

3 Credit risks to the banking system

The global recovery remains uneven. Risks to the downside could place further strains on balance sheets in both the public and private sectors. Sovereign and banking sector risks have re-emerged across parts of Europe and remain closely intertwined.

There are signs of corporate and household sector credit risks attenuating in some countries. But banks remain heavily exposed to further falls in property prices. And survey evidence suggests that the burden of unsecured debt on households in the United Kingdom has increased. Corporate and household defaults have so far been contained by temporary government support, bank forbearance and the exceptionally low level of interest rates. But balance sheets remain overextended in some sectors, so pressures would intensify if these factors were to reverse, crystallising latent credit losses.

Table 3.A UK-owned banks' claims^{(a)(b)}

	Claims on country as a per cent of world total	Claims on sector as a per cent of world total:		
		Banks	Non-bank private sector	Public sector
United Kingdom	50.8	9.2	40.3	1.2
Other Europe	15.6	5.3	6.9	3.3
France	3.7	1.9	1.2	0.6
Germany	2.4	0.9	0.5	1.0
Ireland	1.8	0.4	1.3	0.0
Spain	1.4	0.4	0.9	0.1
Italy	0.9	0.1	0.6	0.2
Portugal	0.3	0.1	0.2	0.0
Greece	0.2	0.0	0.1	0.0
Developing	0.6	0.1	0.4	0.1
United States	15.4	2.0	11.0	2.5
Other developed	4.5	1.5	2.0	1.1
Asia (excluding Japan) ^(c)	9.2	1.3	5.4	2.5
Other developing ^(d)	4.5	0.4	2.8	1.2
World	100	19.8	68.5	11.7

Sources: Bank of England and Bank calculations.

(a) End-June 2010 adjusted for risk transfers. Excludes guarantees and derivatives.

(b) UK-owned banks, including local claims by subsidiaries and branches.

(c) Developing Asia, Hong Kong and Singapore.

(d) Africa, Caribbean, Latin America and Middle East.

This section focuses on credit risks facing UK and other banks internationally. Credit risk is driven ultimately by losses on loans to households, companies and sovereigns, which together account for around 80% of UK banks' worldwide claims (**Table 3.A**). Those losses hinge on the path of global economic recovery. In the Bank of England's October 2010 *Systemic Risk Survey*, the proportion of respondents citing an economic downturn as a key risk to the UK financial system increased to 83%, from 67% in May (**Table 3.B**).

Growth remains uneven.

In the IMF's October *World Economic Outlook*, global output was projected to grow by over 4% in 2010 and 2011, above the average in the decade prior to the financial crisis. But growth remains uneven, with the recovery in emerging markets much stronger than in advanced economies. That growth differential is one factor boosting capital flows to emerging markets and reducing flows of capital to some advanced-economy assets (Section 2).

Against that backdrop, concerns about the ability of some European economies to meet sovereign debt obligations have re-emerged. Direct UK bank exposure to European sovereign debt is relatively low (**Table 3.A**). But perceptions about sovereign and banking sector risk have become closely linked. Weaker growth could expose latent balance sheet vulnerabilities. Any related increase in perceived counterparty credit risk between banks could lead to renewed funding difficulties which, in turn, could threaten the supply of credit.

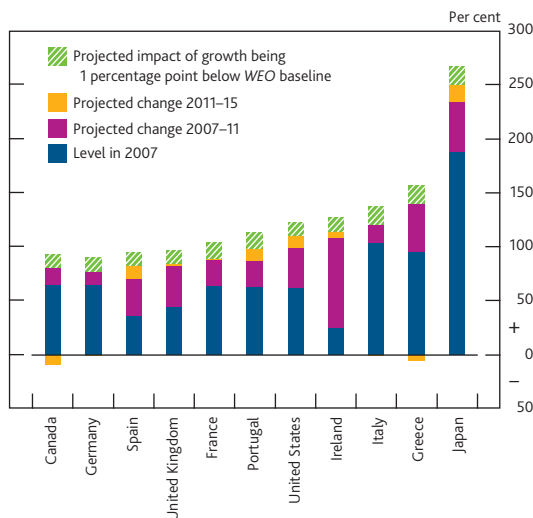
Table 3.B Systemic Risk Survey responses^(a)

Systemic Risk Survey results: key risks to the UK financial system

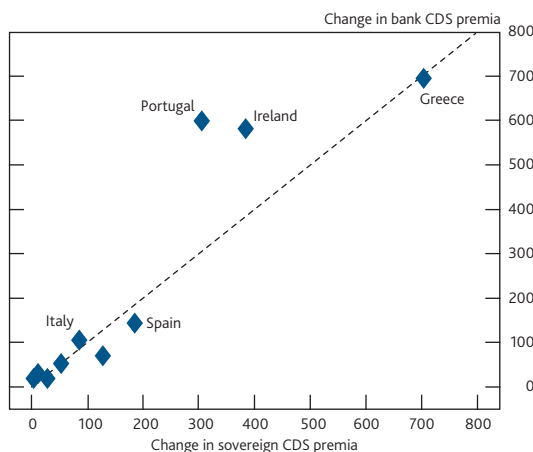
	May 2009	Nov. 09	May 2010	Oct. 10
Economic downturn	58	68	67	83
Funding and liquidity problems	33	35	33	45
Regulation, taxes on banks	24	49	41	45
Property price falls	18	27	28	41
Sovereign risk/public debt	24	24	69	36
Financial market disruption/dislocation	33	30	28	28
Household/corporate defaults	45	49	17	19
Financial institution failure/distress	30	11	15	14

Sources: Bank of England Systemic Risk Surveys and Bank calculations.

(a) Percentage of respondents citing each risk. Market participants were asked to list (in free format) the five risks they believed would have the greatest impact on the UK financial system if they were to materialise. Risks cited in previous surveys have been regrouped into categories used to describe the latest data. Only risks that have been in the top five in at least one of the above surveys have been included in the table. The October survey was carried out between 27 September and 2 November 2010.

Chart 3.1 Evolution of advanced-economy general government gross debt to GDP ratios

Sources: IMF Fiscal Monitor (November 2010), IMF Global Financial Stability Report (October 2010) and Bank calculations.

