and volumes of new build dried to virtually zero. The author refers to "*carnage beyond even our most bearish expectations"* in the newbuild apartment market, and that *"many developers have gone bust and land in many cases appears worthless".*

3.35 In a specifically Scottish context, Homes for Scotland evidence to the Scottish Parliament Economy, Energy and Tourism Committee reflected the English despondency:

"From the information that we have, we think that production in Scotland will drop to at least 15,000 units this year, and the emerging third-quarter data on starts and completions, which we are trying to refine, suggest that the figure could drop to 12,000 — production could be halved."

"At the end of June we knew that 15,000 jobs had been lost in the industry … As of last week, we think that the figure for job losses has increased to 30,000. We are trying to refine our understanding of the figures, but information from our major companies suggests that 30,000 jobs might have been lost since the beginning of the year."

3.36 More general evidence from the Committee's deliberations indicate that an important aspect of the problems facing the industry is the emphasis it was placing on supplying flats at the time the crunch began to bite:

(Dave Thompson, MSP for the Highlands and Islands) *Allan Lundmark (Homes for Scotland) mentioned that many developers and builders have been driven towards higher-value units — I think that that is how he put it. Is there enough supply at the lower end for first-time buyers?*

(Ron Smith, ESPC) *Yes; indeed, there is oversupply at the lower end. More than half the properties that we sell in Edinburgh are flats. My building industry colleagues may correct me on that, but certainly, flats account for a larger percentage of the new units that are coming on to the market in Edinburgh and the surrounding area than one might expect.*

Housing Market Prospects

3.37 In May 2008, the CML issued a forecast for the UK housing and mortgage markets, suggesting:

"The worst of the credit crunch may now be over. An important element behind this has been the Bank of England's special liquidity scheme, announced in April. The primary aims of this are to improve the liquidity of banks and to lower the current high level of wholesale money rates relative to the Bank rate … But this is only likely to take effect slowly, and in conjunction with the further disclosure and writing down of impaired and illiquid assets (and repairs to balance sheets and capital ratios). So, although the conditions for an easing of the credit crunch are falling into place, it is likely to be some time before there is a measurable improvement in terms of an easing in the availability and terms of mortgage credit. Indeed, we expect only a modest improvement, at best, in the availability of mortgage credit before the end of this year" (CML 2008b).

3.38 Five months later, this looks unduly hopeful, and indeed in October CML revised its estimates for total 2008 gross lending downwards to £255 billion (relative to £363 billion achieved in 2007) and net lending to £40 billion (£108 billion in 2007)[22]. But it does remain the case, as Crosby (2008) noted in July, that housing market fundamentals remain strong across the UK (in terms of long term demand prospects).

3.39 In his interim report, Crosby was of the view that mortgage market difficulties will continue into 2010 because of the term structure of existing wholesale borrowings by mortgage lenders.

"Banks are struggling to increase the amount or extend the maturity of their wholesale funding. Given that more than half of their existing mortgage-backed borrowings will need to be repaid over the next three years, their capacity to make new mortgage advances therefore looks severely constrained. In my opinion, such a shortage of mortgage finance will persist throughout 2008, 2009 and 2010, and I suspect that current forecasts for net new mortgage lending during this period will prove optimistic, perhaps significantly so" (Crosby, 2008).

3.40 We await publication of the final Crosby report. It will be interesting to see how developments since July have moderated these views.

[22] http://www.cml.org.uk/cml/media/press/1959

3.41 Having considered the available evidence, our view is that a return to something approaching normality in the Scottish mortgage market during 2010 is a reasonable expectation providing underlying demand is not too badly affected by weakening of the real economy and providing also that Governments around the world can maintain a grip on the current overall situation and avoid a return to the generalised fear witnessed in mid October in world stock and money markets. But this offers little immediate comfort to the Scottish housebuilding industry, which has been at the sharpest edge of the credit crunch impact to date.

3.42 It is also worth noting the slow recovery by the housing sector to the major downturn in the early 1990s. The housing market will not simply switch back to normal conditions when, as we hope, the mortgage market rights itself. The supply side adjusts slowly even in good market circumstances and the new build sector will be damaged by a prolonged period of significantly lowered levels of trading activity.

4 UK policy responses to the crunch

Financial market responses

4.1 As Table 1 makes clear, central banks around the world have been active from the beginning of the crunch in attempting to draw the worst of its sting. The efforts of central banks have not always been well co-ordinated however. One reason for this is simply that different national banking systems faced different initial conditions, exposure and differential capacity to intervene at a national scale. Moreover, different central banks have taken different positions because of variation in concern over the possibility of injecting moral hazard into the banking system as a whole. Put simply, some central banks (particularly at the start of the crisis) believed that if financial institutions are bailed out of the current mess they have engendered, they may subsequently continue intermediating in reckless ways in the expectation of further future help if needed. More technically, they will continue to under price risk.

4.2 There has also been an understandable policy-maker concern at possible political consequences from helping distressed financial institutions that profited in good times and paid healthy bonuses to senior personnel, when the consequences of their actions now bear heavily on individual households through no obvious fault of their own, and where these households have little perception of help for them in dealing with these consequences. Politicians have struggled to manage a feeling of natural injustice across their electorates (mingled to a degree with the politics of envy) while needing to ensure the entire edifice of global finance is sufficiently shored to prevent major damage occurring to the real global economy. This conflict played out most clearly, in the month or so before the passage of the Emergency Economic Stabilization Act in the US in October 2008, which authorised the US Treasury to spend up to $700 billion purchasing distressed assets from banks. Many criticised the proposals prior to passage of the legislation (and continue to do so) as a hand out to Wall St that will not prevent further foreclosure of mortgages for many households in distressed housing markets (Stiglitz, 2008).

4.3 In the early stages of the crunch, the emphasis of Bank of England activity was predominantly on injecting liquidity into the UK banking system in the expectation that this would resolve the wholesale money market issue. How to deal with the first UK financial institution to show real distress (Northern Rock) caused a major problem for the Government and the Bank of England, both at that time fearful of moral hazard consequences, until the sight of lengthening queues outside branches of the bank to withdraw savings concentrated minds on the real issue (Walters, 2008).

4.4 In April 2008, the Bank of England introduced a £50 billion Special Liquidity Scheme (SLS) details of which are provided in Box 1 (Bank of England, 2008a). At the outset some commentators argued the SLS would not work while house prices continued to fall (Bennett, 2008). Banks themselves expressed disappointment at the overall coverage of the scheme, and in particular the narrow limit set on the range of assets that could be used to obtain Government securities.

4.5 In July, a consortium of housing interests including the Council of Mortgage Lenders, the Chartered Institute of Housing, the Home Builders Federation, the National Housing Federation and the Royal Institution of Chartered Surveyors published a proposal for reopening the UK mortgage finance markets, which remained stubbornly closed in spite of the SLS. Essentially a twist on the existing SLS, the proposal would have involved financial institutions selling newly originated mortgage backed securities or covered bonds to investors, who could then offer them to the Bank of England in return for Government loans. The novel aspects of the proposal were twofold. Firstly, the Bank of England would be providing cash rather than Government securities to investors, and secondly it would be dealing directly with these investors rather than through the banks that were responsible for issuing the securities being traded through the scheme.

