

Economic & Labour Market Review

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The Director of ONS is also the National Statistician.

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In brief

Launch of Remote Virtual Microdata Laboratories

The Virtual Microdata Laboratory (VML) is the Office for National Statistics' (ONS) secure facility for providing access to sensitive data for research purposes. Until 2008, researchers had to visit ONS sites to use the data, which severely disadvantaged researchers in Scotland, Northern Ireland, and the north of England. Last year, two pilot facilities were opened at Scottish Government offices in Glasgow and Northern Ireland Statistics and Research Agency (NISRA) offices in Belfast, to try to address this disparity.

In January 2009, the Scottish Government hosted the VML Quarterly Workshop, the latest in a series of research workshops aimed at academics and government researchers. Part of the aim was to officially launch and promote the new Remote VML (RVML) in Glasgow to local users from academia and other government departments.

ONS's Director of Operations, Aileen Simkins, delivered an introduction to ONS, and spoke about its engagement with research communities in the new statistical environment created by the Statistics and Registration Services Act 2007. Felix Ritchie, Head of Microdata Analysis and User Support (MAUS), described the ONS secure facility and the new remote operations. Rob Wishart, Chief Statistician for the Scottish Government, provided an overview on the use of the RVML by the Scottish Government and the need for data to support effective evidence-based policy making.

A selection of experienced users of the VML provided an insight into their research conducted in the VML, to showcase its benefit for the local research community. Topics included:

- 'Regional Analysis using the Virtual Microdata Laboratory: An Example using CIS5 data' by Richard Harris, University of Glasgow
- 'Human Capital, Graduate Migration and High-Technology Innovation in British Regions' by Alessandra Faggian and Sarah Baird, University of Southampton
- 'The Distribution of UK Firm Growth Rates, 2002–05: size, sector and region'

by Michael Anyadike-Danes and Karen Bonner from the Economic Research Institute of Northern Ireland, and Mark Hart, Aston University

- 'Geographical Wage differentials' by Ada Ma, University of Aberdeen

The workshop ended with a VML training session provided to researchers who intend to use the new RVML in the near future, informing them among other matters about legal issues of accessing data stored in the VML and disclosure rules for outputs produced inside the VML.

The MAUS team would like to thank the Scottish Government, and in particular those delegates who were involved in making a success of the first Quarterly Workshop to be held outside London.

With the establishment of an RVML at NISRA, a similar event is being planned for Belfast in due course.

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Pension Trends update

The Office for National Statistics (ONS) published two updates of *Pension Trends* chapters on 27 January 2009.

The first – *Chapter 4: Pensioner income and expenditure* – analyses figures from the Pensioners' Income Series of the Department for Work and Pensions, which is based on the Family Resources Survey. In 2006/07, pensioner couples received average gross income of £508 per week, compared with £267 per week for single men pensioners and £240 per week for single women pensioners.

Chapter 4 also analyses the expenditure of retired households, using data from the ONS Expenditure and Food Survey reported in *Family Spending*. In 2007, the average weekly expenditure of households headed by someone aged 75 or over was £218 per week, of which nearly 40 per cent was spent on food, domestic energy bills, housing and council tax.

The proportion of total expenditure allocated to food, energy bills and council tax rises with age, because older people have to spend similar amounts on these items out of reduced incomes. By contrast,

older-person households spend a smaller proportion of the total on mortgage interest payments than middle-aged households.

The second update of *Pension Trends* was *Chapter 12: Pension scheme funding and investment*. It reports on the aggregate deficit of private sector defined benefit occupational pension schemes, which reached nearly £200 billion in December 2008, according to estimates by the Pension Protection Fund.

Chapter 12 also uses data from the ONS MQ5 series: *Investment by Insurance Companies, Pension Funds and Trusts* to show how the assets of UK pension funds have changed in recent years as the funds have refocused their investment strategies. It finds that, before the start of the current economic downturn, pension funds had a different set of investments than at the start of the last downturn in the early 1990s. In 2007, 61 per cent of pension fund assets were in corporate securities, compared with over 70 per cent for most of the 1990s. The composition of investment in corporate securities has also changed, with a smaller proportion of the total invested in shares and a larger proportion in mutual funds and bonds.

More information

Pension Trends
www.statistics.gov.uk/pensiontrends

Pensioners' Income Series
www.dwp.gov.uk/asd/asd6/PI_series_0607.pdf

Family Spending
www.statistics.gov.uk/downloads/theme_social/family_spending_2007/familyspending2008_web.pdf

Pension Protection Fund estimates
www.pensionprotectionfund.org.uk/index/ppf_7800_index.htm

MQ5 series
www.statistics.gov.uk/statbase/product.asp?vlnk=502

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Local area labour markets

The latest local area labour market data for the 12-month period ending June 2008 show that the area with the highest employment rate was the City of London with 94.0 per cent (note that this estimate is based on a very small sample). Excluding the City of London, the highest employment rate was in St. Edmundsbury, Suffolk (89.2 per cent) while the lowest rate was in Newham, London (57.0 per cent). There is a considerable variation within each region. For example, in the region with the highest average rate, the South East (78.6 per cent), employment varies between 86.9 per cent in both Test Valley and Surrey Heath and 69.9 per cent in Dartford.

The area with the highest unemployment rate in the 12 months ending June 2008 was Tower Hamlets (11.2 per cent), while the lowest rate was in Uttlesford (Essex) (2.3 per cent). Again, there were considerable variations within regions. In the region with one of the lowest average rates, the South West (3.8 per cent), unemployment varied between 5.8 per cent in Plymouth and 2.4 per cent in Purbeck and in Cotswold. The North East had the highest average rate (6.6 per cent), but varied between 9.3 per cent in Hartlepool and 4.0 per cent in Teesdale.

The latest estimates of jobs density (2006) show that there were 0.88 jobs per working-age resident in the UK. London had the highest jobs density at 1.02 compared with 0.77 in the lowest region, Northern Ireland. The local area with the highest jobs density was the City of London, with over 100 jobs per working-age resident, while the lowest

was in Carrickfergus, Northern Ireland, with 0.39 jobs per resident.

People who work in the City of London had the highest earnings, with median full-time gross pay of £896 a week as at April 2008. The lowest pay was for people who work in West Devon, South West, at £302 a week.

The report, 'Local area labour markets: Statistical indicators January 2009', was published on the Office for National Statistics website on 30 January 2009. It also contains sections looking at economic inactivity, ethnicity and the labour market, claimants of Jobseeker's Allowance (the claimant count), and earnings by place of residence. It brings together data from a number of different sources – the Annual Population Survey, Annual Business Inquiry, Annual Survey of Hours and Earnings, and administrative data on benefits from the Department for Work and Pensions – to give an overall picture of the labour market, looking at both labour supply and demand in each area.

Also available are spreadsheets giving data for key indicators such as employment, unemployment, economic inactivity, claimant count and jobs for both local authorities and parliamentary constituencies.

