

ENHR International Conference
‘Changing housing markets: integration and segmentation’
Prague, June 2009

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Mortgage products and government policies to help troubled mortgagors: responses to the credit crisis

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Keywords: housing finance; mortgages; credit crisis; government policy

Introduction

Global economic contraction and the decline in interbank lending, falling house prices and transactions: these economic conditions have had a profound impact on mortgage-market actors in all advanced economies—and mortgage markets in turn have produced waves that have affected the wider economy. What have these changes meant for mortgage funding in particular? This paper reports results from a survey of housing experts¹ in 14 developed economies. It concentrates on two aspects: how have mortgage systems responded differently to both the liquidity crisis and the more fundamental issues of increasing risk; and, how governments are addressing the problems for individual borrowers where economic and financial circumstances have changed.

Background

Like all markets, the mortgage market is the totality of interactions between suppliers (mortgage lenders, in this case) and consumers (borrowers), in a framework set by law and regulation.

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¹ We are grateful for information from Baralides Alberdi, Hanna Augustyniak of the National Bank of Poland, Rolf Barlindhaug of the Norwegian Institute for Urban and Regional Research, Paolo Conceicao of the University of Porto, Peter Englund of the Stockholm School of Economics, Tommi Laanti from Finland’s environmental administration, Tom O’Connor of the Irish Banking Federation, Jan Rouwendal of VU University, Magnus Arni Skulasson; Andrej Tumanov of the Institute for Urban Economics, Bernard Vorms of the Agence Nationale pour l’Information sur le Logement and Judy Yates of the University of Sydney;

Changes affecting any of these categories—supplier, consumer or regulator—can affect the characteristics and effectiveness of the market.

After a significant period during which mortgage funding and mortgage debt grew very rapidly in many countries, the market conditions facing lenders changed profoundly in 2007 and have worsened over the last two years. The wave of failures of banks and other financial institutions was associated with a sharp contraction in interbank lending; potential lenders judged the risk of nonpayment to be sizeable and charged punitively high interest rates to mortgagors—or simply refused to lend at any rate. In particular, those lending institutions whose funds came from wholesale markets rather than from depositors (as was traditional) could not raise funds from their normal sources and can no longer lend at the same rate or the same spread above base rates.

At the same time house prices which had equally risen rapidly have fallen across the developed world. Forecasts of future house price movements have grown steadily more pessimistic over the past year; while in early 2008 economists in many countries were predicting brief market corrections and overall price falls of 10% or less, projections are now much more gloomy. The value of collateral for existing mortgages has fallen (and is expected to fall further still), and new loans are being made against collateral whose value is expected to decline in the short to medium term.

Finally in most countries there was continued deregulation and consequent product innovation, both for consumers and especially in terms of Treasury management. The extent to which this led to changing balance sheets even in countries that had not themselves followed the derivative model only became clear when the system went into collapse in 2008.

The economic environment in which this decline in both levels of borrowing and prices has taken place also worsened very rapidly. Most of Europe entering recession in late 2008 with countries which had had relatively stable housing markets—such as Germany—suffering as much or more than countries that had been in the forefront of the expansion of housing credit and house price increases. This very general decline has meant that risks have turned out to be far more highly correlated than had traditionally been expected—and the extent of this correlation has apparently been exacerbated by the changes in Basle 2 and ‘mark to market’ which has meant that as house prices fall banks and other financial institutions have had to provide additional collateral—further reducing the capacity to lend. So lenders face a challenging set of circumstances particularly because *“unlike other loans, the cash flow to repay a property loan is not independent of the collateral, with changes in vacancy rates or rental values being immediately reflected in the resale value of the building. Also collateral for property loans is highly specific and potentially illiquid.”* Davis 1995, Chap. 10).

Borrowers—both existing and prospective—also face major problems. For existing borrowers, the fall in the value of housing brings in increasing risk of negative equity. The households most likely to be affected are those who purchased at or near the price peak (that is, within the last two to three years) and those who have made equity withdrawal and have—in both cases—ended up with high loan-to-value ratios, and those with interest-only mortgages. (Negative equity is also a spatial phenomenon: it is concentrated in areas which experienced sharp price increases and subsequent sharp falls—in the USA, for example, highest in Phoenix, Las Vegas etc.). This does not have to be a problem of itself—that depends on default legislation and the need to move—but it does further reduce options if mortgagors face other difficulties. And this is what is happening as the worsening global recession increases the likelihood that existing

borrowers will experience negative income shocks—that is, will lose their jobs or be forced to accept pay cuts. This affects their capacity to meet mortgage payments and puts pressure on both the mortgage industry and the housing markets. A further important issue in some countries has been that mortgages denominated in other currencies have become unaffordable – leading to major additional tensions especially in the Baltic States and some other transition economies. One offsetting impact in countries with variable interest rates has been lower actual payments - so one group may be better off while those who face greater uncertainties have fewer means of adjusting.