Chart 3.2 Changes in sovereign and banking sector CDS premia^{(a)(b)}

Sources: Capital IQ, Markit Group Limited, Thomson Reuters Datastream and Bank calculations.

(a) The change is measured from 7 December 2009 to 7 December 2010.

(b) The other countries included are Austria, Belgium, France, Germany and the Netherlands.

3.1 Sovereign risks

Fiscal positions of advanced economies have deteriorated dramatically since 2007. Nearly half of them are now projected by the IMF to have debt ratios above 75% of GDP by end-2011, compared to only a fifth pre-crisis. And despite plans to reduce fiscal deficits, the stock of general government debt in many advanced economies is forecast to rise even further (**Chart 3.1**). There is clearly uncertainty around these projections, particularly if downside risks to growth materialise. In the United States, there has also been concern about state and local government finances, as seen by rising spreads on municipal debt. While market contacts suggest state defaults are unlikely in the near future, increased concerns about local government debt could trigger a sell-off by retail and institutional investors.

As debt stocks rise, the burden of servicing debt becomes more sensitive to changes in interest rates. For a number of countries, that burden has to date been alleviated by unusually low government bond yields (Section 2). But if bond yields rose, high debt stocks would make it harder for governments to rein in borrowing to keep debt on a sustainable path.

Sovereign strains in some European countries have increased...

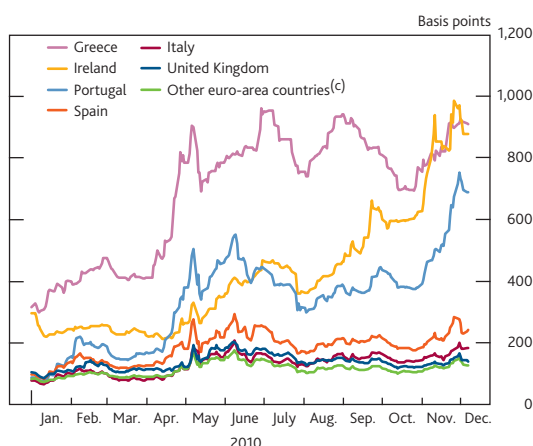
The rising and uncertain path of sovereign debt has raised concerns about the medium-term solvency of some EU governments. The impact on funding depends in part on the proportion of sovereign debt that is held by external investors. Greece, Ireland and Portugal have a relatively high reliance on foreign investors, who hold around 70% of their sovereign debt. By contrast, despite high debt levels, less than 10% of Japan's sovereign debt is held by overseas residents.

In some cases, these concerns stem from the unprecedented public sector support for banking systems during the crisis. That has led to a very rapid accumulation of sovereign debt in countries where the banking system is large relative to the size of the economy, for example in Ireland. As a result, the health of banking systems, sovereign credit risks and economic growth have become highly interdependent. Because of these links, credit risks of sovereigns and banks — as proxied by movements in CDS premia — have been highly correlated in European countries with high government debt levels (**Chart 3.2**).

...with some contagion to other banking systems but so far this has not been widespread...

When sovereign concerns emerged earlier in the year, CDS premia for a wide range of banking systems increased (**Chart 3.3**). Over the past couple of months there has been some spillover from developments in Ireland to other banking systems, most notably to Portuguese, Spanish and, to a lesser extent, Italian banks. That can be seen in strong comovements

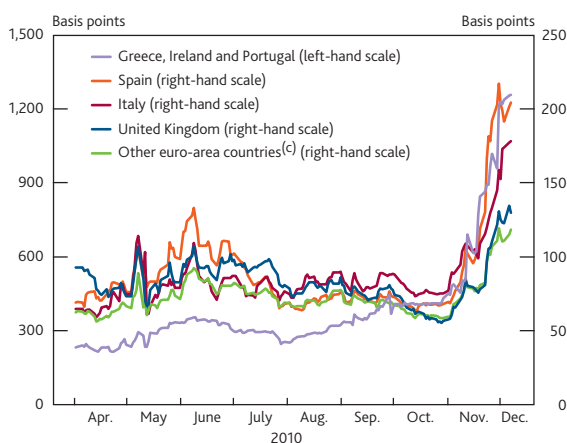
Chart 3.3 CDS premia of banking systems^{(a)(b)}



Sources: Capital IQ, Markit Group Limited, Thomson Reuters Datastream and Bank calculations.

- (a) Asset-weighted five-year CDS premia.
- (b) Data to close of business on 7 December 2010.
- (c) Other euro-area countries consist of Austria, Belgium, France, Germany and the Netherlands.

Chart 3.4 Banking system spread of subordinated debt CDS over senior debt CDS^{(a)(b)}



Sources: Capital IQ, Markit Group Limited, Thomson Reuters Datastream and Bank calculations.

- (a) Difference between asset-weighted five-year subordinated and senior debt CDS premia.
- (b) Data to close of business on 7 December 2010.
- (c) Other euro-area countries consist of Austria, Belgium, France, Germany and the Netherlands.

Chart 3.5 Banks' return on assets and loan loss provisions



Sources: Capital IQ and SNL.

in the spread between CDS premia on subordinated and senior debt across those banking systems (Chart 3.4). The agreement by some holders of Irish subordinated debt to accept a write-down, and discussions by euro-area governments of private sector burden sharing in sovereign defaults, have heightened the perceived risk of holding subordinated debt. But banking systems in the United Kingdom and other major European countries appear so far to have largely decoupled from these developments, perhaps suggesting any risks had already been priced in.

...helped by banks' improved shock-absorbing capacity. Spillovers may also have been mitigated by improvements in the shock-absorbing capacity of the European banking sector. Most euro-area banking systems were profitable in the first half of 2010 (Chart 3.5), supported by lower loan loss provisions, and capital buffers rose. And, overall, euro-area banks have also reduced their dependence on wholesale funding: their customer funding gap — customer loans less deposits — has fallen to around 6% of customer loans during 2010, compared to a pre-crisis peak of around 15%. But reliance on wholesale funding remains high in the most vulnerable banking systems. Irish, Greek, Portuguese and some Spanish banks have had to switch significantly to ECB funding as private funding has dried up (Chart 3.6). And capital ratios have declined in some weaker banking systems, such as Ireland and Spain, as has profitability.