Box 1: The Special Liquidity Scheme

Under normal circumstances, the Bank of England controls money supply in the economy by means of 'open market operations' (OMO). OMO involves the Bank either buying securities from other banks (thereby pumping money into the financial system and through it into the general economy), or selling them (which extracts money and liquidity from the system).

On 21 April, the Bank announced the launch of a Special Liquidity Scheme (SLS), allowing banks to temporarily swap high quality but currently illiquid mortgage-backed and other securities for UK treasury bills. Treasury bills are widely accepted as collateral, and the scheme was therefore an attempt at improving the liquidity position of the banking system, their willingness to engage in interbank lending, and confidence in financial markets.

The main features of the SLS as introduced were:

- Each swap could be renewed for a total of up to three years.
- The risk of losses on the mortgage-backed securities remained with banks – if their value reduced, they would still have to buy them back from the Bank of England at the initial price.
- Only 'legacy' illiquid assets, existing at the end of 2007, were eligible.
- Banks wishing to use the scheme would have to pay a fee based on the spread between the three-month LIBOR and the rate for borrowing against Government bonds, subject to a minimum of 0.2 per cent.

4.6 The proposers of the scheme hoped that this mechanism would restore confidence amongst investors about holding mortgage-backed securities, and therefore re-open wholesale money markets for mortgage lending. The Bank of England however found the proposal deeply unattractive, as it believed it would let mortgage lenders off the hook of monitoring how risky their loans are (another moral hazard concern). In his interim report, Crosby (2008) also rather dismissed the proposal:

"As with any such proposal, the extent to which the necessary market adjustment would be facilitated (rather than prolonged), would need to be weighed carefully. In the specific case of a guarantee, and alongside the potential benefits, the Government would also need to consider the fiscal, debt management and legal implications, and the extent to which a transfer of risk to the Government might distort incentives and create moral hazard, rather than help investors and issuers price that risk more accurately".

4.7 However, in September, in response to worsening money market conditions, the Bank of England announced a three-month extension of the period in which banks could arrange swaps under the SLS (to 30 January 2009). More significantly, on 3 October it agreed to accept securities linked to loans to companies as security for three-month funding – a major relaxation of its lending terms, and an action at face value incompatible with its previous stance on moral hazard. The change in stance was essentially because at present, as Pratley (2008) puts it, *"the Bank has essentially replaced the gummed-up wholesale funding market. It is the only guy in town prepared to lend"*.

4.8 The next round of policy initiatives swiftly followed, and proved to be of an order of magnitude beyond anything that had preceded them. On 8 October it was announced that:

- The UK Government would make up to £50 billion available to 8 major UK banks (and others on application) to increase their capital base. The money would be available as loans or in exchange for preference shares
- Up to £200 billion would be available in short-term loans from the Bank of England
- Up to £250 billion in loan guarantees would be made available at commercial rates to encourage banks to lend to each other.

4.9 In return for assistance under this £500 billion package of measures, participating institutions have had to agree to restrictions on executive pay and dividend payments, the creation of new non-executive Government appointed board members, and to extend normal credit lines to homeowners and small businesses (and extend forbearance to distressed borrowers)[23].

4.10 Initial reactions from financial institutions were very positive, with CML noting on its website:

> *"The CML believes the steps address both relevant issues – funding and capital – and provide both the short-term framework to enable banks to raise finance, and the longer term strengthening of their capital position that should help to re-instil confidence and stability…From what we can see so far, this seems to be a decisive, coordinated and reasonable package of measures that address both the relevant factors necessary to support a return to market stability. The flow of funding to support mortgage lending has been severely constrained, and these measures will help to create more positive conditions for the mortgage market."*

Housing market responses

4.11 With specific regard to difficulties in the housing market, the UK Government introduced a number of measures during the course of 2008. Debt advice services were strengthened in May, with an additional £9 million made available for face-to-face debt advice for homeowners in trouble[24]. Other (non-Scottish) measures announced included permission for the Housing Corporation to spend £200 million buying new properties off the open market, and modification of the eligibility criteria for shared equity schemes so that all households with an income below £60,000 can now apply.

23 At the time of writing however it remains unclear what precisely the Government means by its assertion that it expects competitive lending and products from these banks at the same level as 2007.

24 Although this needs to be set in a context of the long-term decline in core funding for Citizens' Advice Bureaux. ISMI can be paid to homeowners

4.12 A further raft of measures for England followed in July. These were:

- An extra £270 million allocated through the Housing Corporation for use over the period 2008-11
- Establishment of a national clearing house through which house builders can approach the Housing Corporation with proposals to sell unsold stock as affordable housing
- Increasing flexibility with respect to when providers can bid to the Housing Corporation for funding from the affordable housing programme, with providers now able to come forward with proposals at any time, rather than waiting for the quarterly bidding round as previously required
- Increased funding flexibility so that the Housing Corporation can now offer more payment at the start of schemes delivering affordable and social housing
- Announcement of the sixth round of the housing private finance initiative, with councils able to bid for a share of up to £1.87 billion to build new homes or refurbish existing houses and estates.

4.13 September brought yet more reforms, the first two of which apply throughout the UK:

- A 12 month rise in the house purchase stamp duty threshold from £125,000 to £175,000
- Reform of Income Support for Mortgage Interest (ISMI) for owners of working age[25]. From April 2009 the waiting period before ISMI is payable will reduce from 39 to 13 weeks and the capital limit for new claims will increase to £175,000. This is an important recognition of the low take up of mortgage payment protection insurance and a partial reinstatement of the position prior to the mid-1990s
- A new £300 million shared equity scheme targeted mainly at first time buyers. Homebuy Direct will provide an equity loan of up to 30 per cent of the value of a new property, co-funded by the Government and the developer, free of charge for five years. As with other shared equity schemes, buyers with a household income under £60,000 will be eligible

[25] ISMI can be paid to homeowners in receipt of Income Support, Pension Credit and income-based Jobseeker's Allowance. Those in receipt of a pension credit do not have to wait to secure access to ISMI.

- £200 million for mortgage rescue (involving RSLs offering shared ownership, shared equity or sale and rent back options to eligible households)
- £400 million affordable housing programme funding brought forward from 2010/11 for use in 2008/9 and 2009/10. Local authorities with existing stock are allowed to apply for this grant to build social housing.

4.14 Some welcomed these developments; others saw them as the application of sticking plaster to an amputation[26].

4.15 Scottish Government housing policy also increasingly recognised a growing problem as the year has progressed, and in terms of response has shown considerable common cause with those made elsewhere.

4.16 In May, the focus for announcement was the affordable housing investment programme (AHIP) budget for the next 3 years (that is to March 2011). The Scottish Government confirmed an AHIP programme for 2008-11 of £1.5 billion, with this sum expected to create at least 21,500 new affordable homes.

4.17 In June the Scottish Government announced additional support and training for money advisers, and that revised standards for money and housing advice and a new lighter-touch accreditation scheme for advisers would be brought in shortly.

4.18 A homeowners' support fund, encompassing and building on the existing mortgage to rent scheme was also announced. Funds available for an existing mortgage to rent scheme were increased by £25 million over the next 2 years, and options available under the existing scheme extended to include shared equity and shared ownership.

4.19 An expansion of existing shared equity schemes, supported by a further investment of £250 million over the next 3 years beyond previous announcements was also confirmed – although this will still be contained within the £1.5 billion AHIP funding announced in May.

[26] Moreover, many saw the uncertainty around stamp duty modification prior to confirmation of a raised threshold as having created more difficulties in the market that it solved.