New borrowers face three types of uncertainty and change. First, even though interest rates have fallen across the world in response to government intervention, the terms and conditions under which are new borrowers can obtain a mortgage and the size of the deposit they have to find has in many contexts my actually make financing more expensive. Secondly, although lower house prices increase their capacity to enter the market the expectation that house prices may continue to fall makes it riskier to buy – so the market remains further depressed. Third, uncertainties about future incomes and employment increases the risks for consumer and mortgagee alike - and perceptions of risk tend to be pro cyclical further increasing the potential risk premium. Governments tend to act pro-cyclically as well – so tighter lending regulations further reduces the wish and the capacity of institutions to lend.

We therefore might expect

- A decline in the overall amount of new lending (reflecting both supply constraints and fall in demand)
- Increases in arrears and foreclosures (as negative income shocks hit existing borrowers)
- Less generous terms for new lending (reflecting uncertainty about both future value of collateral and borrowers' incomes)
- And a structural increase in risk premia.

Possible policy responses if government policy emphasizes increasing the volume of lending; avoiding foreclosures and keeping owner-occupiers in their houses might be expected to include:

- Targeting the shortage of funds by central bank action, direct intervention of government-owned lenders
- Targeting falls in the value of collateral for new/existing loans by introducing government guarantee scheme
- Targeting those who have experienced income shocks by government assistance with mortgage payments for unemployed, sale/leaseback schemes
- Targeting the fall in demand by offering subsidised loans.

Here we examine evidence on differential responses and and differential outcomes – although by definition the process is only just beginning.

The evidence—what has happened so far in the mortgage markets?

New lending down

To recap, we would expect to find a decline in the overall amount of new lending, reflecting both supply constraints and a fall in demand. We would expect to observe less generous terms for new lending, reflecting falling housing prices and accompanying uncertainty about both the future value of collateral and borrowers' incomes. We would also expect to see increases in arrears as negative income shocks hit existing borrowers; foreclosures should increase as well, as arrears feed through and lenders, expecting further falls in property values, choose to foreclose sooner rather than later.

The evidence from the countries examined is generally consistent with these expectations. Table 1 shows the change in gross new residential mortgage lending from late 2007 to late 2008 in eleven countries. Data on the number of new loans were available for six of the eleven; in all six the number of new loans was sharply down. In the UK the number of new loans fell by 59% from November 2007 to November 2008, while in Australia over the same period the decline was less sharp, at 24%.

The figures for the value of gross new residential mortgage lending show a similar pattern. In all eleven countries the value of new lending fell dramatically from late 2007 to late 2008, with declines ranging from 59% in Ireland (4Q07 to 4Q08) to 19% in Australia (November 2007 – November 2008). The average decline in the national value of new loans was 43.7%. This figure gives equal weight to economies of very different sizes, but the average decline for large economies only (that is the USA, UK and Spain) was almost exactly the same at 41.3%.

Falls in lending levels may also be a result of a decline in the number of mortgage lenders in some markets. Some have made strategic decisions to leave the residential mortgage market, some have merged, and some have failed. These structural changes in the banking sector have been more evident in some countries than in others. In Finland some Icelandic banks have left the market, while in Iceland itself Frjálsi Fjárfestingarbankinn failed. In Poland and Russia some banks stopped lending entirely, and some stopped lending in foreign currency. The Russian banking sector in particular has changed radically; according to some estimates there are only 15-20 banks currently issuing mortgages, down from more than 500 in mid-2007; this fall is attributed to a difficulty in securing long-term funding. In Australia there have been declines in wholesale lending and lending from non-bank lenders (some of which have left the market); bank lending has been more or less stable.

In Denmark, on the other hand, the failure of some commercial banks has had only a minor influence on owner-occupiers' access to mortgage finance.

**Table 1: Gross new residential mortgage lending--Number and value of new loans, 2007 and 2008
(lowest to highest, right-hand column)**

<i>Country</i>	<i>Period</i>	<i>Number of loans</i>			<i>Value</i>			
		<i>2007 month or quarter</i>	<i>2008 month or quarter</i>	<i>% change</i>	<i>Currency unit</i>	<i>2007 month or quarter</i>	<i>2008 month or quarter</i>	<i>% change</i>
Ireland	Q4-Q4	37,719	18,706	-50	Euros mn	8,282	3,359	-59
Iceland	Aug-Aug	1,347	653	-52	Icelandic kroner mn	12,300	5,976	-51
Russia	Q4-Q4	395,000 (entire year)	386,300 (entire year)	-2.2	Russian rubles bn	192.6	96.3	-50
Denmark*	Dec-Dec				Danish kroner bn	84	43	-49
UK	Nov-Nov	80,500	33,000	-59	UK pounds mn	22,160	12,000	-46
Sweden**	Nov-Nov				Swedish kroner mn	29,270	16,469	-44
Portugal	Nov-Nov				Euros mn	1,719	982	-43
USA	Q4-Q4				US dollars bn	481	277	-42
Finland	Nov-Nov				Euros mn	1,762	1,058	-40
Spain	Dec-Dec	1,347,888	970,785	-29	Euros mn	135,576	83,780	-38
Australia	Nov-Nov	65,842	49,810	-24	Aus dollars bn	15.5	12.6	-19
<i>Average decline in value of new loans</i>								-43.7
<i>Average decline in value of new loans—large countries only</i>								-41.3

