

4 – Regional household exposure to financial stress

Key points

- Unemployment, negative housing equity, low wage growth and exposure to public sector cuts have left many households with uncertainty about how they are going to meet their financial obligations in the future. This exposure to financial stress has dampened consumer confidence and held back economic recovery.
- Some regions of the UK are feeling these problems more keenly than others. Our new index of exposure to financial stress shows that households in London, the South East and the East have experienced relatively lower financial stress levels, with more modest reductions in house prices from peak levels and more resilient earnings growth rates than other UK regions.
- The North East and Wales have experienced the highest levels of household financial stress according to our index, with substantial increases in unemployment and reductions in house prices, while the West Midlands has also fared relatively badly. In general, the results suggest that the economic downturn has further widened the North-South divide within the UK economy.

Introduction

Unemployment in the UK stood at 8.1% in May to July 2011, up 2.8 percentage points from the end of 2007. UK house prices have fallen 9.4% on average since their peak in 2007 Q3. The public sector, which currently accounts for around 20% of employment, has started this year to cut back severely on spending and jobs. Wages growth has been subdued for some years relative to consumer price inflation, while taxes have risen. All of these things mean that households are facing uncertainty about how they will meet their financial obligations in the future, but how do these pressures vary across UK regions?

To answer this question we have compared the regions across a variety of key indicators of financial stress. We look at the change in unemployment and economic inactivity since the start of the recession as a measure of the proportion of households who have lost their income stream from employment. We look at average earnings growth to reflect money available to households with individuals still in work. Personal insolvency reflects the prevalence of people unable to service their debts. Reductions in house prices mean reductions in wealth and reductions in the collateral available for borrowing. In addition, for some households this means negative equity, whereby if they sell their house they will still have some of the mortgage outstanding. These effects will both tend to reduce consumption and enhance the risk of not being able to pay household bills.

We have also included exposure to public sector cuts to encapsulate the threat of further job losses. In regions with high public sector employment, there are more people who will potentially lose their jobs and thereby reduce demand to the local economy. However, some regions receive more favourable funding, both as a result of the Barnett formula and other funding pots (such as health funding, the regional growth fund) and so are better placed to maintain public sector jobs and to maintain a higher level of demand through public spending. Therefore an adjustment is made for public spending per head. It is true that the favourable treatment of some regions in terms of public spending may not persist as cuts are made, but there is little indication of substantial changes in the treatment of regions.

Regions perform differently against different indicators. Therefore, in order to obtain an overall comparison of financial stress across the regions we also combine these indicators to create a new PwC regional index of household financial stress. To construct the index we take each individual indicator and standardise all of the data points by looking at the number of standard deviations by which each region varies from the sample mean for that indicator. These standardised scores are then weighted and summed to derive the overall index. We also test the robustness of the regional rankings by looking at their sensitivity to plausible variations in the weights used to construct the index.

The remainder of this article is structured as follows:

- Section 4.1: The labour market – regional trends in unemployment and economic inactivity
- Section 4.2: Regional trends in earnings growth and personal insolvencies
- Section 4.3 : Regional housing market trends
- Section 4.4: Exposure to public sector cuts by region
- Section 4.5: Overall regional index of household financial stress including sensitivity analysis
- Section 4.6: Summary and conclusions.

4.1 – The labour market

In this section we examine how changes in unemployment and economic inactivity rates since before the onset of the recession have varied by region.

Unemployment rates

The unemployment rate, as measured by the Labour Force Survey (LFS), increased in all UK regions between Q4 2007 and May to July 2011. Figure 4.1 shows the unemployment rates in the two periods, ranked from left to right decreasing in the percentage point change in unemployment. The North East has clearly suffered the greatest increases; the unemployment rate has almost doubled, now surpassing London, which had the highest unemployment rate in Q4 2007. Yorkshire and Humberside,

Wales and the West Midlands have also seen relatively large increases in their unemployment rates. Northern Ireland and the South West have seen significant increases, but from a low base. The South East and the East have kept their relatively low unemployment rates.