4.20 In August, in response to further deterioration in housing market conditions, the Scottish Government announced that (Scottish Government, 2008a):

- £100 million of AHIP funding already allocated for 2010/11 would be brought forward for additional spending in 2008/9 and 2009/10[27]
- RSLs would be encouraged to purchase unsold stock or land from developers, where there is evidence of priority need, such purchase meets value for money tests and it is supported by a local authority
- An awareness raising campaign would be funded to encourage people to seek money advice if in financial difficulties
- The choice of homes available to buy through its open market shared equity pilot would be increased.

[27] The time shifting of £100 million within the AHIP is reflected in the Scottish Government's draft 2009/10 budget published in September (Scottish Government, 2008b).

4 Job done?

5.1 Has the policy response been sufficient? Now that a £500 billion UK bank stabilisation programme and a range of housing specific measures have been announced, can we just buckle up and wait for the remnants of the storm to pass us by?

5.2 Sadly, the answer to that is no. For the global financial system as a whole, and warnings against over-reaction notwithstanding (Greenspan, 2008; Hahn and Passell, 2008), recognition of regulatory failure and the need for reform of the regulatory framework both within countries and internationally is widespread (Blundell-Wignal, 2008; Blundell-Wignal and Atkinson, 2008; Muellbauer and Murphy, 2008)[28].

5.3 More specifically with regard to housing, a number of US commentators have made proposals to resolve the continuing distress in the US housing market (see Annex 2 for details), while in the UK and Scotland there are also continuing calls for further measures to be taken.

[28] There is also a growing call for a review of accounting principles with respect to asset valuation, with 'mark to market' or 'fair value' asset pricing seen as having played a particularly destabilising role in the current financial crisis.

5.4 At UK level, the National Housing Federation (2008a, 2008b) has set out an agenda that includes:

- More support for housing associations in developing mortgage rescue schemes and in buying unsaleable private developer homes
- Increased public investment
- More public land available to associations at discounted rates
- Increased investment for different models of housing for older people
- A reversal in Supporting People budget reductions.

5.5 In recommending more support for association purchase of speculatively built properties, NHF argues that properties rated less than Level 2 of the Code for Sustainable Homes should not be used for social renting. However, it sees such property as potentially suitable for market renting and student accommodation.

5.6 Also at a UK wide level, Homes for Scotland (2008) has called for the re-introduction of mortgage interest tax relief, and in Scotland for:

- More RSL purchase of land, part completed and completed stock from developers
- An increase in the proportion of AHIP used to secure home ownership for first time buyers through the Low-cost Initiative for First-Time Buyers (LIFT)
- Increased funding for "other housing types to provide a soft landing for the wider house building economy".

5.7 The Chartered Institute of Housing Scotland (2008) invited views from housing practitioners over the summer on opportunities to deliver additional housing and help alleviate the pressure on the Scottish housebuilding industry, and posed a number of questions:

- Can RSLs and local authorities gain access to or take ownership of properties built by private developers that are not selling on the open market or are being withdrawn from the market and are being left empty? Can or should these be used for social rented, mid-market rent and market rent to meet a range of current housing needs, from people on housing lists through to people unable to afford or obtain a mortgage? Are there any rules and regulation changes needed to enable this? How can or should it be financed and how can it be made attractive?
- As developers slow down or even stop their development programmes how can social housing providers or enablers be encouraged to buy surplus land that they may be banking? Can they take over and complete partly developed sites?
- Is there any evidence in Scotland that less affordable housing is beginning to be delivered via planning gain? What more can be done to assist the planning system in delivering more housing to meet needs?
- How willing may developers be to work more closely with RSLs and local authorities to build new homes at lower costs? Will this help them remain in the market, protect their share prices and prevent them having to sanction job losses?
- Is there a case for developing the Scottish Government's proposals for more flexibility on the mortgage to rent scheme and LIFT programme by looking at a much wider *flexible tenure* scheme that would give people the ability to move between renting and owning without changing home?
- Is there more the Scottish Government could be doing to assist people looking to access home ownership and in doing so provide some solace to the building industry? Is it time to extend the open market part of the LIFT programme across the whole of Scotland?
- What consideration should now be given to a wider range of measures to lever in finance for the delivery of affordable housing?

5.8 However, no consistent views have emerged in the rather limited response that CIH Scotland received.

5.9 More should be done, both short term and long term, to help the housing system through its current difficulties and to prevent new problems emerging through the development of future housing market bubbles. There are Scottish and UK wide dimensions to these issues. Furthermore, in a global crisis, it is important to also consider the local value to Scotland and the UK, suitably contextualised, of reform proposals from elsewhere.

5.10 As regards the short term, developments in financial and housing markets since May mean delivery of the Scottish Government's AHIP targets, and within this, initiatives to support the further development of owner occupation such as the Low-cost Initiative for First-Time Buyers (LIFT; The Scottish Government, 2008c) are under serious threat. However, the authors do not believe that further actions to promote first time buyer activity are a priority – especially where that involves new build housing. Effort to develop increasingly niche tenure products with which to support ever more marginal groups into owner occupation has arguably been a key failure of housing policy over the last two decades. Moreover, promoting purchase of new housing to first time buyers, particularly low income first time buyers, makes as much intrinsic sense as promoting the purchase of new cars by first time car owners. While there is no doubting the importance of first time buyers (and last time sellers) to housing market activity, this has no necessary relation whatsoever with the new housing market.

5.11 The primary short-term issue is dealing with the current surplus of unpurchased new property, and ensuring the level of new housing supply is maintained into 2010 at which point it is expected that current financial market problems will have sufficiently unwound to allow a more normal level of new housing market activity to resume. At that point it is highly likely that credit will still be more difficult to access and cost more than at present, which, other things equal, will continue to make owner occupation less attractive to new households. But that will not be a problem if there is a suitable supply of rented accommodation to meet their requirements.

5.12 The Scottish Government has recently promoted an expanded role for private renting in the Scottish housing system, partly as a response to the boom in owner occupation in the early years of the current decade, and the consequences that had for procurement costs in the social rented sector (Scottish Government, 2007a, 2007b; Gibb and O'Sullivan, 2008). Current circumstances give the Scottish Government an opportunity to support the purchase of property that the housebuilding industry cannot shift for renting in the open market. This could be undertaken through RSL subsidiaries, (where RSLs might be expected to make a contribution through free reserves) or by Government providing loans at commercial rates direct to existing registered private landlords, with a contractual arrangement in place for private lenders to assume those loans once markets normalise. This policy could be time limited (say for the next 18 months) to help encourage builders to continue producing new housing.

5.13 A second, time-limited, policy to stimulate the housebuilding sector would be a temporary suspension of the requirement for affordable housing contributions on new housing developments where planning permission has yet to be sought and properties are completed before an agreed deadline (say mid-2010). This would stimulate new development without giving developers an opportunity to build up a sizeable bank of burden-free development opportunities once housing markets normalise. This approach would have the disadvantage of removing the incentive to progress developments where there is already planning agreement with an affordable housing element involved, but as little of this is progressing anyway this could be an acceptable short term price for the longer term benefit of supporting the industry through a very difficult period.