**New loans granted by housing credit institutions only—account for about 75% of mortgage lending

Sources: Bank of Finland; Central Bank of Iceland, Housing Financing Fund, Icelandic Pension Funds Association and Reykjavik Economics Ireland: IBF/PwC Mortgage Market Profile; Central Bank and Financial Services Authority of Ireland; Portugal: Bank of Portugal; Russia: Central Bank of Russia, Federal registration service (FRS); Spain: Bank of Spain and Spanish Mortgage Association; Sweden: Statistics Sweden; UK: Council of Mortgage Lenders; USA: Mortgage Bankers Association

Table 2 shows developments in net new residential mortgage lending in ten countries (excludes Sweden and Finland, which appeared in Table 1, but includes Norway and the Netherlands). Net new mortgage lending is defined as gross lending minus repayments and redemptions. This is a more important indicator than gross lending, because as long as net lending is positive, the amount of outstanding loans (the stock of loans) is increasing. Gross lending fluctuates more over time due to remortgaging activities. Like gross mortgage lending, net lending fell in all countries from late 2007 to late 2008 but remained in positive territory except in the USA, where repayments and redemptions exceeded new lending by \$248bn in 4Q08.

**Table 2: Net new residential mortgage lending, late 2007 – late 2008
(lowest to highest, column 6)**

<i>1</i> <i>Country</i>	<i>2</i> <i>Period</i>	<i>3</i> <i>Currency unit</i>	<i>4</i> <i>2007</i>	<i>5</i> <i>2008</i>	<i>6</i> <i>% change</i>	<i>7</i> <i>% change gross mortgage lending (fm Table 1)</i>
USA	Q4-Q4	US dollars bn	612	-248	-141	-42
UK	Nov-Nov	UK pounds mn	8,842	469	-95	-46
Ireland	Q4-Q4	Euros mn	3,879	354	-91	-59
Denmark	Dec-Dec	Danish kroner bn	6.6	0.9	-86	-49
Russia	4Q-4Q	Russian Rubles bn	132	24	-81	-50
Spain	Dec-Dec	Euros mn	136,062	41,834	-69	-38
Portugal	Nov-Nov	Euros mn	975	357	-63	-43
Australia	Nov-Nov	Australian dollars bn	15	6	-62	-19
Netherlands	4Q-3Q	Euros bn	13	5	-62	n/a
Norway*	3Q-3Q	Norwegian kroner mn	26,774	22,409	-16	n/a

*Calculated from change in stock of total household mortgage debt

Sources: Ireland: IBF/PwC Mortgage Market Profile; Central Bank and Financial Services Authority of Ireland
Norway: Statistics Norway; Portugal: calculated from Bank of Portugal figures; Spain: Bank of Spain and Spanish Mortgage Association; UK: Council of Mortgage Lenders; USA: Federal Reserve

It can be seen that, in those countries for which we have data about both gross and net lending, net lending fell about twice as sharply as gross lending from late 2007 to late 2008. Borrowers cut back on new borrowing, despite very low interest rates that made it cheap to service many mortgages (particularly those on adjustable or tracker rates). However, so far net lending has only been negative in the USA, which shows that US homeowners have reduced their outstanding debt.

Mortgage characteristics tighter

In assessing whether lenders had tightened availability of mortgage credit, we looked for information about the general availability of mortgage products with certain characteristics in late 2008 as compared to late 2007. We expected to find that decreased availability of many

non-standard mortgage products, as they expose the lender to more risk than standard loan types. In particular, we asked about interest-only mortgages and 100% mortgages. We also asked whether lenders had tightened their loan-to-income or affordability criteria, whether they had increased the required down payment or shortened maximum mortgage terms. Finally, we asked whether any new loan types had been introduced to deal with the crisis. The findings for 14 countries are summarised in Tables 3 and 4.

**Table 3: Change in mortgage product characteristics, late 2007 – late 2008
(alphabetical by country)**

<i>1</i> <i>Country</i>	<i>2</i> <i>Lower loan-to- value ratios</i>	<i>3</i> <i>100% mortgages less available</i>	<i>4</i> <i>Loan-to- income/ affordability criteria tightened</i>	<i>5</i> <i>Maximum mortgage term shortened</i>	<i>6</i> <i>Introduction of new loan types to deal with the crisis</i>
Australia	X	X	X		
Denmark	X				
France	X	X		X	
Iceland					
Ireland	X	X	X		X
Netherlands		X	X		
Norway	X				
Poland				X	
Portugal			X		X
Russia	X	X	X	X	
Spain	X		X	X	
Sweden	X	X			
UK	X	X	X		
USA	X	X	X		

Source: Country experts' reports

In most of the countries studied, mortgage lenders have become more conservative (columns 2-4 of Table 3). In view of continued expectations of property-price falls, they are requiring higher deposits and have cut back or withdrawn entirely the supply of very high LTV mortgages (100% or more). Such loans were very common in some markets; in Norway in 2007, 25% of new mortgages had LTVs over 100%. In Spain over 100% LTVs were available, and in Poland up to 120%; such loans have now disappeared in both countries. In Russia 100% LTVs were common; now the maximum is 80%.