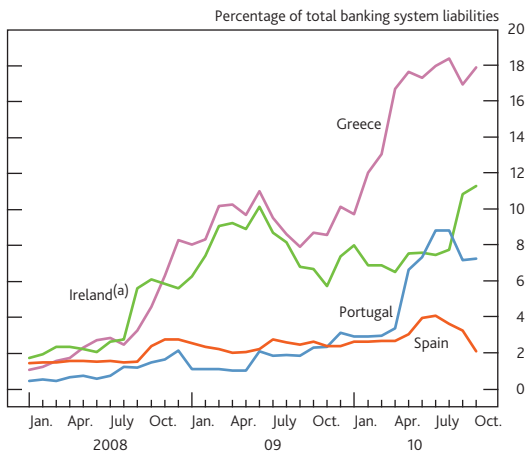
Direct UK bank exposure to European sovereign debt is relatively low (Chart A in Box 2). The main credit risks to UK banks stem from the possibility of losses on lending to euro-area households and companies, should sovereign and banking concerns spillover to weaker-than-expected growth in the euro area. Heightened sovereign risk in Europe could also expose UK banks to funding risks and the UK economy to the withdrawal of lending by foreign banks (Box 2).

The financial support provided by the IMF and EU authorities for Greece, and being put in place for Ireland, has alleviated their near-term financing concerns. But the systemic nature of these risks highlights the importance of developing a comprehensive, rather than country-by-country, solution. Recent events also underline the need for the next EU-wide stress-test exercise to provide greater transparency about banks' resilience to these risks.

3.2 Corporate sector risks

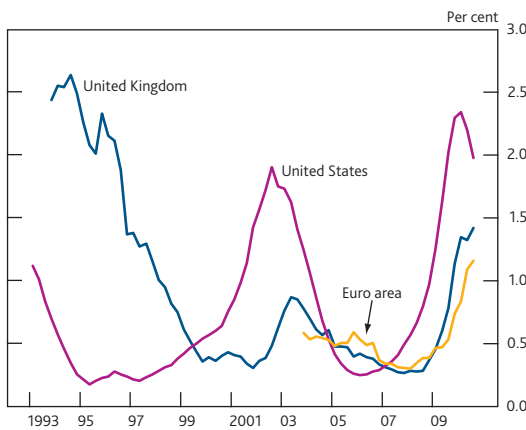
Risks appear to be attenuating in the corporate sector...

There was an improvement in corporate profitability in the first half of 2010 in the euro area and the United States and some signs of a moderation in near-term credit risk. In the United States, corporate write-off rates fell (Chart 3.7), even in the commercial real estate (CRE) sector. And default rates among speculative-grade bond issuers in the United States and

Chart 3.6 Usage of ECB liquidity facilities

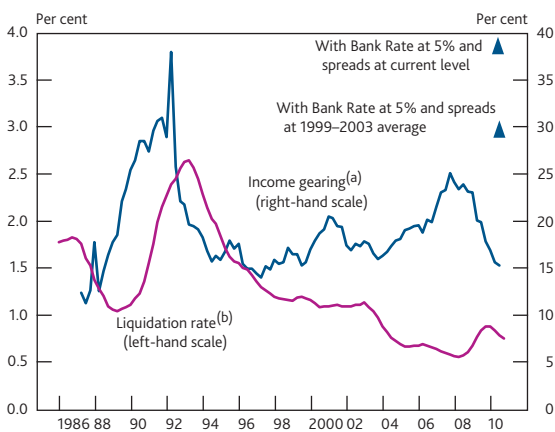
Sources: Banco de España, Banco de Portugal, Bank of Greece, Central Bank of Ireland, ECB, Thomson Reuters Datastream and Bank calculations.

(a) Domestic credit institutions only.

Chart 3.7 Corporate write-off rates^(a)

Sources: Bank of England, ECB, Federal Reserve Board and Bank calculations.

(a) Annualised quarterly write-offs divided by the corresponding loans outstanding at the end of the previous quarter, expressed as a four-quarter moving average.

Chart 3.8 UK corporate liquidations and income gearing

Sources: Bank of England, ONS, The Insolvency Service and Bank calculations.

(a) Interest paid divided by gross operating surplus for private non-financial corporations.
 (b) Calculated as the total number of liquidations in the previous four quarters divided by the average number of active registered companies. Since the Enterprise Act 2002 a number of administrations have subsequently converted to creditors' voluntary liquidations. These are not included in the chart.

Europe have fallen since June and are expected to fall further. But in the ECB's October 2010 *Bank Lending Survey*, banks continued to report a worsening in the outlook for companies, and write-off rates on bank lending to euro-area companies continued to increase.

...but corporate balance sheets remain stretched...

Write-off rates on loans to companies also rose further in the United Kingdom in 2010 Q3 (**Chart 3.7**). But the liquidation rate, which tends to lead write-offs, has been falling since 2009 Q4 (**Chart 3.8**). And UK corporate profitability has also improved. In the Bank of England's 2010 Q3 *Credit Conditions Survey*, banks reported that default rates for large and medium-sized companies were expected to fall in 2010 Q4.

Low interest rates have been a key factor enabling companies to avoid default. Contacts have also suggested that bank forbearance has played a role, with banks rolling over debt as long as companies are meeting debt-servicing costs. It is unclear if this situation is sustainable. Capital gearing — debt relative to the market value of the corporate sector — remains high (**Chart 3.9**). So while current debt-servicing costs for many companies are relatively low, they remain exposed to any future increase in interest rates or decline in profits.

...with aggregate measures masking a tail of distressed companies...

For example, **Chart 3.8** illustrates that if Bank Rate were to rise to 5%, corporate income gearing could reach levels last experienced in the early 1990s, even if lending spreads reverted to a pre-crisis average — assuming for illustration that corporate debt and income remained unchanged. In this scenario, companies would need to reduce their debt levels by around a third to restore income gearing to its historical average. Moreover, aggregate measures of income gearing mask a tail of distressed highly indebted companies. Data from companies' accounts suggest that around 30% of companies made insufficient profits to cover their interest payments in 2009 (**Chart 3.10**). The proportion of distressed companies is particularly high in the CRE and hotels and restaurants sectors.