5.14 At the UK level, the call by Homes for Scotland for the re-introduction of mortgage interest tax relief in an amended form is understandable. However, subsidy to home owners (in this case to reduce their interest payments) would only have a basis in the long-term as an offset for introducing other currently absent taxes on investment such as on real capital gains as part of long-term structural change to the way housing is subsidised. In the longer term, policy has to ensure that future housing bubbles do not emerge or grow into speculative feeding frenzies as they have in the past (Shiller, 2005). The policy goal should be real price stability in the housing market. An important mechanism for achieving this would be capital gains taxation on house price appreciation (Maclennan and O'Sullivan, 2008). Real gains taxed at the normal rate would act as a significant brake on house price rises that might otherwise gain a self-perpetuating head of steam. Flat rate mortgage interest tax relief if introduced at the same time would lessen the initial unpopularity of such a policy development. However, further work would be necessary (including modelling market impact) to take this idea forward. Moreover, it would in any case be inappropriate to introduce such major structural changes until UK housing markets have normalised.

5.15 A more effective short-term response would be to further strengthen financial support to mortgage holders facing payment difficulties through co-insurance or public guaranteed support of mortgage protection payment insurance. Also, in the current clamour for incentivised public sector support of distressed banks, it could be argued that the price for addressing the potential insolvency of specific banks is a moratorium on repossessions or at least extended forbearance for borrowers. After all, it makes little sense, let alone is it ethical, to provide public funds and commitments to keep institutions solvent for them in turn only to make borrowers homeless.[29]

[29] We acknowledge Eric Levin who forcefully made this point to the authors.

5.16 Shiller (2008) identifies other short-run policy prescriptions aimed at addressing the sub-prime fall-out in the US, but also raises a number of long-term policy ideas to reduce bubbles and volatility[30]. These ideas, some of them controversial, have resonance with the UK situation. In brief, his short-run proposals involve developing and implementing a bail-out based on principles similar to the Resolution Trust Corporation which rapidly bought up and disposed of assets associated with failing Savings and Loans businesses in the 1980s (see also Malpezzi, 2008; Green and Wachter, 2007). Shiller also proposes a 'continuous workout mortgage' that is flexible in its terms and duration according to the on-going circumstances of the borrower, in order to reduces future foreclosures. More generally, Green and Wachter advocate development of a more appropriate incentive structure in the mortgage industry, for instance, originators retaining a proportion of the stake in a mortgage after it is sold on for securitisation, while Immergluck (2008) identifies a number of practical ways for communities to avoid foreclosures and protect neighbourhood property values.

5.17 In the long run, Shiller argues for the education and protection of consumers in the mortgage and housing markets through an array of policies involving standardised mortgage products, better disclosure by mortgage lenders and securitisers, the involvement of a neutral notary to advise both parties to a mortgage, and investment in compulsory financial education. More controversially, he calls for new hedging products that can reduce future bubbles by allowing investors to insure against future house price falls (a house price index futures market – prototypes of which already exist) and for purchasers to insure against value falls through home equity insurance. While there may be little appetite for such exotic products currently, they do deserve greater scrutiny in due course.

[30] See Annex 2 for more detailed discussion.

5.18 In summary therefore there is no shortage of ideas and proposals regarding short-term and longer-term policy possibilities. The report indicates those the authors favour, but more fundamentally in formulating and taking any future action it will be important for the Scottish and UK Governments to ensure that new problems are not stored up for the future, and that underlying weaknesses in the current market and policy frameworks are addressed in order to avoid future housing bubbles emerging. This is a challenging, but by no means impossible agenda.

6 Conclusions

6.1 The credit crunch poses considerable challenges for the Scottish Government's current housing policy agenda as set out in *Firm Foundations* (Scottish Government, 2007a). In particular, the ambitious goal of moving by the middle of the next decade to an average of 35,000 completions a year (broadly 50% up on current long term average completions) with as much as a third of the new housing being affordable, and heavy reliance therein on S75 affordable housing policies, seems fanciful at present. New housing supply is currently well below the long-term average and, as noted in Section 3, there is increasing anecdotal evidence of reduced willingness to lend to social landlords despite their relatively low risk profile.

6.2 Social landlords that do secure new loans in future are likely to face higher costs than they were used to prior to the crunch taking hold, and this is likely to continue for some time, even if the Bank of England base rate is reduced further to offset economic slowdown. Higher lending costs may pose some challenges for the efficiencies agenda also mapped out in *Firm Foundations,* although an increase in financing costs may be considerably outweighed by falling land prices. Moreover, the current context of scarce resources and heightened risk may provide new impetus to the Scottish Government's proposals to promote competition for lead social housing developer status across regional housing market areas. In particular, it may be possible to link consortia of funders to larger programmes of development and hence protect build levels compared with the more fragmented and decentralised development funding processes currently used[31].

6.3 A further broad element of Scottish housing policy signalled in *Firm Foundations* was additional emphasis on supporting access to full and partial home ownership. The LIFT initiative will have been affected by the drying up of mortgage finance, but is also called into question by the increasingly high opportunity costs associated with the allocation of development funds to vehicles like shared equity rather than social housing for those in need.

6.4 The credit crunch has therefore served to raise issues around some of the core assumptions and objectives underlying Scottish housing policy, and it has demonstrated the need for re-appraisal of the strategic goals of long-term housing policy as much as for short-term fixes. In the midst of the crisis there is an opportunity to reflect on the long term picture and what the housing system, including the mortgage market, is actually supposed to do. There are encouraging signs that many commentators in the media, academia and the professions are seriously questioning the long-run consequences of continuing to allow the housing market in the UK to operate in an unbalanced way. Removing or lessening the sources of housing market bubbles, and addressing the privileged status of home ownership in Scotland and the UK, are coming back onto the public policy agenda for economic efficiency and social justice reasons. These developments will hopefully generate further innovative policy debate.

[31] However, this is only one dimension of a complex set of arguments for and against the principle of a lead developer as set out in *Firm Foundations.* At the time of writing the precise model envisaged and the detailed timetable of its implementation remain unknown.

6.5 However, discussion of short-term housing policy tactics and long-term strategy must be based on an accurate understanding of current events if it is to lead to better policy outcomes. These are trying times for the Scottish and UK economies, and in particular for the Scottish and UK housing systems, but it is unhelpful to over dramatise the situation. Sensationalist press and lazy references to the depression of 1929 and even to the recession of 1989-1993 misrepresent current reality and spread unnecessary alarm. Downside risks exist, and the possibility of serious economic consequences resulting from panic and contagion effects cannot be ruled out altogether, but these remain remote possibilities.

Glossary

Alt-A	A category of mortgages where the default risk is assessed to be less than for sub prime borrowers, but higher than for prime.
Asset backed security	Bonds or other instruments backed by an asset other than mortgages.
Bank of England base rate	The interest rate at which the Bank of England lends money to high street banks.
Basis point	One hundredth of one percent. One hundred basis points equals 1 per cent.
Bond	A bond is a debt instrument issued for a period of more than a year. It is a form of borrowing to raise capital.
Certificate of deposit	An interest bearing debt instrument, such as a deposit account where the depositor must keep a specified amount of money in the account for an agreed period of time.
Covered Bond	A bond backed by mortgages or cash flows. If the issuer of the bond goes into bankruptcy the bond owners can claim the underlying assets.
Depression	A severe downturn in economic activity. There is no universally agreed definition for this term, but some suggest it to mean an economic downturn where real GDP declines by at least 10%. Between 1929 and 1933 real GDP fell by 33%.
Federal Reserve Discount Rate	The interest rate at which the US central bank lends to other banks.
Hedge Fund	An investment fund that is largely exempt from regulation, and typically uses aggressive strategies such as short selling to generate investment returns.
Liquidity	A measure of the ease with which an asset can be converted into cash.