Very high LTV loans were nominally prohibited in countries such as Denmark (where the legal maximum is 80%), but buyers were often able to get around this by taking out supplemental unsecured loans. Loan-to-value ratios are also falling in countries where maximum LTVs did not reach 100%. In Sweden, LTVs of 95% (and, by negotiation, more) were commonly available pre-crash; now the maximum is 85 to 90%, with less scope for negotiation. In the UK according to statistics from the Council of Mortgage Lenders, in November 2007 the average LTV on new mortgage loans was 80%; in November 2008 it was 75%. The best rates are available to borrowers with LTVs below 75% or even 60%, depending on the lender. First-time

buyers can get a mortgage with a 10% deposit but at significantly higher interest rates. 100% mortgages now almost disappeared but are perceived to be one of the causes of the crisis; prime minister Gordon Brown wrote on 22 February that he wanted to ‘control’ new mortgages for over 100% (Brown 2008).

Similarly, loan-to-income or affordability criteria have tightened: borrowers and lenders cannot rely on an increase in the value of the collateral to mitigate the effect of a negative income shock for the borrower, and the current economic situation makes such income shocks more likely than they were before.

In several countries, surveys of bankers provide evidence of this tightening. In the Netherlands, according to the Dutch National Bank, 80% of banks tightened their criteria for mortgage lending in some way in the final quarter of 2008 (De Nederlandsche Bank 2009, Table 5.5). This percentage was 17 in the third quarter of 2008, and zero in the four previous quarters. In Portugal the central bank conducts a quarterly survey of the five main banks; it shows that lending criteria have tightened since the third quarter of 2007. In the USA, according to April 2009 Senior Loan Officer Opinion Survey, ‘about 50% of domestic respondents indicated that they had tightened their lending standards on prime mortgages over the previous three months, and about 65% of the 25 banks that originated non-traditional residential mortgage loans over the survey period reported having tightened their lending standards on such loans.’ (Federal Reserve 2009) In France lenders were reportedly more cautious when considering loan applications from those employed by industries in economic difficulties.

In some countries lenders have responded by cutting the maximum mortgage term (column 5); In Poland, for example, 50-year mortgages are no longer available. (However in Iceland one provision of the government’s rescue package for troubled mortgage borrowers is to increase the term of the mortgage to up to 70 years in order to reduce monthly repayments—see below).

New loan types (column 6) are not common; rather, mortgage lenders seem to be falling back on traditional lending patterns and products. In Ireland and Poland there have been innovations: In Ireland, a product has recently been introduced targeted at consumers fearful of further price drops. The borrower is offered a loan at up to 95% LTV. If after five years the value of the property has fallen, the developer will reimburse the borrower for up to 15% of the drop. In Portugal, one bank has introduced a new Euribor tracker mortgage with a minimum interest rate (floor); the initial repayments are lower than for other products. Also, in the second half of 2008, some property developers began to offer loans designed for potential purchasers without a down payment. The developer would fund up to 30% of the purchase price, repayable in bullet format after a set number of years. The amount repayable would be linked to the market value of the property at the time.

Table 4: Change in availability of interest-only mortgages on residential properties to early 2009

<i>Country</i>	<i>Interest-only available 2005</i>	<i>% of new loans 2005 I-O</i>	<i>Early 2009</i>
Australia	Yes	30	
Denmark	Yes	31.5	New data easily done; at what time?
France	Yes - buy-to-let only	n/a	no change
Ireland	Yes	8.4	less available
Netherlands	Yes	87.6 (44.3 with no repayment vehicle)	less available
Norway	No—introduced early 2006		25% of total mortgage stock
Portugal	Yes		
Sweden	Yes	Available up to 100% ltv	Now max 75%
UK	Yes	24 (20% with no repayment vehicle)	X
USA	Yes	23.3% in 2Q07 (and up to 47% in some cities); 8.3% 1Q08	X

Source: Scanlon, Lunde and Whitehead (2008); expert responses; *Inside Mortgage Finance* fIND 4q07 AND 4Q08 DATA FROM CML.

The picture as regards interest-only mortgages is somewhat less clear-cut (Table 4). These products were not previously available in all countries (although in many they were taking an increasing market share up to 2005 and beyond—see Scanlon, Lunde and Whitehead 2008). In several of the countries where they were available, however, they now account for a decreasing percentage of new mortgages. Both supply- and demand-side changes are involved: the riskier nature of such mortgages as compared to standard annuity products means that lenders are less inclined to offer them and borrowers are more wary of taking them on. In the UK, for example, 49.5% of advances to residential mortgage borrowers were interest-only in the third quarter of 2007; a year later this had fallen somewhat to 44.5%. (Financial Services Authority 2009)

In general, loans with ‘exotic’ features have been curtailed. This includes foreign currency loans, which were very important in some small economies. They were previously common in Iceland but are now unavailable; in Poland some banks have stopped lending in foreign currencies (mostly Swiss francs). Other exotics include long-term loans, and self-certification or ‘no official income verification’ loans. Even relatively common loan products have been curtailed; for example, some Danish *garantilån* (variable-rate mortgages with a 5 or 6% interest-rate cap) have disappeared from the market, because the investors in the bonds that finance them deemed them so risky that their internal rate of return became higher than on ordinary fixed-interest mortgages.