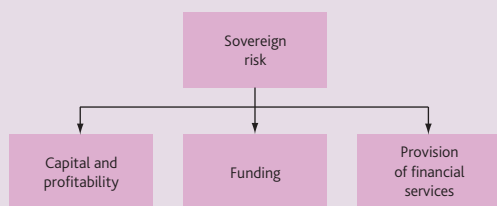
Distress is also more evident among smaller companies. Such companies are likely to have less well diversified sources of revenue and finance and have experienced a greater tightening in bank lending conditions than larger companies (Section 1). In the United Kingdom, a survey of major UK lenders indicated that their lending to SMEs accounts for around a quarter of lending to all UK businesses.⁽¹⁾ In the latest *Credit Conditions Survey*, banks reported that they expected default rates and losses given default for small companies to rise in 2010 Q4.

(1) See October 2010 *Trends in Lending*.

Box 2 European sovereign risk and UK financial stability

Market concerns over sovereign risk in some European economies have reintensified sharply in recent weeks. This box discusses potential spillovers to UK financial stability through UK banks' capital and profitability, funding conditions and the provision of financial services to the UK economy (Figure 1).

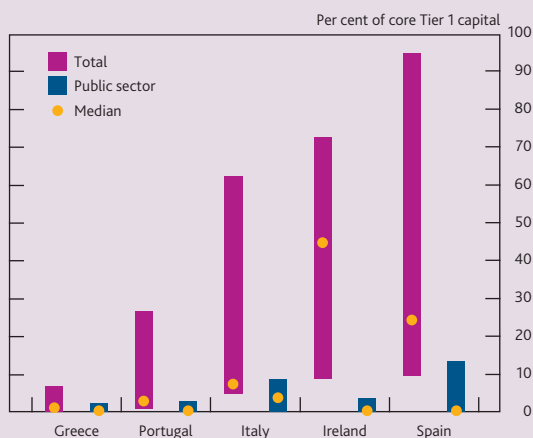
Figure 1 European sovereign risk: transmission channels to UK financial stability



Capital and profitability

An escalation of sovereign concerns could lead to further mark-to-market losses on UK banks' holdings of sovereign debt in their trading books. Between September 2009 and May 2010, the price of long-term sovereign debt issued by some euro-area countries fell, including by around 40% in Greece. But UK banks' total (banking and trading book) holdings of this debt are small relative to capital (Chart A). So any further increases in mark-to-market losses associated with a fall in the value of these holdings are likely to be manageable.

Chart A Range for major UK banks' claims on selected euro-area countries^{(a)(b)(c)}



Sources: Bank of England, published accounts and Bank calculations.

(a) Barclays, HSBC, Lloyds Banking Group, Nationwide Building Society and Royal Bank of Scotland.

(b) Claims data are to end-June 2010, adjusted for risk transfers. Excludes guarantees and derivatives.

(c) Core Tier 1 capital data are to end-June 2010 except for Nationwide Building Society which are to end-April 2010.

However, heightened sovereign concerns are likely to be accompanied by weakening economic conditions (Section 3). So UK banks may also experience higher-than-expected losses on lending to euro-area households and corporates. Major UK banks' total private sector exposures to Greece and Portugal are modest (Chart A). But claims on Ireland and Spain are larger, in combination representing around 75% of core Tier 1 capital for major UK banks. Moreover, these claims are concentrated within a few banks. The largest four UK banks have built up impairment allowances of £71 billion, some of which reflects impairment charges on these exposures (Section 4).

The interconnectedness of the financial system provides a potential amplification mechanism for these credit risks. Some European banking systems have significant exposures to those euro-area countries where sovereign risks have intensified. In particular, French and German banks have large exposures to borrowers in Spain. German banks also have material exposures to Ireland. There is a risk that a sharp deterioration in economic conditions here may have adverse implications for credit conditions in larger European countries and thus the losses UK banks might face. Major UK banks' claims on France and Germany combined are £288 billion, equivalent to around 140% of core Tier 1 capital of these banks. Of this, close to one half reflects claims on banks. Market prices may already reflect to some degree the risks that German and French banks face on exposures to Spain and Ireland.

Some countries could face larger losses on exposures to other euro-area countries under a sovereign debt restructuring.

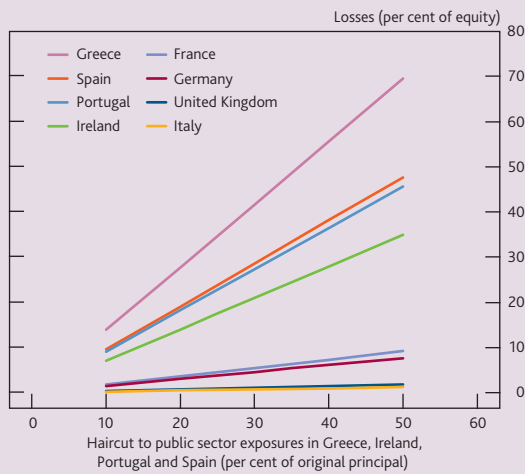
Chart B provides a mechanical illustration of potential losses that European banking systems would face if they had to write down their holdings of Greek, Irish, Portuguese and Spanish public sector debt by various amounts in a hypothetical, simultaneous debt restructuring. The impact on Greek, Irish, Portuguese and Spanish banks would be significant given their large holdings of domestic public sector debt. Moreover, under the European implementation of Basel II, banks using the standardised approach are not required to hold capital against the risk of default of local-currency EU sovereign exposures. So there is a risk that banks have not set aside sufficient capital to absorb any losses.

Funding

Heightened sovereign risk in Europe is likely to lead to a sharp increase globally in the perceived riskiness of European assets, as happened earlier in 2010. This could potentially affect domestic and foreign currency funding conditions for UK and other major European banks.