More information

www.statistics.gov.uk/statbase/product.asp?vlnk=14160

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UPDATES

Updates to statistics on www.statistics.gov.uk

9 January

Producer prices

Factory gate inflation falls to 4.7% in December

www.statistics.gov.uk/cci/nugget.asp?id=248

Index of production

Manufacturing: 3.3% three-monthly fall to November

www.statistics.gov.uk/cci/nugget.asp?id=198

13 January

UK trade

Deficit widened to £4.5 billion in November

www.statistics.gov.uk/cci/nugget.asp?id=199

14 January

Corporate profitability

13.9% in Q3 2008

www.statistics.gov.uk/cci/nugget.asp?id=196

20 January

Inflation

December: CPI down to 3.1%; RPI down to 0.9%

www.statistics.gov.uk/cci/nugget.asp?id=19

21 January

Average earnings

Pay growth slows in the year to November

www.statistics.gov.uk/cci/nugget.asp?id=10

Unemployment

Unemployment rate rises to 6.1% in three months to November

www.statistics.gov.uk/cci/nugget.asp?id=12

Public sector

December: £11.4 billion current budget deficit

www.statistics.gov.uk/cci/nugget.asp?id=206

23 January

GDP growth

UK output decreased by 1.5% in Q4 2008

www.statistics.gov.uk/cci/nugget.asp?id=192

Index of services

0.4% three-monthly fall into November

www.statistics.gov.uk/cci/nugget.asp?id=558

Retail sales

Retail sales slow in December

www.statistics.gov.uk/cci/nugget.asp?id=256

FORTHCOMING RELEASES

Future statistical releases on www.statistics.gov.uk

2 February

Consumer credit business – December 2008**MA4 Foreign direct investment – 2007**

6 February

Index of production – December 2008**Producer prices – December 2008**

10 February

MM22: Producer prices – January 2009**UK trade – December 2008**

11 February

Labour market statistics – February 2009**MM19: Aerospace and electronics cost indices – November 2008****Regional productivity**

12 February

New orders in the construction industry – December 2008**Public and private breakdown of labour disputes**

13 February

Monthly review of external trade statistics – December 2008

16 February

Digest of engineering turnover and orders – December 2008**MM17: Price Index Numbers for Current Cost Accounting – January 2009**

17 February

Consumer price indices – January 2009

18 February

Average weekly earnings – December 2008**International comparisons of productivity**

19 February

Public sector finances – January 2009

20 February

Internet connectivity – Q4 2008**Retail sales – January 2009****SDM28: Retail sales – January 2009**

23 February

Focus on consumer prices – January 2009

24 February

Business investment provisional results – Q4 2008**Public sector finances: supplementary (quarterly) data**

25 February

Distributive and service trades – December 2008**Index of services – December 2008****Services producer price index (experimental) – Q4 2008****UK output, income and expenditure – Q4 2008**

27 February

ASHE 2008 Pension tables

Economic review

February 2009

Graeme Chamberlin

Office for National Statistics

SUMMARY

Economic growth during the fourth quarter of 2008 contracted by 1.5 per cent. This marks the second successive quarter of negative growth so, according to the widely-held technical definition, the UK is now officially in recession. The pace of the downturn appears to be accelerating and broad-based, with the UK expected to remain in recession throughout 2009. Manufacturing output has contracted sharply and looks to be experiencing a slump reminiscent of the early 1980s. Construction output has been supported by repair and maintenance work and new private commercial and infrastructure work, but the outlook is bleaker with falling new orders. Services, the largest part of the economy, recorded one of its largest ever quarterly falls in output. Rapidly falling output along with the gloomy outlook has seen unemployment push upwards, fuelled by rising redundancies. However, inflation has fallen back as the effects of the December VAT reduction feed through to consumer prices.

GROSS DOMESTIC PRODUCT

Sharp fall in economic growth confirms UK recession

The latest data published by the Office for National Statistics (ONS) confirms the UK to be in the midst of a severe economic downturn. Preliminary estimates for the final quarter of 2008 showed a strong contraction with output falling by

1.5 per cent. This marks the single biggest quarterly drop in activity since 1980 and the sixth largest since records began in 1948. Furthermore, as shown in **Figure 1**, the pace of the economic slowdown accelerated in the second half of last year. Output was 1.8 per cent lower in 2008 quarter four compared with the same quarter in 2007.

These figures imply that, according to the technical definition, the UK is now officially in recession having posted two successive quarters of negative growth. For most, this is

unsurprising following the dire news recently emanating from business surveys, financial markets, the corporate sector and the labour market. It brings to an end the longest peacetime expansion of the UK economy, which grew for 64 successive quarters between 1992 quarter two and 2008 quarter one.

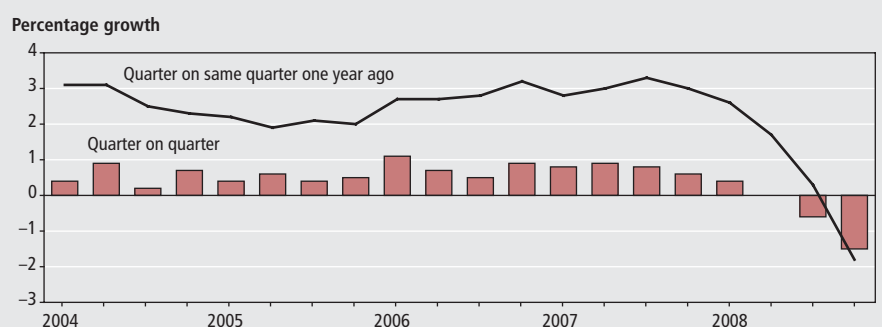
The latest data gives the first full-year estimate of UK Gross Domestic Product (GDP) for 2008. In real (constant price) terms the size of the economy was estimated at £1.28 trillion, a very modest increase of 0.7 per cent relative to the previous year. Annual growth has not been so weak since 1992 when the economy was last in recession (**Figure 2**). Expressing growth in annual terms though can slightly underplay the weakness in the latest data. If the downward momentum in the second half of 2008 continues then GDP growth for the whole of 2009 will more than likely be negative.

At the start of 2008, independent and city forecasters predicted a slowdown relative to the strong growth in previous years but not a full blown recession. The median forecast was for annual growth of 1.8 per cent, much stronger than the subsequent reality. Furthermore, city forecasters tended to be the least optimistic about the UK's prospects, especially compared to governmental organisations. In the 2007 Pre-Budget Report, published in October that year, HM Treasury predicted the economy would expand by 2.25 per cent in the next year. This was broadly in line with the views of the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD) which forecast 2.3 per cent and 2 per cent respectively.

Outlook for 2009 remains bleak

The sharp turnaround in forecasts reflects the growing intensity of the financial crisis and its contagion to the rest of the economy. Official data has reflected this, with economic growth slowing in the first quarter, stalling in the second, contracting in the third and accelerating downwards in the fourth. Consensus opinion is that things will get worse before they get better, with

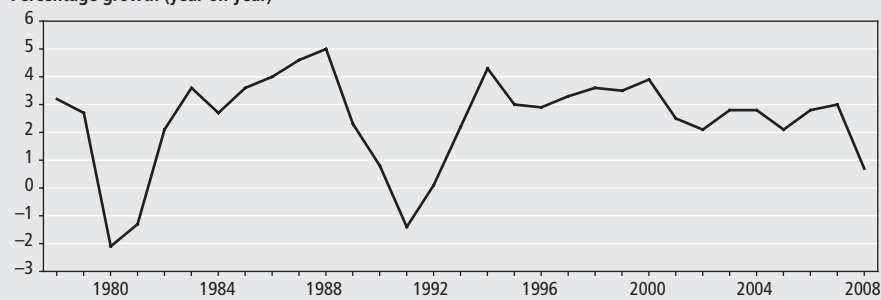
Figure 1
UK economic growth



Source: Office for National Statistics

Figure 2
Annual GDP growth

Percentage growth (year on year)



Source: Office for National Statistics

the UK expected to remain in recession throughout 2009. Independent forecasts made at the beginning of the year, on average, point to a contraction of 2.1 per cent in 2009. Even HM Treasury, which tends to be more upbeat than the city, expected the economy to contract by 1 per cent at the time of its November 2008 Pre-Budget Report.