Glossary

Liquidity trap	Normally applied to consumers and businesses, it is a situation where economic agents hoard money and lending/borrowing activity ceases regardless of the amount of money made available by a central bank.
Leverage	The extent to which an investor or business is using borrowed money to finance a deal. High leverage means high debt and correspondingly high repayment obligations.
London Inter Bank Offer Rate (LIBOR)	The interest rate that banks charge each other for loans. The rate is applicable to the short-term international interbank market and applies to very large loans borrowed for anywhere from one day to 5 years. LIBOR is officially fixed on a daily basis.
Mark to market	An accounting method whereby the value of an asset is based on the value it would currently fetch in the open market, even if this in no way reflects underlying performance of the asset (the net income stream it is generating, for example through mortgage repayments).
Moral hazard	A situation where a party may behave in an inappropriate way (e.g. making inappropriate loans) because it will not face the full consequences if something goes wrong.
Mortgage backed security (or certificate)	A security that is based on a combined set, or pool, of mortgage loans.
Open market operations (OMO)	The buying and selling of Government securities by a central bank in order to control the money supply. If it buys securities, it puts money (liquidity) into the economy. If it sells them, it takes money out.

Glossary

Recession	Two successive quarters of negative economic (GDP) growth.
Repo	See repurchase agreement.
Repurchase agreement (also known as a 'repo' or 'buyback')	A contract in which the seller of securities agrees to repurchase them at a specified time and price.
Security	An investment instrument, such as a bond, a treasury bill, a mortgage or a certificate of deposit.
Securitisation	The process by which a number of individual but like instruments, such as mortgages, or loans, are aggregated together into a security that can be sold on.
Short selling	Short selling involves borrowing a security (for a fee) and selling it on the understanding the security will subsequently be repurchased and returned to its original owner.
Structured investment vehicle	A fund owned by a private company that borrows money by issuing short-term securities and uses it to buy longer-term higher rate securities.
Sub prime	A class of borrowers with low credit ratings Because of higher risk of default associated with sub prime borrowers, sub prime loans are made at higher interest rates than are offered to 'prime' borrowers.
Toxic debt	Toxic debt is shorthand for the various types of asset that have lost a significant amount or all of their value during the financial crisis.

Annex 1: An introduction to Bond markets and securitisation[32]

A1.1 In one sense bonds are like standard forms of borrowing involving 'IOUs'. Selling a bond normally involves raising funds for the bond seller (who in this case is the ultimate borrower) who then pays interest to the purchaser on a periodic basis (in this case on a fixed interest rate basis). Bonds involve maturity date repayment of the initial loan (par value) to the purchaser. Importantly though, there is a secondary market wherein holders or purchasers of bonds can resell them, thereby providing liquidity.

A1.2 Bonds can involve a variety of embellishments on the above broad form, be they Government bonds, bonds issued by the private sector or bonds traded internationally. Mortgage-backed securities are a particular form of bond.

32 This Annex draws on Chapter 6 of Valdez with Wood (2003).

A1.3 The key relationship in valuing a bond is that between the fixed rate of interest on the bond against its par value and current market yield. Valdez with Wood (2003) illustrate this by means of a simple example. If a 20 year bond is initially sold for £100 offering a £10 fixed annual return, then the initial yield is 10%. However, once we introduce the secondary market, the on-going market value of the bond may be more or less than the par value depending on demand and supply. If the bond is subsequently offered for sale but the market interest rate has risen relative to the original interest rate, e.g. rising from 10% to 12.5%, then the sellers will only be able to get £80 for the bond because the going rate on newly issued bonds is 12.5%. This is because the bond pays £10 annually in income whatever the going interest rate is set at and now if £10 is equivalent to 12.5% then the selling value is only £80. In effect, a higher market rate of interest has reduced the secondary market value of the bond. Equally, if interest rates subsequently fell to 5%, then 5% equal to the fixed income of £10 implies a secondary bond value of £200 – in other words, a fall in interest rates increases the value of the bond.

A1.4 The bond market is made much more complex by a range of conditioning factors such as how close a bond is to its maturity date (prices in the secondary market tend to converge on the par value as time approaches maturity), the possibility of index linking, the treatment of and obligations for interest rate payments in the secondary market, and also because of currency movements in international bond markets. But the general principles described above continue to hold.

A1.5 The US mortgage bond market is massive. As explained in the main text, the US mortgage backed bond market has gone through major changes since the early 1990s, which led to the rapid growth of sub-prime mortgages, and the creation of a class of mortgage backed bonds that include different percentages of sub-prime loans whose underlying risk became unknowable after the downturn in the US housing market set in. It became impossible to price these bonds as potential purchasers could not tell how much of the underlying value of the bond represented defaulting sub-prime loans and this in turn led to banks becoming exposed to unmeasurable debts and losses, which in turn stopped inter bank lending and precipitated the credit crunch.

Annex 2: International experiences of housing market turbulence

United States of America

A2.1 The US house price boom was caused by several factors (Haurin 2008). While undoubtedly facilitated by supply constraints in some cities, aggregate income growth and rising household numbers were general long-term structural factors. There was also an impact from declining mortgage interest rates, and evidence (from measures of sentiment) that people thought house prices were going to continue to rise, contributing a speculative element to the boom. However, the evolution of the mortgage market over the last 20 years is seen by Haurin as the key factor: technical developments to support subprime lending via credit scoring and securitisation growth – all these helped to reduce effective down payment constraints.

A2.2 Greenspan (2008) argues that the broad decline in long-term interest rates, in the context of falling inflation, drove the price of a broad range of assets sharply higher. Financial intermediaries purchased these assets, generating a massive increase in liquidity. Greenspan notes that the US boom was close to the median of booms taking place at the same time in other developed economies, but "*one area to which a significant share of the increased liquidity flooded was very high yielding securities based on US sub-prime mortgage loans".* Risks seemed low because delinquencies etc were deceptively small – in part because new equity and refinancing could help owners pay their mortgages. The high yields increased demand from all parts of Wall Street. Sub prime lenders *"seeing that they could now, seemingly without risk, make any new loan and immediately resell it to securitizers began encouraging more people to apply for mortgages by offering excessively lax terms – no down payment, a payment option adjustable rate mortgage, without having to document household assets or income, and without having the property independently appraised".* Subprime originations rose threefold between 2002 and 2005, and by the last quarter of 2005, 80% of sub prime loans were securitised.

A2.3 According to Susan Wachter (2007), Americans held 2.5 times as much mortgage debt in 2005 as in 1997 and subprime loans grew as a share of the total to 22% in 2005 compared with 8% in 2003. Mortgages were also more likely to have adjustable rates (30% in 2004 compared with 10% in 2001). Also, new products appeared with 30-year terms, annual interest rate adjustments, teaser rates and high prepayment penalties for refinancing. Although one should note the heterogeneity of the sub prime market and that some of it was and remains fine (and indeed met the policy objective of widening affordable home ownership) post boom losses have been concentrated in the sub-prime sector.