When sovereign concerns escalated in late April, UK banks' funding costs as proxied by Libor increased and the maturity of

Chart B Hypothetical losses to European banking systems from haircuts to Greek, Irish, Portuguese and Spanish public sector exposures^{(a)(b)(c)(d)(e)}



Sources: BIS, ECB, national central banks and Bank calculations.

- (a) Chart shows indicative losses to banking systems if the sovereign debt (loans and securities) of Greece, Ireland, Portugal and Spain was restructured and haircuts were applied to the original principal.
 (b) Exposures for all countries excluding Germany are adjusted for risk transfers. All exposures exclude guarantees and derivatives.
 (c) Exposures are to end-June 2010. Chart uses data available as at 13 December 2010.
 (d) Exposures for Greek and Portuguese banks only reflect holdings of domestic public sector debt due to data availability.
 (e) Equity data are to end-2009.

their wholesale financing contracted. In recent months UK, along with other major European, banks' funding costs appear to have largely decoupled from those in other European countries which may reflect improvements in bank resilience (Chart 3.3). Nevertheless, UK and many other European banks remain vulnerable to a return of strains in funding markets. This reflects their continued dependence on short-term domestic and foreign currency wholesale funding and the challenge of refinancing or replacing substantial amounts of term loans and public sector support by the end of 2012 (Section 4).

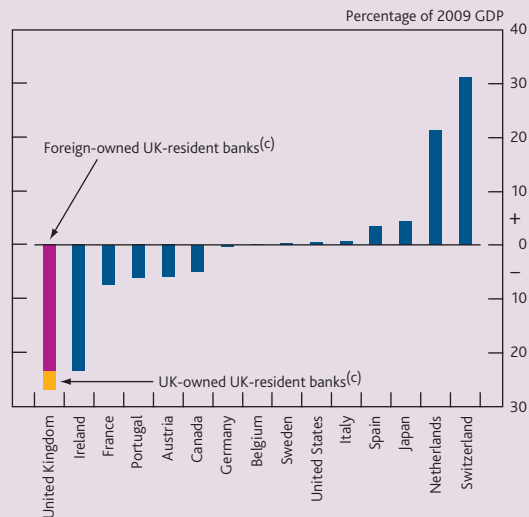
Provision of financial services

Heightened strains in European banking systems could also affect the provision of financial services to the UK economy more generally. Foreign-owned banks play a key role in the provision of banking services to the UK economy.⁽¹⁾ Santander UK accounts for around 15% of lending to the UK household sector, while German banks account for around 6% of lending to the UK non-financial corporate sector.

The presence of foreign lenders should help to diversify the provision of credit to the UK economy, making lending less sensitive to shocks in any one banking system. But there is also a risk that a shock in some euro-area countries could lead to a retrenchment in the provision of UK financial services by foreign lenders. In response to a funding shock, there is evidence that banks look to cut back lending most in non-core foreign markets, particularly if made cross-border rather than

from their local operations abroad.⁽²⁾ Between 2008 Q1 and 2009 Q4, UK-resident banks experienced a large net withdrawal of funding by banks abroad, equivalent to 27% of GDP (Chart C). And during this period, lending to the UK corporate sector by foreign branches fell faster than lending by foreign subsidiaries and UK-owned banks.

Chart C Net cross-border borrowing by selected resident banking systems from non-resident banks,^(a) cumulative flows,^(b) end-2008 Q1 to end-2009 Q4



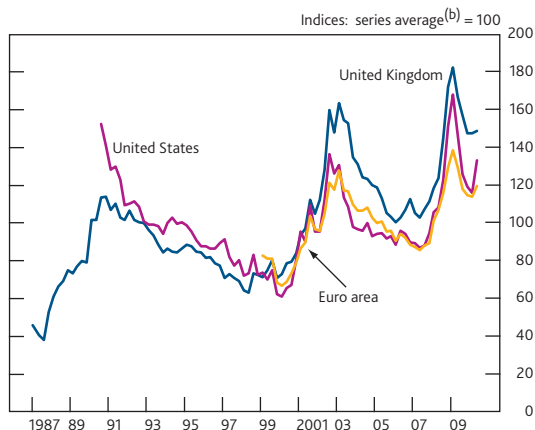
Sources: BIS and IMF *World Economic Outlook* (Spring 2010). BIS locational by residence and Bank of England data.

- (a) The change in the banking system's net liabilities to banks in all other countries.
 (b) Exchange rate adjusted change in stock.
 (c) Split for United Kingdom based on Bank of England data.

Many large European banks also play an important role in the provision of credit through their activity in primary and secondary capital markets. There is a risk that a further escalation in sovereign concerns, and a concomitant withdrawal of external funding to these large banks, might have adverse implications for the provision of these market activities.

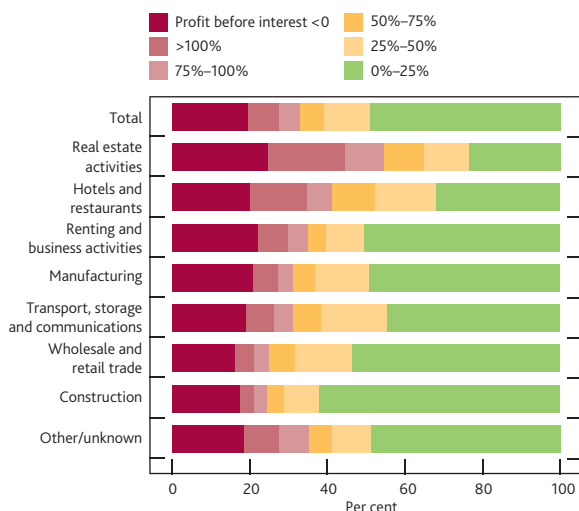
(1) See Box 1 of the June 2010 *Report*, page 16.

(2) See Hoggarth, G, Mahadeva, L and Martin, J (2010), 'Understanding international bank capital flows during the recent financial crisis', *Bank of England Financial Stability Paper* no. 8, September.

Chart 3.9 Corporate capital gearing^(a)

Sources: ECB, Thomson Reuters Datastream and Bank calculations.

- (a) Defined as debt net of liquid assets relative to the market value of capital for the United Kingdom and the United States and gross debt (loans, debt securities and pension fund reserves) relative to the market value of equity for the euro area.
 (b) Series averages are calculated over the period shown on the chart.