The financial crisis and associated credit crunch is widely considered to be the main culprit for the current economic woes. After making large but difficult to quantify losses on assets related to the US sub-prime mortgage market, financial institutions around the world started to hoard funds in case they were required to cover potential losses. This, and a major re-assessment of default risks, meant they stopped lending to each other and restricted credit to households and firms. Only governments, with their sovereign right to raise money from taxes, have been immune from the general tightening of credit conditions.

September and October of last year were particularly tumultuous times for global stock markets. The collapse of Lehman Brothers seemed to have a significant impact on eroding investor confidence, which was further dampened by news that global growth was stalling. Taken together it was evidence that the intensity of the financial crisis was far from abating, and its effects were being increasingly transmitted to the wider economy.

The FTSE 100 (Figure 3) is now approaching a level last seen at the end of 2002, when equity prices bottomed out after a two year bear market driven by the collapse of the Dot-Com bubble, a global economic downturn, the September 11th terrorist attacks, and the accountancy scandals that resulted in the bankruptcies of Enron and Worldcom. By the end of January the FTSE 100 had fallen to 4053,

losing nearly a third of its value since the start of 2008. In theory, stock market valuations should reflect expectations of future profitability, so the currently depressed prices are a strong indicator of the gloomy and uncertain outlook.

Broad-based contraction in output

Closer inspection of the GDP data reveals that the downturn in the UK economy has been broad-based.

Figure 4 shows the contributions of the main industries to overall growth and it is

clear that none have managed to buck the trend.

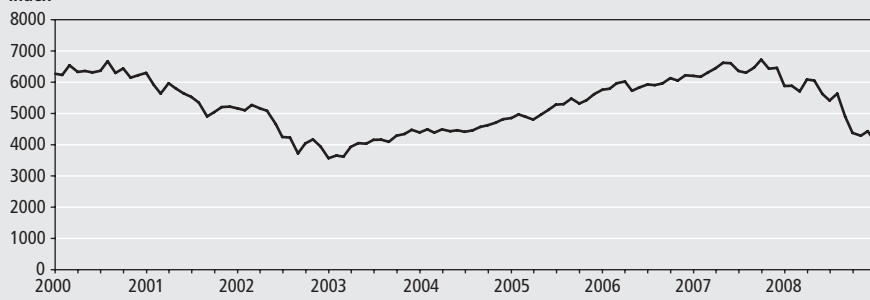
Particularly striking is the plight of the UK manufacturing sector. In the last quarter of 2008 output fell by 4.6 per cent, and although it only accounts for 15 per cent of total GDP, it contributed nearly half of the 1.5 per cent fall recorded in that quarter. From a historical perspective, the current contraction in manufacturing output looks severe.

Between the third quarters of 1990 and 1991 UK manufacturing output fell continuously generating a total output loss of 7 per cent relative to its pre-recession level. This exactly corresponds to the output loss recorded in the final three quarters of 2008, and the general expectation is that output has much further to fall. In addition, the quarterly fall in output never exceeded 2 per cent during the early 1990s recession. The last time the sector contracted at rates of over 4 per cent each quarter was at the height of the recession in 1980. So the early evidence suggests that manufacturing will experience a recession more reminiscent of the early 1980s than the early 1990s.

Services are the largest constituent of the UK economy and typically the most

Figure 3
FTSE 100

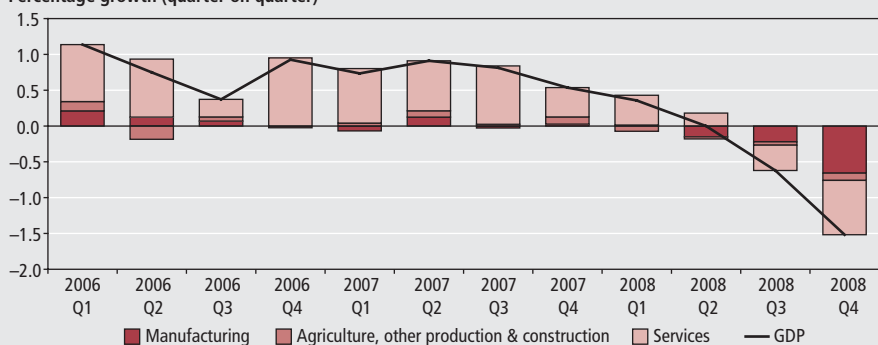
Index



Source: FTSE 100

Figure 4
Contributions to growth by industry

Percentage growth (quarter on quarter)



Source: Office for National Statistics

important driver of growth. Relative to manufacturing, the slowdown in 2008 quarter four was fairly modest, with the sector contracting by 1 per cent. However, when judged relative to its previous growth the recent contraction was just as acute.

Between 1993 and the start of 2008 service sector growth has been strong and robust, averaging 0.93 per cent each quarter. Only twice in the last fifty years has a quarterly contraction in excess of 1 per cent been recorded, and in both instances (1968 quarter two and 1979 quarter three), output in the preceding quarter was exceptionally strong. Therefore the slump in service sector output during the last two quarters of 2008 is fairly unprecedented in UK economic history.

MANUFACTURING OUTPUT

Pace of contraction quickens

Official data report that during the fourth quarter of 2008 manufacturing output fell by 4.6 per cent on the quarter and by 7 per cent relative to the same quarter in 2007. The downturn in the second half of 2008 is already as severe as the total loss of output in the early 1990s recession, and the outlook remains gloomy with the pace of contraction accelerating in the last quarter. If the current trend persists then UK manufacturing may undergo a similar experience to the early 1980s recession, when between the fourth quarters of 1979 and 1980 output fell by 14.7 per cent.

Business survey data also report a dramatic slowdown in the sector. The Report on Manufacturing conducted on behalf of the Chartered Institute of Personnel and Supply (CIPS) by Markit Economics is a widely used barometer of manufacturing activity and, as

Figure 5 shows, bears a strong coherence with the official data. Results from the December CIPS/Markit survey showed UK manufacturing to be in the midst of its deepest downturn in the 17 year history of the survey with both output and new orders near to record lows. Similar findings were recently reported in the quarterly surveys published by the British Chambers of Commerce (BCC) and the Confederation of British Industry (CBI).