Availability of bridge finance has been unaffected in some countries, but in others it has dried up. In Denmark, commercial banks issue bridge loans when housing markets are operating ‘normally’—that is, when housing prices are increasing—but in general are no longer doing so.

In France LTVs for bridge loans have fallen; they were previously available for up to 80% but this has fallen to 60%. In Poland the cost of bridge loans has increased dramatically.

Arrears and foreclosures

In all countries studied, borrowers are considered to be seriously in arrears after three months of missed payments. Table 5 shows the change in levels of serious arrears from late 2007 to late 2008 in 11 countries, plus the latest data for Poland. Of the eleven countries for which comparative data were available, nine experienced an increase in the percentage of serious arrears. The average increase for all eleven countries (including those where no increase was seen) was 84% over the period; for the large economies only (the USA, UK and Spain) the average was 183%. (In the UK, the Council of Mortgage Lenders has recently begun to emphasise statistics on ‘mortgages in arrears of 2.5% or more’, arguing that in an environment of falling interest rates this allows for better comparisons with previous periods. As of end-2008, about 182,600 mortgages [1.57% of the total] had arrears equal to/greater than 2.5% of outstanding balance.)

The consequences for the borrower of falling into serious arrears are not the same everywhere, since the legal requirements for foreclosure (in the UK formally known as possession and action for sale) and the speed of the court system vary by country. Many governments have announced new policies to help avert foreclosure on borrowers facing payment problems (see below); such policies are clearly more relevant in countries where foreclosure proceedings are relatively swift and certain.

Table 5: Percentage of residential mortgages over 3 months in arrears, late 2007 – late 2008

<i>Country</i>	<i>Period</i>	<i>2007%</i>	<i>2008%</i>	<i>% change</i>
Spain	Dec-Dec	0.95	2.40	253
USA	Dec-Dec	0.85	1.88	221
Russia*	Dec-Dec	3.5	5.4	154
Denmark	Sep-Sep	0.12	0.27	125
UK	2H07-4Q08	1.08	1.88	74
Finland	Dec-Aug	0.37	0.51	38
Iceland**	June-June	0.8	1.0	25
Ireland	Dec 06-Jun 08	1.21	1.44	19
Portugal	Nov-Nov	1.3	1.5	15
Australia	Nov-Nov	less than 1	less than 1	0
Norway	Nov-Nov	0.7	0.7	0
<i>Average% increase in arrears late 2007-late 2008</i>				84
<i>Large economies only</i>				183
<i>Latest information only available</i>				
Poland	Nov 08		(est)1.5	

*Only mortgages owned by Agency for Home Mortgage Lending, in arrears (not 3 months)

**Total household debt to banks, over 1 month in arrears

Sources: Denmark: Realkreditrådet; Finland: Financial Supervision; FME: Iceland: Financial Service Authority of Iceland Ireland: Financial Regulator; Portugal: Bank of Portugal; Russia: Central Bank of Russia, AHML; Spain: Bank of Spain and Spanish Mortgage Association; UK: Council of Mortgage Lenders; USA: FHFA Foreclosure Prevention Reports

Negative equity

Negative equity can be defined in different ways. The narrow definition of negative equity is when the market value of a house is less than the outstanding mortgage secured on it. More broadly, an owner-occupier household is in negative equity is when the value of its assets (including the dwelling) is lower than the value of all its liabilities (including the mortgage debt).

Negative equity (or technical insolvency) does not necessarily lead to arrears or foreclosures—as long as the borrower can maintain their repayments. It is when borrowers need to sell or remortgage that negative equity becomes a problem. Sellers will owe the lender more than the proceeds of their sale, and remortgaging for the same amount will be impossible, so households may be trapped in mortgages with high interest rates.

There are few reliable statistics on the extent of negative equity. While it is possible to determine the amount of debt secured on individual properties (although this information may not be publicly available), it is only when a property transaction occurs that the ‘true’ price of the collateral is established. Large-scale calculations of negative equity thus rely on imputed property valuations, which may differ from the values that would be achieved on the open market. (See Hellebrandt and Kwar, 2009 for an exploration of the different methods of calculating negative equity, and its consequences for the wider economy.)

Despite the problems of measurement, it is clear that as house prices have fallen, the proportion of borrowers in negative equity has risen across countries. In Denmark, on the narrower measure of the value of the dwelling versus debt secured on it, 15% of Danish households are estimated to be in negative equity; on the broader measure of all assets:all liabilities, 25% (calculations based on Lunde 2007). In Iceland, 5% of owner-occupier households were estimated to be in negative equity in November 2008, up from none a year previously. In Norway, according to calculations by the Norwegian Institute for Urban and Regional Research, about 2% of homeowners were in negative equity in 2007; the estimate for 2008 was 5%. In the UK, Bank of England research suggests that 7-11% of UK owner-occupier mortgagors were in negative equity in Spring 2009, although in most cases the amounts involved were small – less than £10,000 (Hellebrandt and Kwar 2009). In the USA 20% of mortgaged properties were in negative equity as of December 2008, according to a firm that holds a large repository of data on US mortgages (First American CoreLogic 2009).