Chart 3.10 Distribution of corporate income gearing in 2009^(a)

Sources: Bureau van Dijk Fame database and Bank calculations.

- (a) Interest paid divided by profits before interest and expressed as a percentage. Data include firms reporting turnover in 2009 of more than £1 million and reporting profit and interest paid (a sample of around 14,000 companies). Subsidiaries, as identified from current company structures, are excluded from the data set. Company accounts are assigned to the calendar-year 2009 according to the end of their accounting period. Sectors are based on SIC (2003) codes.

...and vulnerabilities remain in commercial real estate.

Particular vulnerabilities remain in CRE markets in many advanced economies. For the major UK banks, CRE lending accounts for around a third of lending to companies worldwide, with significant overseas exposures to Hong Kong, Ireland, Spain and the United States. But the amount, and likely quality, of CRE lending is uneven across banks. There has been some improvement in commercial property values during 2010 (Chart 3.11), in part supported by the exceptionally low level of interest rates. But there is considerable variation across countries, with values flat in Spain and still declining in Ireland. Property values in most countries are still considerably below pre-crisis levels, when loan to value ratios on new lending were up to 85%. This means a significant proportion of CRE mortgages are in negative equity. In the United States, nearly half of commercial real estate mortgages maturing between 2010 and 2014 are currently in negative equity. Continued losses for banks are likely as loans come up for refinancing or fall delinquent.

There has been little recovery in non-prime values in the United Kingdom...

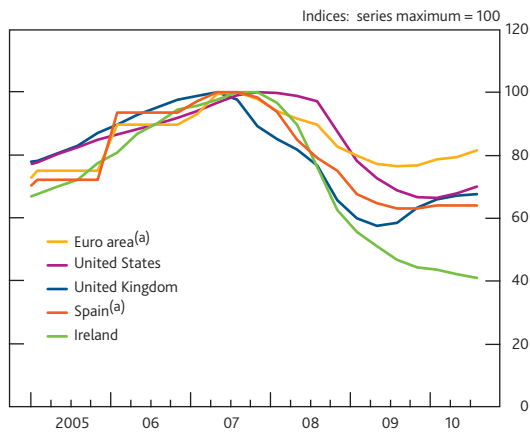
In the United Kingdom, vacancy rates have fallen and capital values have increased for prime properties. But the values of non-prime properties — which market contacts suggest account for the majority of UK banks' exposures — have seen little recovery (Chart 3.12). And derivative contracts continue to signal a further reduction in valuations over the next few years.

UK banks have contained losses on CRE exposures so far by extending maturing loans, provided that the loans are being serviced. This is despite falls in collateral values having pushed LTVs above levels at which banks would usually be willing to lend. The *De Montfort Survey* indicates that around 16% of loans by value are in breach of financial covenants. And that up to 70% of the loans that should have matured in 2009 have been extended for between one and three years, increasing the refinancing challenge in coming years.

...and banks may become less willing to refinance maturing loans.

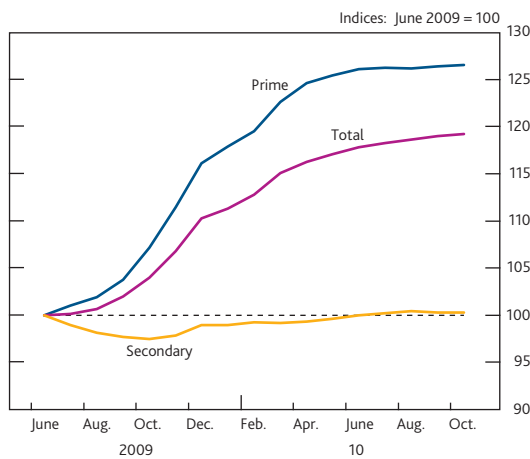
Looking forward, banks may become less willing or able to forbear on these loans. Potential triggers could be the materialisation of downside risks to rental income or increases in market interest rates. Market contacts suggest that the cost of breaking interest rate hedges, contracted when market interest rates were higher, may have contributed to forbearance. That cost could fall were market interest rates to rise. Many of these hedges are in any case scheduled to terminate over the next couple of years.

In the United Kingdom, *DTZ Research* estimates a potential gap of US\$54 billion between the value of CRE loans maturing and the amount of new debt that they believe could be raised

Chart 3.11 International commercial property values

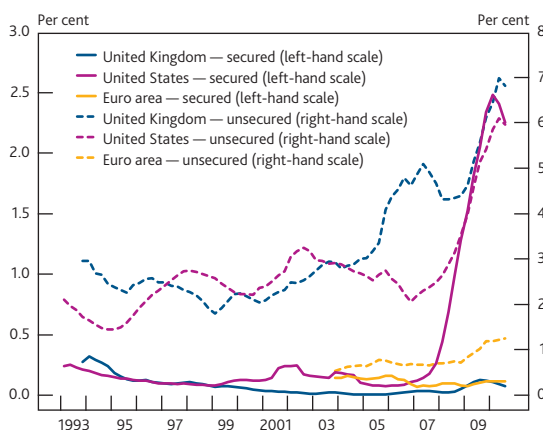
Sources: IMF *World Economic Outlook* (October 2010), IPD, Jones Lang LaSalle, Thomson Reuters Datastream and Bank calculations.

(a) Annual data prior to 2006 Q1.

Chart 3.12 UK commercial real estate values by sector^(a)

Source: CB Richard Ellis Ltd.

(a) The performance of prime and secondary properties is proxied by tracking the performance of a group of the highest and lowest-yielding properties within the CBRE index.

Chart 3.13 Household sector write-off rates^(a)

Sources: Bank of England, ECB, Federal Reserve and Bank calculations.

(a) Annualised quarterly write-offs divided by the corresponding loans outstanding at the end of the previous quarter, expressed as a four-quarter moving average.

over the next three years. Relative to their overall market sizes, Ireland and Spain also have large estimated CRE funding gaps. Inadequate funding at maturity could also trigger defaults. Any subsequent rapid disposal of properties by banks could place downward pressure on values at a time when there may be other sources of disposals — for example, by the Irish National Asset Management Agency and from maturing commercial mortgage-backed securities. Lower collateral values would increase banks' losses in the event of default.