Economic inactivity rates

The economic inactivity rate measures the proportion of people between 16 and 64 who are not employed and not actively seeking work. If an individual gives up searching for work then they will no longer be counted in the unemployment figures, but will still be without a job. Therefore measuring economic inactivity as well as unemployment is important in capturing the overall labour market impact of the recession.

In principle, the recession could have opposing effects on economic inactivity. On the one hand, where one member of a household has been made redundant, other adults who previously did not seek work may start looking for jobs, so leading to a decrease in inactivity. Conversely, a lack of job opportunities may encourage people to stop looking, or to delay employment to undertake more education or training, so increasing inactivity rates.

Across the regions there is a mixed picture on the direction of changes in inactivity rates although, as Figure 4.2 shows, the changes are not as large as for unemployment rates. London and Northern Ireland, which have

traditionally had relatively high rates of economic inactivity, saw the biggest falls since Q4 2007. The South West and South East, which have higher rates of labour market participation, saw the biggest increases in economic inactivity. Most concerning are those regions that have had high increases in unemployment and small reductions or increases in economic inactivity, notably the North East, West Midlands, Wales and the South West.

4.2 – Regional trends in earnings growth and personal insolvencies

Earnings growth

London has seen the strongest earnings growth of all the regions, while the rest of the South East has, perhaps surprisingly, seen one of the lowest earnings growth rates in the UK. The West Midlands stands out as a potential area of concern here, with both low earnings growth and high increases in unemployment, perhaps reflecting the particularly severe impact of the recession on relatively cyclical manufacturing industries in that region.

Personal insolvencies

The number of personal insolvencies was increasing year on year for some time before the recession. The change between 2005 and 2009 (the latest year for which regional data is available) reflects the impact of the recession on the financial health of individuals. We use 2005 as a reference point to ensure that for both England and the devolved

Figure 4.1 – Unemployment rates in 2007 Q4 and May-July 2011, with numbers showing ppt changes between those periods

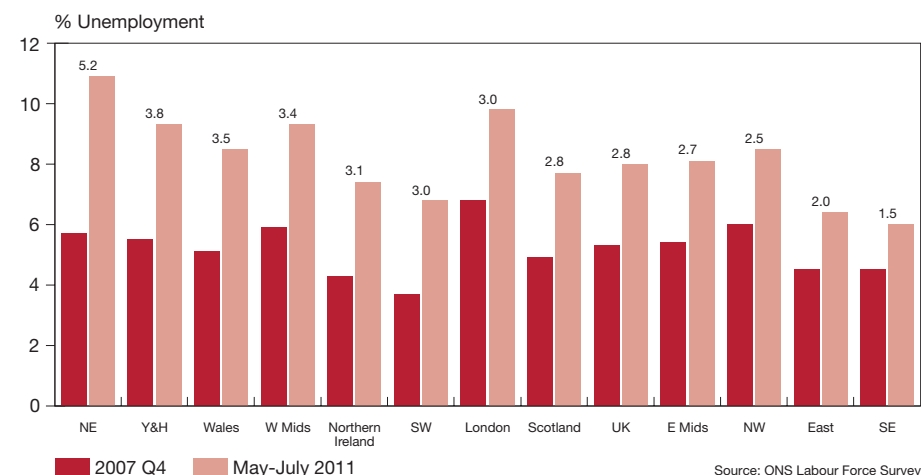
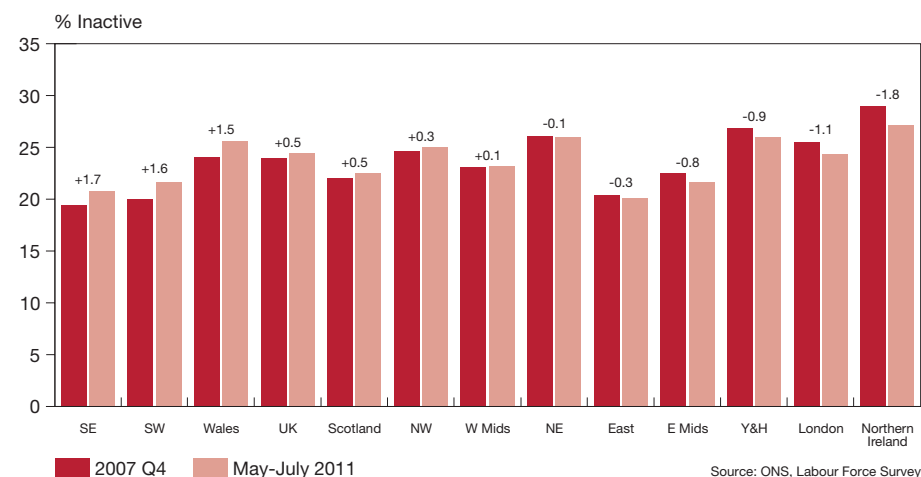