A number of common themes can be drawn from the business survey data. First, the current slump in manufacturing output is expected to be worse than during the early 1990s recession. According to the CBI, output expectations are at their most depressed since the survey began in 1975, and if realised the contraction would be closer to 1980 than 1991. Secondly, the sharp deterioration in export orders suggests the large depreciation in sterling, currently at a 23 year low against the US dollar, is having little impact in offsetting weak domestic and global demand. In fact, weak economic growth in the rest of a world is a factor helping to explain the current downturn that was not such a strong issue in the last UK recession. Finally, falling output is partly the consequence of firms seeking to run down stocks of inventories in order to consolidate cash flows. The CBI survey highlighted the highest stock adequacy balance since January 1981.

Car manufacturers hit hard

The automobile industry appears to be suffering particularly badly. According to the Society of Motor Manufacturers and Traders (SMMT) annual production fell by 5.7 per cent in 2008. However, this estimate under-represents the marked

downturn towards the end of the year. Due to a large number of extended plant shutdowns over Christmas production fell by 47.5 per cent relative to the same month in the previous year.

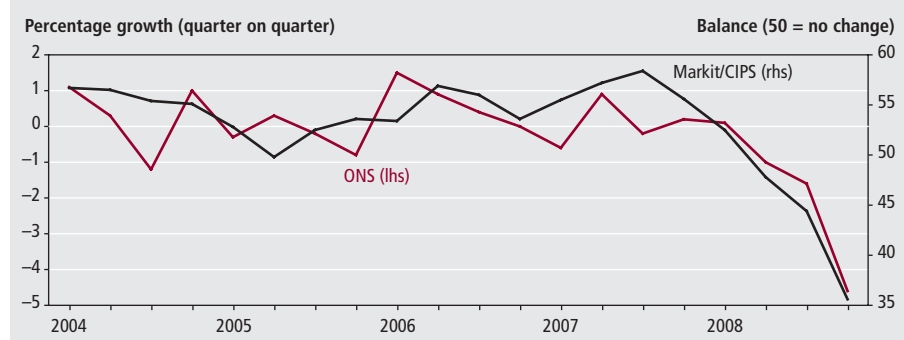
Almost every major car producer in the UK has announced plans to drastically cut production in the coming months. Bentley aims to stop production in Crewe for seven weeks from March despite already reducing to a three-day week last October and taking an extended Christmas break. Honda will cease all production at its Swindon plant between February and May. Aston Martin, following an extended Christmas shutdown, will cut its workforce by a third and move to a three-day week. Vauxhall also implemented an extended Christmas closure and plans a 40-day shutdown. Jaguar Land Rover in late 2008 held a series of one-day shutdowns and plans 450 redundancies. Production of the Mini will also be cut back. After a Christmas break that was extended by 10 days, a further one week cessation in February, two week closure in August and 300 job cuts are planned. Nissan held a two-week shut down last year at its Sunderland plant and has announced 1,200 redundancies. Even Toyota, which recently overtook General Motors to become the largest car producer in the world, has suspended one of its nightshifts.

Manufacturing leads faltering industrial production

Manufacturing accounts for roughly four-fifths of total industrial production. The other components, each representing about 10 per cent of output, are the extraction industries (mining and quarrying including oil and gas extraction) and the supply of utilities (electricity, gas and water). According to preliminary estimates for 2008 quarter four, industrial production fell by 3.9 per cent in the quarter and by 6.7 per cent relative to the same quarter in 2007, unsurprisingly driven by the trends in manufacturing.

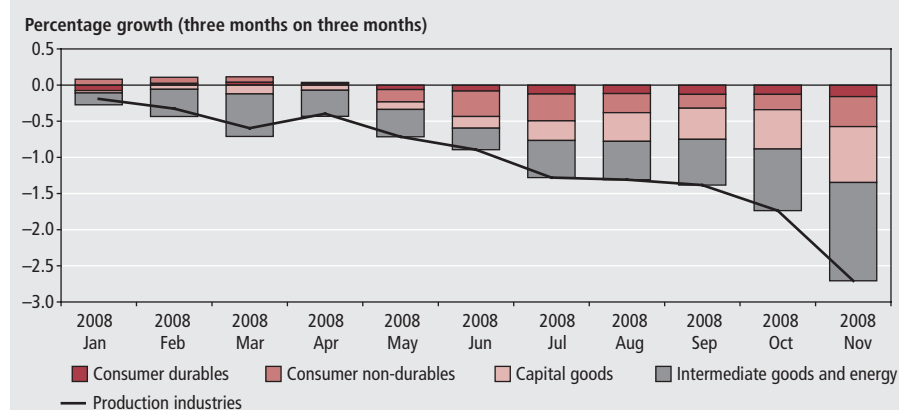
However, at the time of the preliminary estimate, which is only 23 days after the end of the reference quarter, data for the final month are often limited. Usually this gap has to be filled by a combination of judgement and time series forecast. Therefore, most recent data on the monthly Index of Production and its specific

Figure 5
UK manufacturing output



Source: Office for National Statistics

Figure 6
Contributions to the Index of Production



Source: Office for National Statistics

components are only available up to November 2008.

Figure 6 shows, in the three months to November, the output of the production industries declined by 2.7 per cent. This figure is also split into the respective contributions of the four main types of output: intermediate goods and energy, capital goods, consumer durable goods and consumer non-durable goods.

Intermediate goods and energy represent nearly half the output of the UK production sector and declined by 2.7 per cent in the three months to November 2008. Because these products are generally the intermediate consumption of other industries, the fall in output is consistent with the recessionary conditions in the UK and the rest of the world. Sharp downturns in the construction and automobile sectors would be expected to have a large impact on the demand for semi-manufactures. Reports from business surveys of firms looking to run down stocks of inventories would also have a dampening effect on demand for these intermediate products.

Capital goods account for just over a fifth of total industrial production. In the three months to November, output fell by 3.6 per cent. Again this appears to be broadly consistent with other data. Last month's Economic Review article highlighted the contribution of fixed investment to the fall in GDP during 2008 quarter three. Due to its lumpiness and irreversibility, investment spending tends to be the part of expenditure most sensitive to the economic outlook and credit conditions, so is usually a leading indicator as an economy moves towards recession. Falling output of capital goods production throughout 2008, but accelerating in the last four months of the year, tends to confirm this

view. Furthermore, because manufactured capital goods are a significant component of exports, it also highlights the impact of a more global slowdown. The CBI survey noted that this sector had been strongly hit by falling orders in the final quarter of 2008.

Consumer durables are a fairly small part of industrial production, but have contracted sharply during the second half of 2008. In the three months to November, output fell by 4.5 per cent. It is likely that the collapse in motor vehicle production noted earlier is an important factor. Consumer non-durables, accounting for just over a quarter of production, performed slightly better, registering a contraction of 1.5 per cent during the same period. All three business surveys made reference to the uncertain economic outlook and credit market problems as having a strong influence on consumer demand and new orders.

All the evidence, official, business surveys and reported directly by companies, indicates a marked and broad-based downturn in the UK production sector and manufacturing in particular. These trends are also consistent with weakening domestic demand, driven by a sharp decline in fixed investment, and foreign demand consistent with a slowdown in global growth.