Policy responses

Governments and central banks have put in place a range of policies to try to encourage mortgage lenders to increase the volume of new lending, and to enable new borrowers to take out loans, but the main focus of policy turned in early 2009 to assisting those borrowers in payment difficulties to avoid foreclosure.

Policies directed at increasing new lending include general macroeconomic policies such as increasing the money supply and reducing interest rates: the US Federal Funds rate fell from 5.26% in March 2007 to 0.18% in May 2009; the Bank of England’s official bank rate fell from 5.75% in July 2007 to 0.5% in May 2009; and the European Central Bank’s refinancing rate fell from 3.75% in October 2008 to 1.0% in May 2009. In Australia, the Reserve Bank reduced official interest rates four times between September and December 2008, and put significant

pressure on banks to pass the rate cuts on to borrowers (about 75 per cent of whom are on variable rate loans); Australian housing interest rates fell by 3-4 percentage points over the same period.

These interest-rate reductions are good for borrowers, particularly when they take out a new loan, when adjustable rates reset, or for those borrowers with variable-rate loans. Reductions in interest rates are a faster and more precise way to help most borrowers than targeted benefit programmes for the highly indebted, and to date these interest-rate policies have succeeded in lowering the speed of house-price falls and the rate of foreclosures.

Some governments that took control of or shored up failing banks have insisted that in return they increase lending. The UK government nationalised major mortgage lender Northern Rock in February 2008 and stopped it issuing new loans, but in February 2009 Northern Rock announced that it would resume new lending. In Ireland, as part of the recapitalisation scheme for Allied Irish Bank and Bank of Ireland, the banks are required to provide an additional 30% capacity for lending to first-time buyers in 2009. (Department of Finance 2009)

Government programmes to assist those facing mortgage repayment difficulties

This section describes international policy responses to mortgage-payment problems. In the last year many countries have instituted new programmes, or modified existing policies, to try to help households facing financial problems. A selection of such programmes is described in Table 6. The table is not comprehensive but aims to illustrate the variety of approaches taken in six countries: Iceland, the USA, Spain, Portugal, the UK and Russia.

Not all of the countries studied had found it necessary, as of early June 2009, to put such programmes in place. (Netherlands and Finland as examples of countries that has not? Check housing bulletin Jens sent.) It may be that rescue programmes were only seen as necessary when house prices had fallen significantly. As of end-2008, when most of these programmes were being designed, house prices had fallen by the following percentages in the six countries in Table X: Iceland -X; USA -X; Spain -X; Portugal -X; the UK -X and Russia -X. Conversely, in Finland they had fallen by only -X and in the Netherlands -X. The timing of the crisis has varied from country to country, and even those that initially expected to be immune from its effects may well find it necessary to develop their own mortgage rescue schemes over the next year.

The aim of most of these programmes is to help borrowers remain in owner-occupation and to stay in their homes. Most of the mortgage rescue schemes described in Table 6 have the effect of temporarily reducing the amount that borrowers themselves have to pay for their mortgage. There are several ways of achieving this. One approach is to offer temporary government assistance with mortgage payments to those who become unemployed (for example, Income Support for Mortgage Interest in the UK); the assistance is withdrawn when the borrower has found another job and can again make payments. The assistance is an outright grant, not a loan. There is thus no overhanging financial burden on the borrower, but such a programme is costly to the public purse.

More common are those programmes which enable borrowers to defer a proportion (often 50%) of their payments during the hardship period (Iceland, Spain, Portugal, Russia, UK). The deferred amount is normally added to the principal of the loan. This has the undesirable effect of increasing the financial burden on borrowers when they are in a position to resume repayments.

Such programmes are perhaps attractive to policy-makers because they require less government outlay than direct assistance with mortgage payments, and do not require lenders to write off the loans.

In Iceland, a borrower from the Housing Financing Fund who is in payment difficulties can ask to freeze payments for up to three years. Other financial institutions have different rules, but the government controls the three largest banks and experts expect that they will standardise the rules on repossessions. In Portugal, a scheme to help unemployed people meet their mortgage payments was established in May 2009. Those unemployed for three months or more can have their mortgage repayment reduced by 50% (maximum reduction 500 Euro) for up to 24 months. This reduction must be repaid during over the remaining period of the loan, at an interest rate of Euribor minus 0.5%. These special conditions are financed by the State.

There is another set of programmes that enable borrowers to remortgage or change the terms of their loan to reduce payments, even in cases where lenders would not normally permit this. In the USA, for example, the Home Affordable Refinance programme lets households refinance even if they no longer meet lenders' 80% loan-to-value requirements because of house-price falls. In Iceland, borrowers from the state-owned Housing Financing Fund can turn their overdue debt into a new five- to 30-year loan, or extend the term of their loan to up to 70 years.