Figure 4.2 – Economic inactivity rate in 2007 Q4 and May-July 2011, numbers show ppt changes



regions we take a point before the step change in insolvency that accompanied the recession. In England the significant increase in insolvencies happened in 2006, preceding the economy entering recession, perhaps because household debt levels were already high by that time.

Figure 4.4 shows Wales and the North East experiencing the greatest increases in insolvencies and, as Figure 4.1 above shows, these two regions also saw relatively large rises in unemployment rates. London and Northern Ireland have experienced the lowest increases in personal insolvencies, despite having relatively high increases in unemployment rates.

4.3 – Housing

Falling house prices reduce the collateral available for borrowing and increase the risk of negative equity. People become less wealthy and less willing and able to consume than they did before. We have used the fall in average house prices from peak levels (in 2007 Q3) to Q2 2011 based on the Nationwide index. As Figure 4.5 shows, the property price crash in Northern Ireland has been more than 3 times as severe as any of the other regions, with average reductions in house prices at 45%. Within England, it is the North and Midlands that have been worst affected, whilst house prices in London have barely changed from earlier peak levels (though there have been some ups and downs during the course of this period).

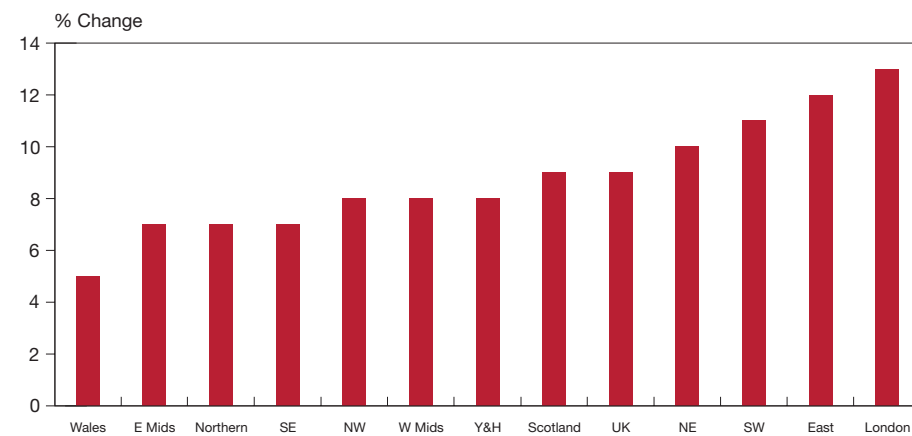
It should be noted that the scale of the house price fall in Northern Ireland is so large that it tends to distort the overall index rankings, so in constructing the index we have adjusted for this outlier value by restricting standardised scores on any particular indicator to a range of between +2.5 and –2.5 standard deviations from the mean. Northern Ireland therefore gets a maximum negative score of -2.5 on the housing indicator.

4.4 – Exposure to public sector cuts

Reductions in public sector spending increase unemployment directly through public sector job cuts and indirectly through reduced public spending on privately produced goods and services which in turn induces job losses in those private sector companies. For this element of the index we have looked at the proportion of public sector employment in each region (see Figure 4.6 below) divided by public spending per head indexed to the UK average.