3.3 Household sector risks

Household lending accounts for around half of the major UK-owned banks' worldwide lending to the non-financial private sector — with significant overseas exposures to the United States, Ireland and Spain — and three quarters of UK banks' domestic lending. The vast majority of lending to households is secured against property.

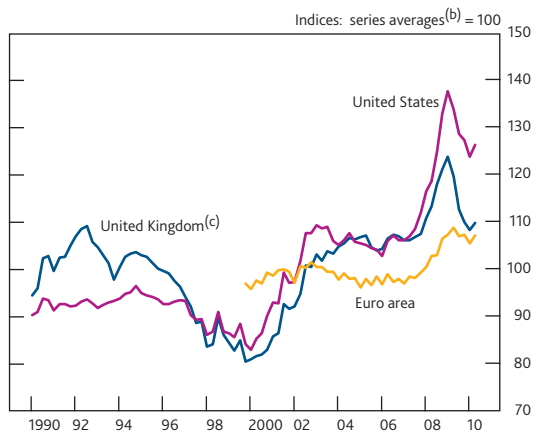
Household sector credit risk remains vulnerable to further house price falls...

Write-off rates on secured household lending remain low in the United Kingdom and the euro area, and have been falling during 2010 in the United States (**Chart 3.13**). In some countries, there was a stabilisation or even increase in house prices in the first half of 2010. Increases in asset prices have helped to bring household debt to wealth ratios down a little since their peaks during the crisis (**Chart 3.14**). But they remain high by historical standards, leaving household balance sheets vulnerable to further wealth shocks. House price to rent ratios in several countries, in particular Ireland, Spain and the United Kingdom, remain well above historical averages (**Chart 3.15**). Government assistance in some countries and low interest rates have helped to support prices. With the withdrawal of some temporary government support, downside risks to house prices have re-emerged.

...as government support is withdrawn and inventories of foreclosed homes are sold.

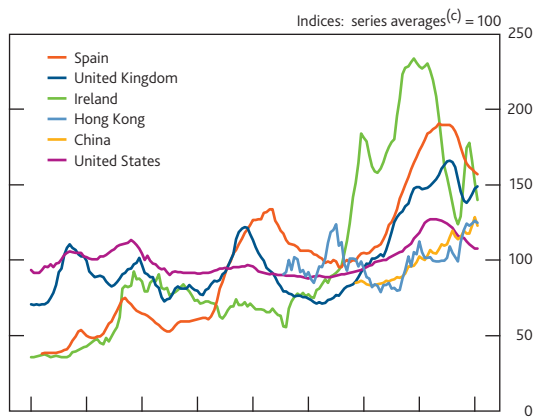
In the United States, prices have fallen following the expiry of tax credits for homebuyers. The IMF estimates that there is a 'shadow inventory' of foreclosed homes potentially amounting to 15% of mortgages. If these properties were to be released onto the market rapidly it could depress prices, prompting a renewed increase in defaults. This could lead to a marked rise in write-offs, as around a quarter of residential mortgages are in negative equity.

'Put-backs' of delinquent loans — where the originator of a mortgage is required to buy back the loan at full value because of inadequate due diligence — could also add to bank losses. Market estimates suggest potential losses of up US\$120 billion, equivalent to around 10% of US banks' Tier 1 capital. The legal complexities associated with this process could inject uncertainty about losses for some time.

Chart 3.14 Household capital gearing^(a)

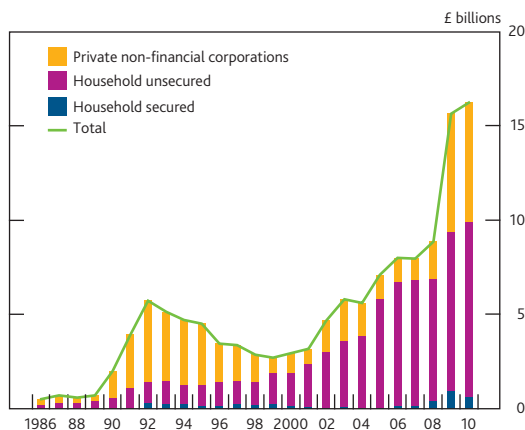
Sources: CLG, ECB, ONS, Thomson Reuters Datastream and Bank calculations.

- (a) Capital gearing is the ratio of households' gross debt to their gross wealth (financial assets and housing wealth).
 (b) Series averages are calculated over the period shown on the chart.
 (c) Housing wealth for the United Kingdom is estimated by the ONS on an annual basis. Quarterly estimates are interpolated by revaluing the previous end-year estimate using the CLG house price index, and adding private sector dwellings investment and council house sales in the quarters since year-end.

Chart 3.15 Residential property price to rent indices^{(a)(b)}

Sources: CEIC, OECD and Bank calculations.

- (a) Data are monthly except for China which is quarterly from June 1999 to December 2009.
 (b) Using residential property indices, except for China which uses a broader property index.
 (c) Series averages are calculated over the period shown on the chart.

Chart 3.16 Write-offs by UK monetary financial institutions^{(a)(b)}

Sources: Bank of England and Bank calculations.

- (a) 2010 is annualised data for the first three quarters of the year.
 (b) Prior to 1992 all write-offs to individuals were allocated to the unsecured debt category, as write-offs on house purchases were assumed to be negligible.

As noted in Section 2, the renewed strength of capital flows to EMEs has helped to inflate property values in some countries. For example, in Hong Kong prices have already increased by around 50% since the beginning of 2009, taking the price to rent ratio up to levels last seen in the late 1990s (Chart 3.15). Authorities in EMEs have implemented macroprudential measures to contain the risks of overheating, with Hong Kong and China restraining lending to the property market.

In the United Kingdom, house prices fell by 1% in 2010 Q3 and are now around 14% below their October 2007 peak. Looking forward, the latest Royal Institution of Chartered Surveyors' survey points to further downward pressure on prices. And in the Bank's October 2010 *Systemic Risk Survey*, the proportion of respondents citing property price falls as a key risk to the UK financial system increased to 41%, from 28% in May (Table 3.B).