CONSTRUCTION OUTPUT

New work falls, but repair and maintenance remains robust

The output of the construction industry fell by 1.1 per cent in the fourth quarter of 2008 and by 0.8 per cent relative to the final quarter of 2007. Whereas the manufacturing sector looks like experiencing a much sharper

contraction than during the last recession, so far the downturn in the construction sector has been relatively modest. Although output has fallen for three successive quarters, the total decline amounts to less than 2 per cent. In contrast, between 1990 and 1993 output fell for 12 successive quarters, ending up over 14 per cent below its pre-recession level.

These trends are surprising given recent news from the construction industry and the evidence presented in other data. In last month's Economic Review article, it was shown that fixed investment was the most significant driver of the downturn in aggregate demand during the third quarter of 2008. Within this component, spending on dwellings and new building fell sharply, down 25.5 per cent relative to the same quarter a year earlier. A collection of Britain's largest house builders, including Bovis Homes, Taylor Woodrow, Taylor Wimpey, Barratt Developments and Persimmon, announced job losses and cutbacks in developments during the summer.

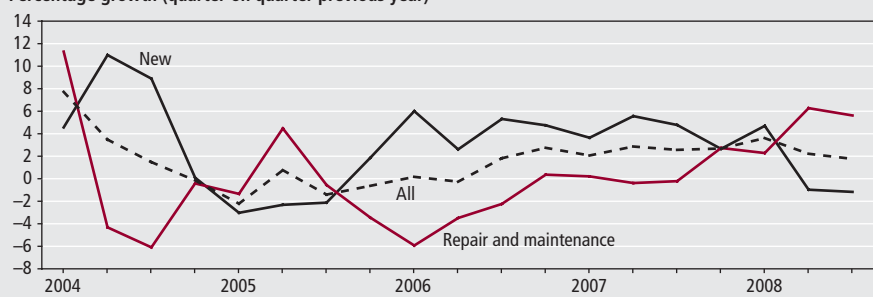
Results from business surveys also support the troubled outlook for the construction sector. The Royal Institute for Chartered Surveyors (RICS) reported their Construction Market Survey pertaining to 2008 quarter three to be the weakest ever, with falling workloads across the board. In the December Markit/CIPS survey, new work fell at the sharpest rate since the survey began. In particular, the housing sector was adversely affected by a strong retrenchment in demand as prices and mortgage approvals continued to fall.

ONS publishes a more detailed breakdown of output in the construction industry each quarter. However, latest data is only available up to the third quarter of 2008, and pertains to Great Britain rather than the whole of the UK. Despite this, there appears to be clear evidence of two factors holding up construction activity in recent months.

First, **Figure 7** (overleaf) shows the four-quarter growth in total output and its two main components, new work and repair and maintenance work. In the third quarter of 2008 total construction output was 1.8 per cent higher compared to the same quarter in 2007, but this hid the disparate performance of the two major components. New work contracted by 1.2 per cent while repair and maintenance work, which represents about 45 per cent of total output, surged ahead by 5.6 per cent. In fact the

Figure 7
Construction output

Percentage growth (quarter on quarter previous year)



Source: Office for National Statistics

offsetting nature of repair and maintenance appears to be a feature of the time series. It is not hard to reason that it is a substitute for new work. In a downturn owners and prospective owners of buildings may prefer to maintain their existing stocks and delay new work.

Infrastructure and private commercial activity supports output, but new orders are weak

Secondly, a breakdown of new construction work in **Figure 8** also shows very diverse trends among the main components. New housing work has collapsed. Between the third quarters of 2007 and 2008 output fell by over 20 per cent, consistent with the recent data on fixed investment in dwellings, news from the house building industry, and business surveys. However, the other new work category, consisting of private industrial, private commercial and infrastructure, has been fairly resilient. Over the same period it expanded by more than 7 per cent.

New private industrial construction work actually declined quite sharply, again consistent with the data on fixed investment reported for the third quarter of 2008, but it only represents a small part of this category. On the other hand, growth in infrastructure and private commercial buildings was robust over this period.

Despite the current economic turbulence, tight credit markets and low projected occupancy rates for office space, many of the largest commercial developments in the UK are continuing. London Bridge Tower, also known as the Shard of Glass, will be Britain's tallest building when it is completed in 2012. Another prominent London landmark will be the Bishopsgate Tower, also known as the Pinnacle or the

Helter Skelter, which is also proceeding. And of course, work on the Olympic Village and other facilities has commenced. Paradoxically, despite the poor economic outlook, the large fall in commodity prices has made skyscrapers much cheaper to build. Construction of the Leadenhall building (aka the Cheesegrater) has been temporarily put on hold, partly due to concerns over future occupancy rates, but also so that contracts can be renegotiated to take advantage of lower building costs.

Despite recent output being better than expected, the outlook may not be so rosy for the construction industry. Latest official data on new orders paint a very bleak picture. In the three months to November total new orders fell by 9 per cent compared to the previous three month period, and by 27 per cent compared to the same period in the previous year. Much of this trend continues to be driven by the house building industry, which recorded a 55 per cent fall in new orders over a twelve-month period. But the decline in new orders was broad-based with infrastructure, private commercial and private industrial also posting significant falls. If these falls in new orders are sustained, it will eventually feed through to output resulting in a more severe contraction than at present.

SERVICE SECTOR OUTPUT

Slowdown significant by historical standards

Services are the largest part of the UK economy and generally the principle driver of economic growth. It is very rare for the output of this sector to fall in either a sustained or significant way. Taking an entire time series of data starting in 1948, a year-on-year contraction has only been reported on two occasions, 1980 and 1991. Furthermore, in both these instances the annual contraction was fairly mild at 0.4 per cent and 0.2 per cent respectively.

In 2008, the total output of the services industry was 1.4 per cent higher than its level in 2007. However, except in 2002, this is the only time growth on an annual basis has fallen below 3 per cent since 1992. Naturally, looking at growth on an annual basis can underplay the significance of turning points. Quarter-on-quarter growth figures show a sharp contraction in the second half of 2008, with output falling by 0.5 per cent in the third quarter and by 1 per cent in the fourth. Therefore it is clear the present slump in service sector activity is severe by historical standards.

Once again there is a strong correspondence between the official data and business surveys (**Figure 9**). Activity balances for December in the Markit/CIPS survey showed a further considerable fall, the eighth successive month when output is reported to have fallen. Financial services, hotels and restaurants were hit particularly hard, with low demand reflecting weak consumer confidence and an unwillingness of potential buyers to commit to new spending. Similar findings were reported in the BCC survey where home deliveries

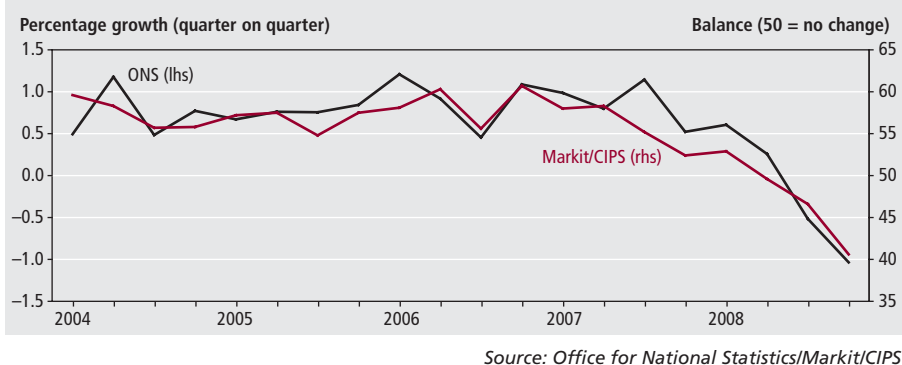
Figure 8
New construction work

Percentage growth (quarter on quarter previous year)