A2.4 Greenspan considers that without the demand from securitisation, the problem would not have become so big. Moreover the problem was compounded by the fact that a large share of sub prime securities was sold abroad. It was the failure to properly price such risky assets that characterised the crisis. When the market took fright *"a blanket of uncertainty descended on the investment community".*

A2.5 A number of authors have now offered recommendations designed both to resolve current market distress and to avoid a future repeat of the last US house price bubble.

A2.6 Malpezzi (2008) and Greenspan (2008) have advocated the development of something akin to the Resolution Trust Corporation (RTC) that formed the basis for the savings and loans bailout in the 1980s. The RTC took on the assets, disposed of them quickly and was then wound up. (The Troubled Assets Relief Programme has now been established to perform this function).

A2.7 Greenspan (2008) advocates policy attention to ensuring adequate capital and liquidity buffers for financial firms in the future.

A2.8 Haurin (2008) believes that the crash in the housing market has been made worse by letting foreclosed homes sit empty and thereby creating contagion effects – suggesting a case for mortgage to rent schemes to keep people from foreclosing or vacating homes that then cannot be re-sold.

A2.9 Immergluck (2008) surveys the responses of cities and regions in the USA that seek to mitigate or prevent foreclosure and support recovery in local housing markets. While recognising that local actors have limited capacity to address macro scale causes of the mortgage crisis, Immergluck does identify four widely pursued policy responses:

- Outreach, counselling and negotiation of loan modifications to prevent foreclosure.
- Short-term mitigation and containment of local spillover problems in property markets through security measures and maintenance of empty properties.
- Property reclamation and recovery.
- Household recovery (i.e. reducing the harmful effects of foreclosure on individuals and their families).

A2.10 To minimise the chance of a repeat of what has happened, Green and Wachter (2007) recommend that firms that originate loans be required to maintain a financial stake after they are securitised, suggesting this could be done by requiring they keep sufficient funding on hand to cover a portion of investors' losses if borrowers default at higher than expected rates.

A2.4 Greenspan considers that without the demand from securitisation, the problem would not have become so big. Moreover the problem was compounded by the fact that a large share of sub prime securities was sold abroad. It was the failure to properly price such risky assets that characterised the crisis. When the market took fright *"a blanket of uncertainty descended on the investment community".*

A2.5 A number of authors have now offered recommendations designed both to resolve current market distress and to avoid a future repeat of the last US house price bubble.

A2.6 Malpezzi (2008) and Greenspan (2008) have advocated the development of something akin to the Resolution Trust Corporation (RTC) that formed the basis for the savings and loans bailout in the 1980s. The RTC took on the assets, disposed of them quickly and was then wound up. (The Troubled Assets Relief Programme has now been established to perform this function).

A2.7 Greenspan (2008) advocates policy attention to ensuring adequate capital and liquidity buffers for financial firms in the future.

A2.8 Haurin (2008) believes that the crash in the housing market has been made worse by letting foreclosed homes sit empty and thereby creating contagion effects – suggesting a case for mortgage to rent schemes to keep people from foreclosing or vacating homes that then cannot be re-sold.

A2.9 Immergluck (2008) surveys the responses of cities and regions in the USA that seek to mitigate or prevent foreclosure and support recovery in local housing markets. While recognising that local actors have limited capacity to address macro scale causes of the mortgage crisis, Immergluck does identify four widely pursued policy responses:

- Outreach, counselling and negotiation of loan modifications to prevent foreclosure.
- Short-term mitigation and containment of local spillover problems in property markets through security measures and maintenance of empty properties.
- Property reclamation and recovery.
- Household recovery (i.e. reducing the harmful effects of foreclosure on individuals and their families).

A2.10 To minimise the chance of a repeat of what has happened, Green and Wachter (2007) recommend that firms that originate loans be required to maintain a financial stake after they are securitised, suggesting this could be done by requiring they keep sufficient funding on hand to cover a portion of investors' losses if borrowers default at higher than expected rates.

A2.11 Shiller (2005) argues that the idea rising house prices are a *good thing* is a myth that needs to be exploded (a similar point is made by Malpezzi, 2008). In the long term Shiller (2008) proposes that stable real prices should be set as the policy goal. He also argues that we need separate short and long-term solutions to the sub prime problem. Agreeing that a short run bailout is required, Shiller suggests a new state agency to systematically buy up mortgage debt, but also to provide stronger enforcement of capital adequacy rules.

A2.12 In the long run, Shiller argues for a process of widespread financial 'democratisation' using technology and product innovation, and financial education, to reduce the probability of future bubbles. Information technology is the key, he believes, to better risk management. Shiller recommends a package of reforms involving.

- Independent financial advice for all at a flat rate fee. Financial web engines should be promoted to support this (on this, see also Thaler and Sunstein, 2008)
- A new financial watchdog to protect the financial interests of the consumer. It would also be a resource for information on the safety of financial products
- Default option financial planning, such as new standard boilerplate legal requirements for mortgage contracts and possibly a requirement that every mortgage borrower has the assistance of a civil law notary (as in Germany) providing legal advice to both parties and witnessing signatures
- Improved financial disclosure by firms to credit rating agencies in order to overcome the sub-prime risks within securities. Shiller argues for standard disclosure and presentations of financial models etc so that it is readily understandable to investors but also for wider public disclosure on the internet about the range of activities undertaken by financial institutions so that better investor decisions can be made
- Improved financial databases: Provided privacy is rigorously addressed and the data is only used strictly for risk management purposes, Shiller advocates the creation of wider and larger databases on individuals and organisations – these could be subsidised by the State
- A new approach to measurement of prices, (in particular, an inflation-indexed unit of account to help people understand what they are paying for housing measured in real terms. Shiller argues that if this had been in place, the US housing boom could have been averted, as people would not have suffered money illusion and indulged in speculative activity to the degree they did as nominal prices rose).

A2.13 Shiller also proposes new retail risk management solutions. One idea is a 'continuous workout mortgage' where repayment terms would be adjusted every month in line with changing ability to pay and changing housing market conditions. For example, payments might be reduced and mortgage term extended but not interrupted. Moral hazard issues would need to be managed but Shiller argues this can be done if the terms are agreed in advance.

A2.14 A further idea Shiller promotes is home equity insurance. Decreases in home equity can make refinancing and moving home impossible. But home equity insurance written against decline in local housing values based on metropolitan or local housing market performance would eliminate the need for risky highly leveraged positions by many borrowers. This could address the possibility of people falling into negative equity and further stabilise the housing market.

European Experiences

A2.15 European countries have also had to contend with the housing market consequences of the credit crunch. Developments in a number of these countries are outlined below. The excellent RICS European Housing Review (Ball, 2008) has been extensively drawn on in compiling the following summaries.

France

A2.16 Real house prices in France roughly doubled between 1996 and 2006, but began to falter in the summer of 2007. French banks have been caught up in the financial market crisis, but there are different views about how much of a housing market correction will now ensue – varying from an 18% fall over the next three years to a much more soft landing (Ball, 2008). Market commentators suggest transactions will fall by 10% in 2008 (new build was down a third for the first quarter of 2008 compared to a year before) and that current credit problems obscure a strong underlying economic set of conditions or market fundamentals (FINAIM, 2008). The Global Property Guide (2008a) argues more sceptically that prices will stagnate in the context of modest future economic performance.