It should be noted that these programmes simply enshrine in policy what many lenders already would have been doing in practice. This reflects a trend for moving control of these lending practices out of the hands of the mortgage lending industry and making it part of official regulations. In the UK, the Council of Mortgage Lenders' Mortgage Code, which covered issues such as treatment of borrowers in arrears, was superseded in 2004 by the Financial Services Authority's Mortgage Conduct of Business Sourcebook. In Ireland, the Code of Conduct on Mortgage Arrears, previously a voluntary industry initiative, was made statutory in February 2009 and some of its terms changed. It applies to all mortgage lenders and the Code prohibits lenders from initiating court proceedings until the borrowers has been in arrears for six months.

Another approach is simply to forbid banks from initiating foreclosure proceedings. In Iceland, banks were not permitted to take action on loans in arrears until August 2009. In Ireland, the two banks recapitalised by the government had to agree to hold off starting court proceedings for repossession until after 12 months of arrears initially appearing (as opposed to 6 months under the Irish mortgage arrears code).

Some analyses have pointed to the strong growth in owner-occupation rates over the last decade as one of the roots of the crisis (cite). In implicit recognition that some households cannot continue to own their homes, policymakers in the UK and Portugal have designed programmes under which a third party (a housing association in the UK; a specially designed investment fund in Portugal) purchases the dwelling and rents it back to the former owner (presumably at a rent lower than the previous mortgage payment). Both programmes include provisions whereby the borrower can re-purchase the dwelling if their financial circumstances improve.

Not all mortgage rescue schemes are official government initiatives; many lenders have their own schemes to help troubled borrowers (though they may have been encouraged or even forced by governments to create these). In many cases governments and lenders split the financial and administrative burdens of these schemes. For example, under the USA's Homeowner Stability Initiative, the mortgage payments of troubled borrowers are brought down to 38% of gross income by lenders reducing interest rates. Government and lenders split the cost of further rate

reductions so that payments come down to 31% of gross income. There are financial incentives to lenders for modifying the loan and to borrowers for staying current with payments.² Similarly, in cases where troubled borrowers are permitted to refinance or renegotiate the terms of their loans, it is generally the lender rather than government that bears the cost.

It is notable that none of these programmes attempts to address payment problems by reducing the principal of the loan (although this is an option under the USA's Homeowner Stability Initiative), even though some studies have shown that this is the best way to address debt problems generally (Quercia et al, 2009). Because the amount of principal is unchanged, these programmes address repayment problems only--not negative equity. But many borrowers with repayment problems will also be in a negative equity situation, given near-universal house-price falls. There are three reasons why reduction of principal is not widely used. First, loan forgiveness would affect lenders' balance sheets. These are already weakened by the financial crisis, and further deterioration would affect their ability to carry out new lending—which governments want to encourage. Second, there is the question of equity. It could well be regarded as unfair that households that managed to maintain a good payment record, perhaps by making significant financial sacrifices, should continue to make full mortgage payments while those who fell into financial difficulties were 'rewarded' for by having their debt reduced. Third, both debt- reduction and payment-reduction policies involve moral hazard: many debtors would try to fulfill the conditions for such programmes, even if they had to 'forget' about some of their income or wealth. The existence of black markets in many (highly taxed) countries suggests that it would be reasonable to expect such behaviour.

Finally, it should be pointed out that the programmes listed in Table 6 have limited budgets--no country is so rich that it can help a significant proportion of its owner-occupiers through the housing crises by giving them unlimited grants and benefit payments.

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² Implementation is complicated because many securitisation agreements for mortgages contain clauses that limit the ability to change the mortgage terms; as of mid-May the US Congress was working on a bill to allow servicers to ignore these clauses.

Table 6: Selected policy initiatives to address mortgage payment problems (as of late May 2009)

White rows: Adopted policies

Blue rows: Proposals or policies in process of adoption

Goal	Country	Policy name	Eligibility	Mechanism
Make refinancing easier	USA	Home Affordable Refinance – Feb 09 (check)	Owner-occupiers with LTVs \leq 105%, whose loans owned/secured by Fannie Mae/Freddie Mac, or serviced by participating firm: 75% of outstanding loans	Permits households to refinance even if they no longer meet 80% LTV requirements because of house-price falls
	Iceland		Borrowers behind on payments	Borrowers from the state-owned Housing Financing Fund can turn their overdue debt into a new 5- to 30-year loan, with the same interest rate as the original loan.
Reduce/eliminate mortgage payments for households in financial difficulty	USA	Homeowner Stability Initiative – Feb 09 (check)	Borrowers with high loan-to-income ratios or who are in negative equity	Lender must reduce interest rate to a point where mortgage payment \leq 38% of borrower income; government then shares with lender cost of further reduction in interest rates to achieve payments of \leq 31 of income. Lenders can choose to reduce principal rather than interest.
	Iceland		Borrowers in financial difficulty	Borrowers from the state-owned Housing Financing Fund can extend the term of an existing mortgage to up to 70 years, thus reducing payments.
	Iceland		Borrowers experiencing sudden or unexpected hardship due to illness or unemployment, or those who own two properties and cannot sell one	Borrowers from the state-owned Housing Financing Fund can suspend payments for one to three years
	Iceland		Borrowers facing high	Many borrowers from the state-owned