Source: Office for National Statistics

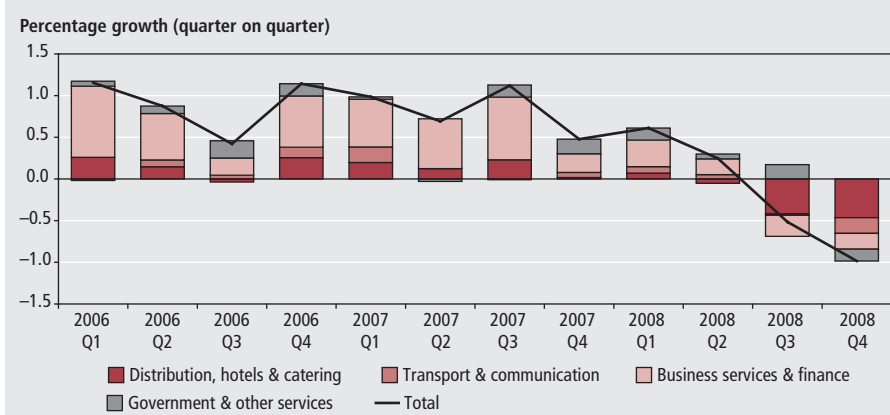
Figure 9
UK service sector growth



in the final quarter of 2008. Although this is a fairly modest fall, it represents a fairly significant turnabout from the consistently high growth rates experienced over the recent past. A significant part of this industry consists of the output from property renting, including imputed rents which are the implicit payments that owner-occupiers pay to themselves for the privilege of living in their own houses. As this is a fairly stable component of output, especially in constant price terms, it tends to lessen the size of the downturn.

Other business activities are also a significant part of the sector, consisting of a myriad of services including accountancy, legal, market research, management consultancy and architects. According to the Index of Services data, the output of these industries fell by 2.1 per cent in the three months to November 2008. These are largely viewed as the more discretionary part of business spending, so the decline here is consistent with the general contraction in the domestic and global economies.

Figure 10
Contributions to service sector growth



and orders were at record lows pointing to a more severe downturn than the early nineties recession.

Distribution, hotels, restaurants and business services contract sharply

ONS preliminary growth estimates for 2008 quarter four provide a fairly broad industry breakdown for the services sector and the contributions of each to the total are presented in **Figure 10**. Once again the data points to a broad-based downturn, reaffirming the view that few parts of the economy have been immune from the current turmoil.

In the final quarter of 2008 the output of the distribution, hotels and restaurants industry fell by 2.4 per cent accounting for about half of the total fall. The monthly Index of Services is available for the period up to November 2008, and this indicates that the motor trades are really suffering. In the three months to November output had declined by 8.1 per cent compared to the previous three month period. Data from the SMMT concurs, reporting the number

of cars sold in the UK fell by 11.3 per cent in 2008.

The hotels and restaurants and distribution industries also fell sharply in this three-month period. However, the retail industry, in line with recent official data on retail sales, appears to be holding up, relatively. In last month's Economic Review article it was suggested that Internet sales, substitution away from other components of consumer spending, and discounting may be supporting activity.

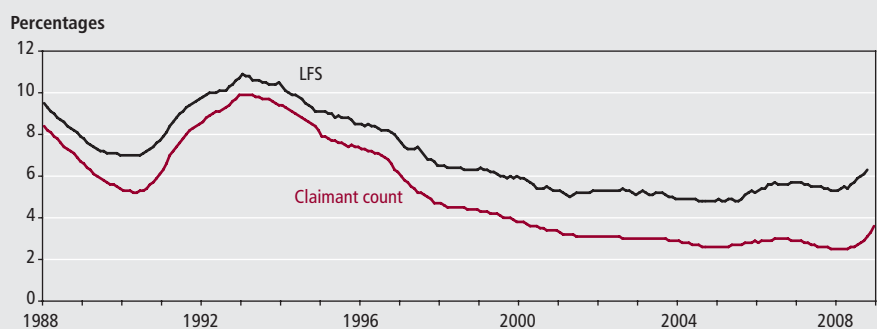
The business and financial services sector is reported to have shrunk by 0.5 per cent

LABOUR MARKET

Redundancies push unemployment higher

Latest data from the labour market points to another sharp rise in unemployment. According to the Labour Force Survey (LFS) measure, unemployment rose by 124,000 to 1.89 million in the three months to November when compared to the previous three-month period. This corresponds to a rate of 6.3 per cent (**Figure 11**). Claimant count figures also posted a significant rise. On this measure, the total unemployed increased by 97,000 between November and December to stand at 1.16 million or 3.6 per cent. These data show that the contraction in output is being passed through to the

Figure 11
Unemployment rates



Source: Office for National Statistics

labour market, an indication that firms consider the current downturn to be both large and persistent.

The LFS measure is the internationally agreed definition, specifying the unemployed as without a job, wanting a job, actively seeking work and available to start work. The claimant count simply measures the number actually claiming unemployment benefits, which tends to be consistently lower than the LFS measure. Differences are largely accounted for by those who are classified as unemployed but are either voluntarily not claiming or ineligible for Job Seekers Allowance (JSA). Those who are unemployed but have a partner in work are not entitled to claim income-based JSA, and although they may be able to claim on their own past National Insurance contributions, contributions-based JSA normally ceases after six months. Therefore, it is no great surprise that there is a permanent wedge between the LFS and claimant count unemployment measures for women that accounts for most of the difference.

A cyclical element also seems to be at play which describes why the long fall in the unemployment rate between 1993 and 2007 was more marked in the claimant count than the LFS rates. A strong labour market may entice previously inactive people who were not JSA claimants back into the labour market. Hence when they start seeking work it causes a rise in the LFS unemployment rate that offsets the effects of the generally falling unemployment rate, keeping the LFS unemployment rate somewhat higher relative to the falling claimant count. As the labour market goes into reverse this divergence effect would be expected to decline. Naturally, the growing divergence could also reflect measures to tighten and enforce eligibility criteria and this is less likely to be reversed by cyclical factors.

Unemployment in 2008 has been pushed up by a strong rise in redundancies along with relatively flat rates of vacancy creation. Hence, the overall dynamics of the labour market show much stronger flows into unemployment but rather stable flows out of it (**Figure 12**). In the three months to September 2008 there were 225,000 reported redundancies, a rise of 78,000 from the 147,000 recorded in the previous three month period. This had the impact of pushing the redundancy rate, that is the ratio of the level of total redundancies to the number of employees in the previous quarter multiplied by 1000,

up from 5.8 to 8.9 over the period. At the same time the vacancy ratio, simply the number of vacancies per 100 employees in employment, fell to an average 2 per cent over the last three months of 2008. In this period there were 512,000 registered vacancies compared to 678,000 in the final three months of 2007.