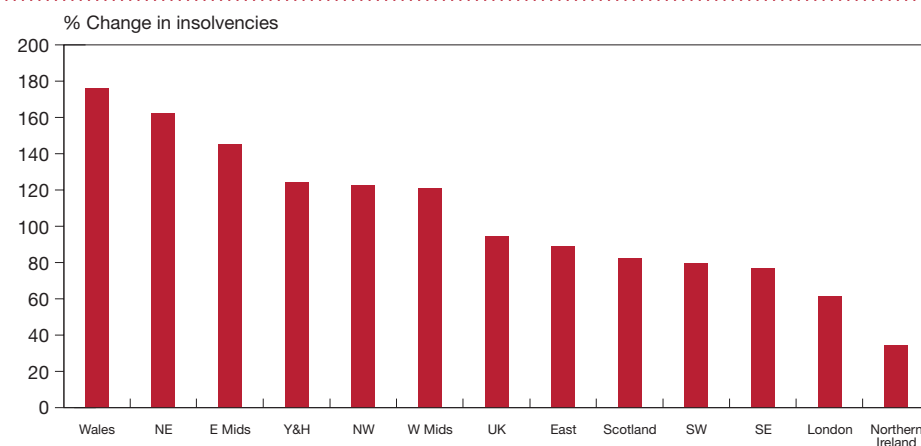
As Figure 4.6 shows, Northern Ireland, Wales, Scotland and the North East have a very high proportion of public sector workers. When we include the adjustment for public spending we find that these regions are also the most exposed, London and the South Eastern regions have the lowest exposures in general.

Figure 4.3 – Cumulative change in mean gross weekly earnings between year to 2007 and year to 2011 Q2



Source: ONS Labour Force Survey data for average gross weekly earnings

Figure 4.4 – Change in personal insolvencies 2005-2009



Source: The insolvency service, The insolvency service NI, Accountant in Bankruptcy

4.5 – Overall PwC regional index of household financial stress

In this section we combine the various aspects of regional household financial stress already discussed to construct an overall index. After standardisation¹, the two measures of the labour market and the two measures of personal income are summed to make one measure for the labour market and one for personal income. The four resulting categories are then weighted and summed to give the overall index. Since the choice of weights is necessarily a matter of judgements, we also look at the robustness of the regional rankings to alternative sets of weights as set out in Table 4.1 below.

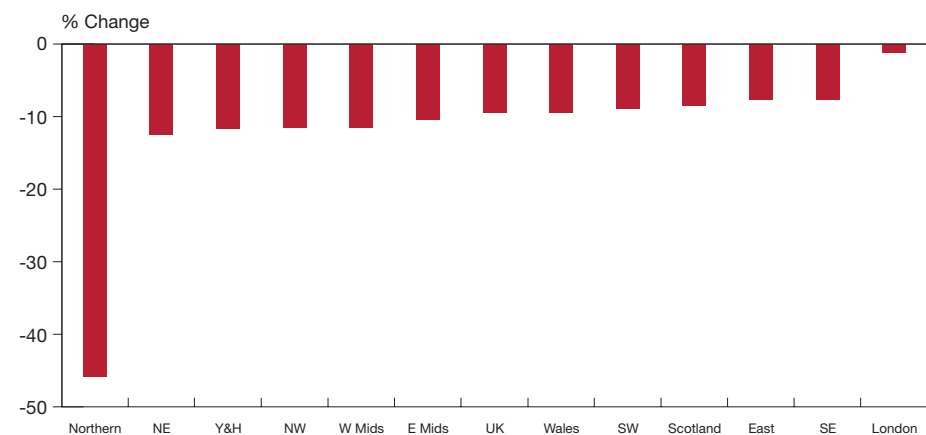
As Table 4.1 shows, our base case index puts 40% weight on the labour market, 25% on housing, 20% on personal income and 15% on public sector exposure. The high weighting of the labour market reflects the degree to which employment is judged to be critical to levels of household financial stress and has profound and immediate impacts on the ability of households to service their financial obligations. House price falls are important for those who find themselves in negative equity and subsequently heavily indebted. This means they may be unable to move house or to downsize to release money to meet other financial obligations. Although for those with no need or desire to move

Table 4.1 – Index weights used for base case and alternative variants

	Base case weights	Lower labour market weights	Higher labour market weights
Labour market	40%	25%	55%
Housing	25%	30%	20%
Personal income & solvency	20%	25%	15%
Public sector exposure	15%	20%	10%
Total	100%	100%	100%

Source: PwC

Figure 4.5 – Change in house prices (2007 Q3 - to 2011 Q2)



Source: Nationwide

Figure 4.6 – Public sector employment 2011 Q2



Source: ONS, public sector employment

¹ As mentioned earlier, this involves calculating the number of standard deviations from the mean for each region and indicators. This is a technique routinely used in constructing such indices where the variables involved are not expressed in the same units.

house or borrow against the value of their house this provides no immediate stress.