Germany

A2.17 German banks were also affected at the beginning of the credit crunch and experienced failures that required bailout in the autumn of 2008. However, the housing market in Germany is very different to that of many of its neighbours. In Germany, the proportion of households renting exceeds that owning and real house prices fell by 14% in the decade to 2006 (Ball, 2008). This is in part to do with Germany's long adjustment to unification and housing problems inherited from the East. Evidence suggests that prices have now weakened further accompanied by declining numbers of new mortgage loans and building permits. Other drivers are also negative, including increased VAT, which is charged on new housing.

Ireland

A2.18 The Irish experienced the largest market bubble of the European economies, with a real terms increase in house prices of 188% in the decade to 2006 alongside a massive construction boom that increased supply in the same period by 177% (Ball, 2008). This also means that the Irish housing system is that much more exposed to the consequences of downturn in the market. Prices fell sharply in 2007 (by 7% in nominal or 10% in real terms), as did transactions, completions and new mortgage lending. In the year to July 2008, prices fell by a further 9.7% (FinFacts Ireland, 2008a).

A2.19 Ireland also has a substantial buy to let sector (bigger than in the UK) and this is considered to be a key driver of market volatility. Other important factors are judged to be affordability constraints, over supply in the new market and negative price expectations (Ball, 2008). FinFact Ireland quotes estimates that more than 40,000 first time buyers with heavily leveraged loans now face negative equity that averages €18,200. House prices are anticipated to fall a further 12% in the next 12 months (after September 2008) and this is expected to increase negative equity to more than €750 million in total. With problems of this scale it is not surprising to find similar debates in Ireland to those taking place in the UK about bail-outs, moral hazard, banking reform and the need for better mortgage regulation, and calls for policies to reduce the likelihood of future bubbles (FinFact, 2008b). The Irish Government decided to give depositors unlimited guarantees for their savings at the height of the recent financial turmoil.

Spain

A2.20 Real house prices doubled (102% increase) between 1996 and 2006 and there was a huge increase in housing supply (by 187%, exceeding even Ireland). Nominal prices nearly doubled between 2003 and 2007 alone (Deutsche Bank Research, 2008). Like the Irish market, the Spanish housing market and construction sector is considerably more exposed to the credit crunch than many other European countries (housing investment was 8% of GDP in 2006). House price inflation slowed but did not stop in 2007, although the impact of higher interest rates and record new housing supply are considered to be drivers of continued moderation in house prices, independently of any credit crunch impacts (Ball, 2008). Foreign investment in homes is a key driver in Spain and there are concerns that this market has weakened and will worsen leading to wider market problems that may tip the Spanish market into decline.

A2.21 Despite this, Spanish banks appear to have greater resilience than most in the face of the credit crunch, and although they favour wholesale funding they do not adopt off balance sheet vehicles to the extent found in the US or elsewhere. Nonetheless, commentators suggest that the housing market downturn will threaten banks in Spain in years to come (Mallet, 2008). Spain may have escaped lightly from the current crisis but has specific housing and economic market problems to contend with in the months and years to come.

Sweden

A2.22 Swedish house prices more than doubled in real terms between 1996 and 2006 (+107%) and housebuilding growth exceeded the price increase during this period (building grew by 128%). House prices rose by 10% in 2007 but masked a negative turning point from around the summer onwards (Ball, 2008). House price growth was strongest in the major Swedish cities reflecting the location of underlying economic growth and continued housing supply shortages (despite the large building programme).

A2.23 In 2008, house prices fell 3.3% in the second quarter (Global Property Guide, 2008b). This is despite radical changes to housing taxation in the last 3 years that have greatly reduced the cost of home ownership. However, Swedish mortgagors are relatively exposed to mortgage rate rises because of the preponderance of variable and short-term fixed mortgage products.

References

The nature of a credit crunch

Ball, M (2008) European Housing Review 2008. RICS: London.

Bank of England (2008a) Financial Stability Report, Issue No 23, April

Bank of England (2008b) Quarterly Bulletin 2008 Q2 Volume 48 No. 2

Bank of England (2008c) Credit Conditions Survey 2008 Q2

Bank of England (2008d) Credit Conditions Survey 2008 Q3

Bennett, T (2008) Darling unveils latest Government subprime crisis 'solution', Moneyweek, 21 April

Berry, K., and Dewar, J (2008) Impact of the Credit Crunch on the Scottish Economy and the Scottish Housing Market, SPICe briefing 08/36, 25 June

Blundell-Wignal, A (2008) The Subprime Crisis: Size, Deleveraging and Some Policy Options, Financial Market trends No. 94 Volume 2008-1, Paris: OECD

Blundell-Wignal, A., and Atkinson, P (2008) The Subprime Crisis: Causal Distortions and Regulatory Reform, paper for the Reserve Bank of Australia Conference

Brandon, S (2008a) Weathering the storm, Inside Finance, March, pp5-7

Brandon, S (2008b) Meet the victims of the crunch, Inside Housing, 25 July, pp20-24

Brummer, A (2008) The Crunch, London: Random House

Chartered Institute of Housing Scotland (2008) Stacking up Housing Supply: The Scottish Government's Delivering Plans and the Credit Crunch, July

CML (2008a) "Scottish Mortgage Market Slowdown Less Severe Than UK", 21 August, London: CML

CML (2008b) Housing and mortgage market forecasts, May, London: CML

CML (2008c) Housing Finance at a Glance, October, London: CML

Crosby, J (2008) Mortgage finance: interim analysis, July 2008. HM Treasury: London

Dell'Ariccia, G., Igan, D., and Laeven, L (2008) Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market, IMF Working Paper WP/08/106, International Monetary Fund, Washington DC

Deutsche Bank Research (2008) The German Housing Market: A Brief Overview. Think Tank Deutsche Bank Group: Frankfurt.

Dresdner Kleinwort (2008) United Kingdom/Building and Construction: It's grim up North, 29 September

Elmeskov, J (2008) What is the economic outlook for OECD countries? An interim assessment, Paris: OECD

European Central Bank (2008) Financial Stability Review, June

Experian (2008) Regional Outlook – Spring 2008 Scotland, Edinburgh: Experian

Fels, J (2008a) Of Disasters, Recessions, Crunches and Busts, 14 August, Morgan Stanley Global Economic Forum

Fels, J (2008b) A Different Type of Downturn, 4 September, Morgan Stanley Global Economic Forum

Finfacts Ireland (2008a) Irish house prices to August 2008. Finfacts Business and Finance Portal. http://adserver.adtech.de/adlink.

Finfacts Ireland (2008b) EU credit crunch seminar: economic challenges facing the Irish Economy are 'homegrown'. Finfacts Business and Finance Portal. http://adserver.adtech.de/adlink.

Gibb, K and O'Sullivan, A (2008) Explaining the Relative Development Costs of Social Housing in Scotland, Glasgow: SFHA

Gibb, K, O'Sullivan, A and Glossop, C (2008) Home Economics: How Housing Shapes City Economies, Centre for Cities: London.