The strong rise in redundancies and a muted rate of job creation certainly corresponds to the swathe of bad news from the corporate sector. This includes a number of high profile insolvencies from the retail sector such as Woolworths, Zavvi, Adams and MFI, along with Marks and Spencer cutting 25 Simply Food stores. Car manufacturers have announced significant job cuts, the steel maker Corus plans to cut 2,500 UK jobs and the financial sector is likely to continue contracting sharply.

During October last year, at the height of the financial market turmoil, the Centre for Economic and Business Research (CEBR) estimated that the City of London would shed 28,000 jobs in 2008 and a further 34,000 in 2009. Together this represents 17 per cent of the workforce, which will effectively be cut back to its 1998 level of 291,000. These reductions do not include the likely impact of consolidation in the banking industry on wider job losses. The merger of Lloyds-TSB

and HBOS, and the takeover of the retail business of Bradford and Bingley and the entirety of Alliance and Leicester by the Spanish banking group Santander, which already owns Abbey, is likely to lead to a significant number of branch closures.

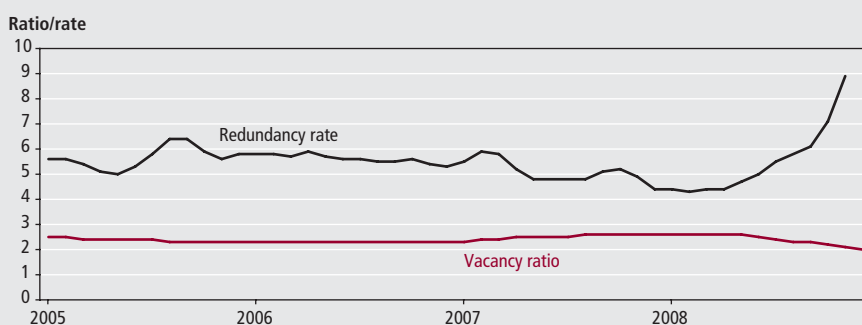
However, those grasping for some better news only need to look to the food retail sector where, Marks and Spencer apart, a number of expansions and significant job creations have been announced. Tesco plans to create up to 10,000 new jobs in new store openings. Sainsbury's, in 50 new convenience stores and a small number of new supermarkets, plans to hire 5,000 people. Waitrose, as part of an expansion drive, will create 4,000 jobs. In 14 new stores ASDA will employ an additional 7,000 staff and Morrisons also plans to create 5,000 new jobs. Finally, Iceland plans to create 2,500 jobs after buying 51 former Woolworths stores.

CONSUMER PRICES

Inflation falls as VAT reduction takes effect

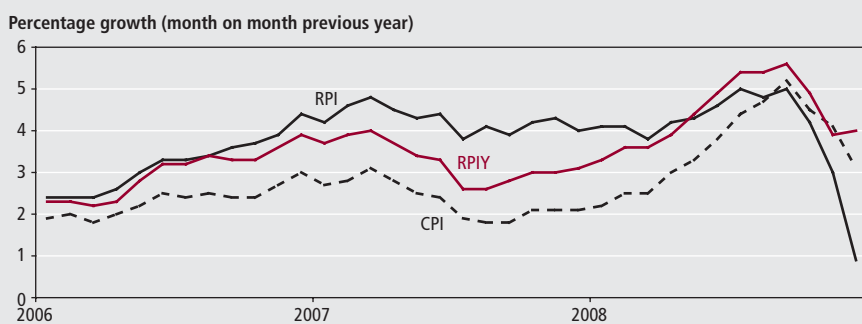
Consumer Price Index (CPI) annual inflation fell to 3.1 per cent in December, down from 4.1 per cent in November (**Figure 13**). The largest

Figure 12
Vacancies and redundancies



Source: Office for National Statistics

Figure 13
Consumer price inflation



Source: Office for National Statistics

contribution to the 1 percentage point change came from the temporary reduction in the rate of Value Added Tax (VAT) that was announced in last year's Pre-Budget Report and implemented in December.

Retail Prices Index (RPI) annual inflation fell from 3 per cent to 0.9 per cent during the final month of 2008 representing the fastest deceleration since 1980. Here the significance of the VAT reduction was actually exceeded by a large downward contribution from mortgage interest payments. In November the Bank of England cut its base rate by 1.5 percentage points, and the majority of lenders under pressure from the Government, passed on the cut to their mortgage rates. Housing depreciation

costs, which are related to overall house prices, also contributed to the slowdown in RPI.

It is these housing related factors that mainly account for the present differences between CPI and RPI inflation. Falling interest rates and house prices have now combined to push the RPI inflation rate below that of the CPI. Other things being equal RPI inflation would normally exceed the CPI rate due to a positive formula effect, which accounts for why the Bank of England inflation target was lowered from 2.5 per cent to 2 per cent when the target variable changed from RPI to CPI inflation.

RPIY inflation is essentially the RPI minus the contributions of changes to mortgage interest payments and indirect

taxes. Therefore, it largely excludes the effects of the VAT and interest rate reductions made in December. It can be seen that these have had a large impact on the index. RPIY annual inflation was 4 per cent in December compared to 0.9 per cent for the overall RPI.

The outlook is for inflation to turn to deflation during 2009 as the economic downturn and weak demand weighs on prices, and the impact of the large energy and food price increases that affected the index last summer fall out of the calculation and are reversed. Consensus opinion of city and other independent forecasts is for CPI inflation to fall to 0.4 per cent and RPI inflation to -1.4 per cent by the end of 2009.

Independent forecasts

January 2009

UK forecasts

The tables below supplement the Economic Review by providing a forward-looking view of the UK economy. The tables show the average and range of independent forecasts for 2008 and 2009 and are extracted from HM Treasury's Forecasts for the UK Economy.

2008

	Average	Lowest	Highest
GDP growth (per cent)	0.8	0.6	1.0
Inflation rate (Q4, per cent)			
CPI	3.9	3.5	4.9
RPI	3.1	2.6	4.2
Claimant count (Q4, million)	1.08	0.95	1.20
Current account (£ billion)	-34.0	-61.0	-22.0
Public Sector Net Borrowing (2008-09, £ billion)	76.8	56.9	90.0

2009

	Average	Lowest	Highest
GDP growth (per cent)	-2.1	-3.2	-0.5
Inflation rate (Q4, per cent)			
CPI	0.5	-0.9	2.1
RPI	-1.3	-3.3	0.8
Claimant count (Q4, million)	1.81	1.35	2.10
Current account (£ billion)	-34.1	-93.0	2.0
Public Sector Net Borrowing (2009-10, £ billion)	121.7	83.7	143.9

Notes

Forecast for the UK economy gives more detailed forecasts, and is published monthly by HM Treasury. It is available on the Treasury's website at: www.hm-treasury.gov.uk/economic_data_and_tools/data_index.cfm

Selected world forecasts

The tables below supplement the Economic Review by providing a forward-looking view of the world economy. The tables show forecasts for a range of economic indicators taken from *Economic Outlook* (November 2008), published by OECD (Organisation for Economic Co-operation and Development).