Losses on secured lending in the United Kingdom have remained low...

Losses on secured credit have been relatively low in the United Kingdom, accounting for less than 5% of UK banks' total losses in the first three quarters of 2010 (Chart 3.16). Mortgage arrears have been falling since 2009 Q2 and the number of properties taken into possession has declined. Arrears and repossessions have been much lower than in the United States. Greater penalties for defaulting in the United Kingdom mean borrowers may have more of an incentive to reach an arrangement with their bank when repayment difficulties emerge. Since early 2009, around a third of mortgagors in arrears have been in some kind of arrangement with their lender.

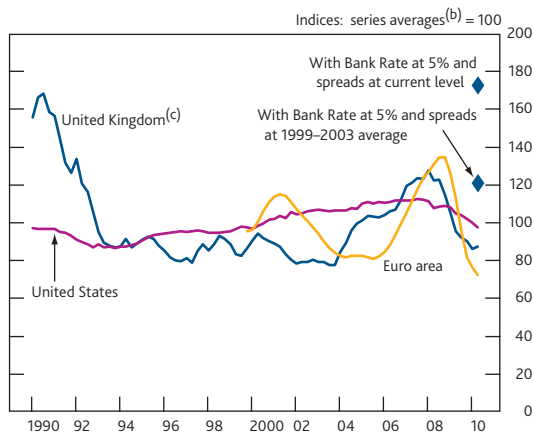
...but concerns about debt levels persist...

A survey conducted for the Bank by NMG Consulting in September indicated that concerns about debt levels had increased among highly leveraged borrowers (with loan to value ratios greater than 75%) over the past two years.⁽¹⁾ One of the main reasons given by households for increasing saving was to try to reduce their debts. However, in aggregate the household saving ratio has fallen since 2009 Q3. Saving rates in the euro area and the United States have also fallen back a little since mid-2009. The persistence of unusually low interest rates may have reduced the incentive for households to reduce their debt levels: aggregate debt-servicing costs relative to income are low in the euro area, the United Kingdom and the United States (Chart 3.17).

...as households remain highly geared...

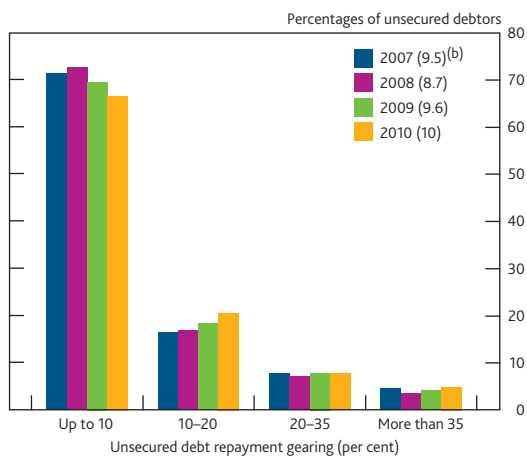
Given current levels of debt, UK banks might face higher defaults if interest rates were to rise rapidly from current levels

(1) See Nielsen, M, Pezzini, S, Reinold, K and Williams, R (2010), 'The financial position of British households: evidence from the 2010 NMG Consulting survey', *Bank of England Quarterly Bulletin*, Vol. 50, No. 4, pages 333–45.

Chart 3.17 Household income gearing^(a)

Sources: ECB, ONS, Thomson Reuters Datastream and Bank calculations.

- (a) For the United Kingdom and the euro area income gearing is measured as the ratio of household interest payments to post-tax income. For the United States it is measured as the ratio of total household debt repayments to post-tax income.
 (b) Series averages are calculated over the period shown on the chart.
 (c) Includes FISIM adjustment.

Chart 3.18 Unsecured debt repayment gearing^(a)

Sources: NMG Consulting survey and Bank calculations.

- (a) Unsecured debt repayment gearing is calculated as total unsecured debt repayments (including principal repayments)/gross income. Calculation excludes those whose gearing exceeds 100%.
 (b) Averages across unsecured debtors are shown in parentheses.

or if income and employment were to fall. For example, if Bank Rate were to rise to 5%, even if mortgage spreads reverted to a pre-crisis average, UK household income gearing would be close to its recent peak in 2008 — assuming for illustration that household debt and income remained unchanged (**Chart 3.17**). In this scenario, households would need to reduce aggregate debt by around 15% to restore income gearing to its historical average. The required adjustment would be much larger were spreads to remain at current levels. In practice, the impact of higher interest rates would depend on the wider economic environment, with higher interest rates against a backdrop of robust growth likely to have a more benign impact than if growth were weak.

Currently, around two thirds of outstanding mortgages in the United Kingdom have floating interest rates, somewhat above the average over the past five years. That proportion is rising as mortgagors move on to standard variable rate products as existing fixed-rate deals expire. This exposes more households to the risk of increases in interest rates.

...and some households are struggling with unsecured debt repayments...

Historically, losses on unsecured credit have been much more significant to UK banks than losses on secured credit. In the first three quarters of 2010, they accounted for around 60% of total UK losses despite accounting for less than 10% of loans (**Chart 3.16**). Spreads over Bank Rate on unsecured lending have risen sharply since the beginning of the financial crisis. As a result, repayments on unsecured debt as a share of household income have increased a little over the past two years, despite the exceptionally low level of Bank Rate (**Chart 3.18**). In the NMG survey, the proportion of unsecured debtors that found unsecured debt a burden increased to 51%, its highest level since the survey began in 2004. And concerns about unsecured debt burdens were most prevalent among households with little or no housing equity that could be used to refinance unsecured debt.

...posing further risks to banks.

The NMG survey suggests that households struggling to keep up with bills and credit commitments account for nearly one third of unsecured debt by value, so unsecured credit risks to banks remain elevated. The write-off rate on consumer credit remained very high in 2010 Q3 and — in contrast to the write-off rate on mortgage lending — is much higher than in the 1990s. Unsecured write-offs also remain elevated in the United States (**Chart 3.13**). Unsecured credit losses are particularly sensitive to labour market prospects. The NMG survey indicated that income and employment shocks had contributed significantly to debt distress.