			repayments on index-linked loans	Housing Financing Fund have index-linked loans, whose repayments have risen sharply. They can instead make lower repayments based on an alternative index; the difference will be added to the principal of the loan.
	Spain	<i>Línea de Moratoria Hipotecaria</i> (mortgage moratorium)	Unemployed people with mortgages worth \leq €170,000 taken out before September 2008, who are not in arrears	50% of monthly mortgage payments postponed for two years (later increased to three). The postponed payments are added to the principal and amortised over a maximum of 15 years.
	Portugal	<i>Linha de crédito extraordinária de protecção à habitação própria permanente</i> (special credit line for the protection of permanent housing) (May 09)	Those unemployed for at least three months who took out a loan before 19 March 09	50% of mortgage payments deferred, up to a maximum of €500, for up to 2 years. Rolled up into principal and amortised over remaining maturity of loan at a discounted interest rate.
	Russia	Mortgage credit restructuring programme (Dec 08)	Borrowers who recently suffered a significant drop in income through unemployment, but were \leq 90 days in arrears. Must be their only dwelling; limits on dwelling price and floor area per person.	Deferral of the bulk of loan payment for one year, financed by a loan from the state or lender (or both jointly). Deferred amount added to loan principal.
	UK	Homeowners Mortgage Support	Owner-occupiers who have had an income loss but can still afford to pay at least 30% of monthly interest payments. Maximum mortgage £400,000; max savings £16,000.	Loan payments deferred for one year (renewable) and rolled up into principal. Borrower moves onto interest-only terms. Lenders must sign up to the programme. They determine eligibility; government

				guarantees up to 80% of deferred interest for 4 years after borrower leaves scheme.
Increase government help with mortgage payments	UK	Changes in Income Support for Mortgage Interest (Jan 09)	Owner-occupiers receiving government benefits for the unemployed. Maximum eligible mortgage £200,000 (increased from £100,000)	ISMI pays 100% of mortgage interest (not principal) for the unemployed for up to 2 years. Interest paid at a standard (not actual) rate. Waiting period after job loss reduced to 13 weeks from 39.
	Russia	Change in rules for maternity benefit (Dec 08)	Borrowers due to receive lump-sum maternity benefit	Lump-sum maternity benefit of RUR 250,000 (€5700) is normally payable three years after birth of second or subsequent child. Rule change allows mother to use it immediately to repay mortgage.
Allow households to remain in dwellings they no longer own	UK (England; separate schemes in Scotland, Wales, N Ireland)	Government Mortgage to Rent	Owner-occupiers, subject to income and price caps. Household must include someone in 'priority need'—basically a child or an elderly or disabled person. Those in negative equity excluded; this was changed in May 09.	Housing associations either take a share in the equity or buy property outright and rent it back to the former owner. Household must agree to financial counselling.
	Portugal	<i>Fundos de Investimento Imobiliário para Arrendamento Habitacional: FIIAH</i> (Investment Funds for Rental Real Estate) (Dec 08)	Aimed at owner-occupiers with affordability problems but anyone with a mortgage may sell dwelling to FIIAH	Household sells dwelling to one of these investment funds and rents it back. They can re-purchase before 31 December 2020 (as long as they pay their rent) or receive any capital gain less administrative expenses. Funds are entitled to several important tax breaks. As of May 2009 two had been created.
	Spain		Owner-occupiers whose dwelling	Regional government buys the

	(Basque region only)		cost ≤ €275,000, unemployed for at least 3 months, gross salary ≤ €22,000 per annum. Dwelling must be main residence.	dwelling. Lending institution must renounce 20% of principal owed. Former owner remains in dwelling as renter for a period of one year (renewable); can re-purchase if income recovers. (However in May 2009, only a few months after their introduction, the application forms were withdrawn because the policy required 'detailed study.')
Encourage lenders to modify mortgage contracts rather than foreclose	USA	Home Price Decline Protection Incentives – May 09 (check)	Lenders who modify loan contracts	Partially indemnifies lenders who make mortgage modifications against the risk of house-price falls, to discourage them from foreclosing now because of fear that prices will fall further still.

Conclusions

The dramatic changes in mortgage markets were predictable responses to developments in the wider economic environment. But did the mortgage product innovation of the 1990s/early 2000s (interest-only mortgages, high LTVs, high loan-to-income, flexible features, self-certification) make things worse than they otherwise would have been? And post-crash, will lenders (and borrowers) return to sober, plain-vanilla products of the kind advocated in the UK by the Miles report?

At this point there is no certainty. In many ways responses have been traditional – though in the case of the market less extreme and in the case of government response more rapid. Whether or not we are anywhere near the turning point is also unclear. We will have to return next year!

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