Global Property Guide (2008a) Housing market in France slowing substantively. February 27 2008. http://www.globalpropertyguide.com/Europe/France

Global Property Guide (2008b) Credit crunch grounds housing markets in Sweden. August 27 2008. http://www.globalpropertyguide.com/Europe/Sweden

Goodhart, C., and Hofmann, B (2008) House prices, money, credit, and the macroeconomy, Oxford Review of Economic Policy, Volume 24, Number 1, pp180-205

Green, R. and S. Wachter, (2007) "The Housing Finance Revolution", Proceedings of the 31st Annual Federal Reserve Bank of Kansas City Economic Symposium, 2008

Greenspan, A (2008) The Age of Turbulence, London: Penguin

Hahn, R and Passell, P (2008) The Rush to Re-Regulate, July 25, Reg-Markets Center Policy matters No. PM08-07

Haurin, D (2008) Recent Experiences and Disruptions in the U.S. Real Estate Market: A Lesson for Europe, European Real Estate Society conference, Cracow, June

HM Treasury (2008a) Forecasts for the UK economy: A comparison of independent forecasts, July

HM Treasury (2008b) Forecasts for the UK economy: A comparison of independent forecasts, October

HM Treasury (2008c) Housing Finance review: analysis and proposals, March

Homes for Scotland (2008) Impact of the Credit Crunch on the Scottish Housing Market: A Call to Action, July 2008

Immergluck, D (2008) Community Response to the Foreclosure Crisis: Thoughts on Local Interventions. Federal Reserve Bank of Atlanta Community Affairs

International Monetary Fund (2008a) Global Financial Stability Report - Containing Systemic Risks and Restoring Financial Soundness, Washington DC: International Monetary Fund

International Monetary Fund (2008b) Global Financial Stability Report Market Update July 28, 2008 International Monetary Fund Washington DC

International Monetary Fund (2008c) IMF Country Report No. 08/271, Washington DC: International Monetary Fund

International Monetary Fund (2008d) World Economic Outlook: Housing and the Business Cycle, World Economic and Financial Surveys, April, International Monetary Fund Washington DC

International Monetary Fund (2008e) World Economic Outlook Update: Global slowdown and rising inflation, July, International Monetary Fund Washington DC

International Monetary Fund (2008f) Global Financial Stability Report: Financial Stress and Deleveraging – Macro-Financial Implications and Policy, October 2008, International Monetary Fund Washington DC

International Monetary Fund (2008g) World Economic Outlook: Financial Stress, Downturns, and Recoveries, October, International Monetary Fund Washington DC

Lazenby, M (2008) Steep descent, Inside Housing, 13 June, pp28-30

Low, K (2008) The Scottish Economy: Forecasts of the Scottish Economy, Fraser of Allander economic commentary June 2008 Vol 32 No 1, pp 30-34, Glasgow: University of Strathclyde

Maclennan, D and O'Sullivan, A (2008) Housing policies for Scotland: Challenges and changes, York: JRF

Mallett, V (2008) 'Bankers fear housing slump will hurt Spain', Financial Times, October 2 2008

Malpezzi, S (2008) 'The Crisis in US Housing and Financial Markets: How did we get here? Which way out?' Rays of Research Lecture, Wisconsin School of Business, Madison Wisconsin, September 19 2008

Matthews, K., and Thompson, J The Economics of Banking (2nd Edition), Chichester: John Wiley & Sons Ltd

McAteer, M (2008) The perfect storm: background paper, the National Consumer Council

Miles, D and Baker, M (2008) UK Pessimism Becomes Excessive, Morgan Stanley Global Economic Forum

Morris, C (2008) The Trillion Dollar Meltdown, New York: Public Affairs

Muellbauer, J., and Murphy, A (2008) Housing markets and the economy: the assessment, Oxford Review of Economic Policy, Volume 24, Number 1, pp1-33

National Housing Federation (2008a) Home Truths 2008

National Housing Federation (2008b) Protecting Households, Delivering Homes – Housing Association Proposals on the Housing Market Downturn

Newhaven (Forthcoming) Review of the Highland Housing Alliance and the Highland Revolving Landbank Fund, Edinburgh: The Scottish Government

NHPAU (2008) Affordability still matters, July

Nicol, S., Dewar, J., and Burnside, R (2008) Economic Indicators, SPICE briefing 08/39, 21 August

OECD (2008) Financial Market Highlights – May 2008: The Recent Financial Market Turmoil, Contagion Risks and policy Responses, Financial Market trends No. 94 Volume 2008-1, Paris: OECD

Pratley (2008) When the Bank is buying car loans, you know this is a crisis, The Guardian, 4 October

Scottish ITEM Club (2008) Economic Prospects 2008, London: Ernst & Young LLP

Shiller, R (2005) Irrational Exuberance 2nd edition, New Jersey: Princeton University Press

Shiller, R (2008) The Sub Prime Solution, New Jersey: Princeton University Press

Soros, G (2008) The credit crisis of 2008 and what it means, New York: Public Affairs

Stephens, M., Ford, J., Spencer, P., Wallace, A., Wilcox, S., and Williams, P (2008) Housing market recessions and sustainable home-ownership, York: JRF

Stiglitz (2008) We Aren't Done Yet: Comments on the Financial Crises and Bailout, Economists Voice, October 2008

Stothart, C (2008) Capacity issue, Inside Finance, March 2008, pp20-22

Thaler, R and Sunstein, C (2008) Nudge, New Haven: Yale University Press

The Scottish Government (2007a) Firm Foundations: The Future of Housing in Scotland, Edinburgh: The Scottish Government

The Scottish Government (2007b) Scottish Housing Market Review – Evidence and Analysis, Edinburgh: The Scottish Government

The Scottish Government (2008a) Responding to the changing economic climate: Further action on housing, Edinburgh: The Scottish Government

The Scottish Government (2008b) Scottish Budget: Draft Budget 2009/10, Edinburgh: The Scottish Government

The Scottish Government (2008c) LIFT: Low-cost Initiative for First-Time Buyers, Edinburgh: The Scottish Government

Thorpe, C (2008) last man standing, Inside Housing, 13 June, pp32-33

Valdez, S with Wood, J (2003) An Introduction to Global Financial Markets 4th Edition. Palgrave Macmillan: Houndmills, Basingstoke.

Walters, B (2008) The fall of Northern Rock, Petersfield, Harriman House

Whitehead, C. and Gaus, K. (2007) At Any Cost? Access to Housing in a Changing Market Place London: Shelter

Design: ink-tank and associates

Newhaven Research Limited is an independent research and consultancy firm that has been conducting housing and regeneration related work on behalf of public and private sector clients across the United Kingdom since 2003. We can be contacted on 07971 498 584 or by emailing tony@newhavenresearch.co.uk

The Department of Urban Studies at the University of Glasgow is a primary locus for research on housing, cities and regeneration and carries our work for government, charities, the private sector and research councils both in the UK and internationally. Further information can be found at http://www.gla.ac.uk/departments/urbanstudies/index.html

The Chartered Institute of Housing

The Chartered Institute of Housing (CIH) is the professional body for people involved in housing and communities. We are a registered charity and not-for-profit organisation. We have a diverse and growing membership of over 20,000 people – both in the public and private sectors – living and working in over 20 countries on five continents across the world. We exist to maximise the contribution that housing professionals make to the wellbeing of communities. Our vision is to be the first point of contact for - and the credible voice of - anyone involved or interested in housing.

CIH Scotland has more than 2,400 members working in local authorities, housing associations, housing co-operatives, Scottish Government and government agencies, voluntary organisations, the private sector, and educational institutions. The CIH aims to ensure members are equipped to do their job by working to improve practice and delivery. We also represent the interests of our members in the development of strategic and national housing policy.

For further information please contact the Policy and Practice Team.

Email Scotland.policy@cih.org

Tel 0131 225 4544

CIH Scotland

6 Palmerston Place

Edinburgh

EH12 5AA

www.cihscotland.org