Growth in earnings clearly affects the ongoing ability of people to meet their financial obligations, but is unlikely to cause sudden changes to which households are unable to adapt. Personal insolvencies are a sign of extreme stress but are relatively rare in practice. Public sector exposure highlights the vulnerability to further job losses although this is a less direct measure of immediate financial stress and hence is given a relatively low weighting in our base case index.

Index results

If we look at the results in Figure 4.7 we can see that the different weightings do not change dramatically the index rankings. The only notable changes relate to Northern Ireland and the South West. The result for Northern Ireland is sensitive to the relative weighting on housing and labour. It performs well on the labour market index, but extremely badly on the housing market index. In the case of the South West, it performs poorly on the labour market measure, but fairly well on others and is therefore sensitive to the weighting on the

Figure 4.7 – PwC regional household financial stress index under three weighting scenarios, ranked by Base Case values (positive value indicates high stress levels and vice versa)



Source: PwC index calculations using data from ONS, Nationwide and Insolvency Service

labour market indicator. But, in general, the index rankings appear reasonably robust to changes in weightings.

In general, the regions of the South and East of England fare better on the index compared to those of the North, the Midlands and devolved territories². This is consistent with the general pattern of regional development that existed before the recession. The index also highlights how different London's experience of the recession has been from the rest of the country.

To explore these results further, Table 4.2 shows the components of the index which have a value greater than +1 or less than -1, which correspond to more than one standard deviation divergences from the mean. The direction of the effect is shown in brackets. On three of the four measures, London has values that are significantly negative influences on financial stress. Whilst in absolute terms London performs worse than regions on measures such as employment, our index demonstrates that the impact of the recession on household financial stress has been much more muted in London.

Table 4.2 – Factors which strongly influence the regional index rankings

Region	Strong influencing factors
North East	Labour market (+),
Wales	Labour market (+), personal income and insolvency (+)
Northern Ireland	Labour market (-), housing (+)
West Midlands	None
Yorkshire & Humberside	None
North West	None
Scotland	None
East Midlands	Labour market (-), personal income and insolvency (+)
South East	None
East	Labour market (-), personal income and insolvency (-)
South West	Labour market (+), personal income and insolvency (-)
London	Housing (-), personal income (-), public sector jobs (-)

Source: PwC calculations based on data sources listed in earlier charts. Factors are shown where divergences are more than one standard deviation from the mean across all UK regions.

2 The index doesn't capture the impact of recent energy price rises. Given that the devolved administrations generally have higher rates of fuel poverty than England, energy price increases may have put additional financial stress on households in these regions.

4.6 – Summary and conclusions

Financial stress is a concern for households, for government and for business. Uncertainty about money leads people to stop spending, reducing overall demand and growth. Our new household financial stress index suggests there are considerable differences between UK regions. In particular:

- The North East and Wales are the regions that have suffered the highest levels of household financial stress since the recession began, followed by the West Midlands. A mixture of high increases in unemployment and economic inactivity rates; marked falls in house prices and increases in personal insolvencies have all contributed to these findings.
- In contrast, the South East, the East and particularly London have not and this pattern echoes the long term trend in UK regional development of a widening North–South divide that has existed for a period extending well before the recession.
- Straddling this geographical divide, the East Midlands region has performed more strongly than the West Midlands on these measures of financial stress since the start of the recession.

Closing the North-South divide is therefore more difficult than ever for government, particularly at a time when money is tight and so the scope for significant transfers to more highly stressed regions is limited, particularly within England. Business needs to consider how its strategy can be tailored to these regional differences in financial stress, which look set to persist for some time to come.