2008

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	1.4	0.5	1.0	1.4
Consumer price (percentage change from previous year)	3.6	1.4	3.4	3.3
Unemployment rate (per cent of the labour force)	5.7	4.1	7.4	5.9
Current account (as a percentage of GDP)	-4.9	3.8	-0.4	-1.5
Fiscal balance (as a percentage of GDP)	-5.3	-1.4	-1.4	-2.5

2009

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	-0.9	-0.1	-0.6	-0.4
Consumer price (percentage change from previous year)	1.2	0.3	1.4	1.7
Unemployment rate (per cent of the labour force)	7.3	4.4	8.6	6.9
Current account (as a percentage of GDP)	-3.9	4.3	-0.1	-1.1
Fiscal balance (as a percentage of GDP)	-6.7	-3.3	-2.2	-3.8

Notes

The OECD *Economic Outlook* is published bi-annually. Further information about this publication can be found at www.oecd.org/eco/Economic_Outlook

Key indicators

The data in this table support the Economic review by providing some of the latest estimates of Key indicators.

Seasonally adjusted unless otherwise stated									
	Source CDID	2007	2008	2008 Q2	2008 Q3	2008 Q4	2008 Oct	2008 Nov	2008 Dec
GDP growth – chained volume measures (CVM)									
Gross domestic product at market prices	ABMI	3.0	0.7	0.0	–0.6	–1.5	..	..	..
Output growth – chained volume measures (CVM)									
Gross value added (GVA) at basic prices	ABMM	3.0	0.7	0.0	–0.6	–1.5	..	..	..
Industrial production	CKYW	0.4	–2.5	–0.9	–1.5	–3.9	–1.6	–2.3	..
Manufacturing	CKYY	0.6	–2.3	–1.0	–1.5	–4.6	–1.4	–2.9	..
Construction	GDQB	2.8	1.6	–0.5	–0.2	–1.1	..	..	..
Services	GDQS	3.6	1.4	0.3	–0.5	–1.0	..	..	..
Oil and gas extraction	CKZO	–2.4	..	0.0	–0.7	..	–6.9	2.0	..
Electricity, gas and water supply	CKYZ	1.1	0.2	–0.4	–0.6	–0.2	1.9	–1.6	..
Business services and finance	GDQN	5.6	2.4	0.5	–0.6	–0.5	..	..	..
Household demand									
Retail sales volume growth	EAPS	4.3	3.5	0.5	–0.1	0.6	–0.2	0.3	1.6
Household final consumption expenditure growth (CVM)	ABJR	3.0	..	–0.3	–0.2	..	..	..	..
GB new registrations of cars (thousands) ¹	BCGT	2,390	2,112	557	542	338	128	101	109
Labour market^{2,3}									
Employment: 16 and over (thousands)	MGRZ	29,222	..	29,505	29,407	..	29,393	..	..
Employment rate: working age (%)	MGSU	74.6	..	74.7	74.4	..	74.2	..	..
Workforce jobs (thousands)	DYDC	31,471	31,661	31,661	31,527	..	..	..	..
Total actual weekly hours of work: all workers (millions)	YBUS	936.6	..	939.9	940.9	..	935.8	..	..
Unemployment: 16 and over (thousands)	MGSC	1,653	..	1,685	1,825	..	1,923	..	..
Unemployment rate: 16 and over (%)	MG SX	5.3	..	5.4	5.8	..	6.1	..	..
Claimant count (thousands)	BCJD	863.3	902.2	826.5	908.3	1,077.6	996.2	1,079.3	1,157.2
Economically active: 16 and over (thousands)	MGSF	30,875	..	31,190	31,232	..	31,316	..	..
Economic activity rate: working age (%)	MGSO	78.9	..	79.1	79.1	..	79.2	..	..
Economically inactive: working age (thousands)	YBSN	7,940	..	7,872	7,887	..	7,856	..	..
Economic inactivity rate: working age (%)	YBTL	21.1	..	20.9	20.9	..	20.8	..	..
Vacancies (thousands)	AP2Y	660	616	649	599	530	582	559	530
Redundancies (thousands)	BEAO	127	..	127	156	..	225	..	..
Productivity and earnings annual growth									
GB average earnings (including bonuses) ³	LNNC	..	..	3.5	3.3	..	3.3	..	..
GB average earnings (excluding bonuses) ³	JQDY	..	..	3.7	3.6	..	3.6	3.6	..
Whole economy productivity (output per worker)	A4YN	..	..	0.7	–0.2	..	..	..	..
Manufacturing productivity (output per job)	LOUV	..	..	..	..	..	–0.1	–1.4	..
Unit wage costs: whole economy	LOJE	..	..	2.2	3.0	..	..	..	..
Unit wage costs: manufacturing	LOJF	..	..	..	..	..	3.1	..	..
Business demand									
Business investment growth (CVM)	NPEL	9.9	..	1.2	–1.3	..	..	..	..
Government demand									
Government final consumption expenditure growth	NMRY	1.7	..	0.7	0.6	..	..	..	..
Prices (12-monthly percentage change – except oil prices)¹									
Consumer prices index	D7G7	2.3	3.6	3.4	4.8	3.9	4.5	4.1	3.1
Retail prices index	CZBH	4.3	4.0	4.4	5.0	2.7	4.2	3.0	0.9
Retail prices index (excluding mortgage interest payments)	CDKQ	3.2	4.3	4.4	5.3	3.8	4.7	3.9	2.8
Producer output prices (excluding FBTP) ^{4,5}	PLL V	1.9	4.7	5.2	5.9	5.0	5.0	5.0	5.0
Producer input prices ⁵	RNNK	3.0	21.8	29.9	28.2	9.6	16.2	8.6	4.3
Oil price: sterling (£ per barrel)	ETXR	36.11	52.10	62.35	61.64	35.69	43.45	34.50	29.13
Oil price: dollars (\$ per barrel)	ETXQ	72.44	98.37	122.87	116.89	57.24	73.68	54.75	43.28

Seasonally adjusted unless otherwise stated									
	Source CDID	2007	2008	2008 Q2	2008 Q3	2008 Q4	2008 Oct	2008 Nov	2008 Dec
Financial markets¹									
Sterling ERI (January 2005=100)	BK67	103.5	90.9	92.9	91.6	83.6	89.3	83.4	78.1
Average exchange rate /US\$	AUSS	2.0022	1.8528	1.9705	1.8918	1.5699	1.6900	1.5338	1.4859
Average exchange rate /Euro	THAP	1.4619	1.2588	1.2615	1.2586	..	1.2718	1.2041	1.1043
3-month inter-bank rate	HSAJ	5.95	2.75	5.88	6.15	2.75	5.85	3.85	2.75
Selected retail banks: base rate	ZCMG						4.50	3.00	2.00
3-month interest rate on US Treasury bills	LUST	3.29	0.10	1.87	0.90	0.10	0.44	0.01	0.10
Trade and the balance of payments									
UK balance on trade in goods (£m)	BOKI	-89,253	..	-23,379	-23,578	..	-7,631	-8,330	..
Exports of services (£m)	IKBB	149,355	..	41,025	40,923	..	13,519	13,460	..
Non-EU balance on trade in goods (£m)	LGDT	-47,788	..	-13,260	-14,580	..	-4,437	-5,304	..
Non-EU exports of goods (excl oil & erratics) ⁶	SHDJ	116.5	..	127.5	128.9	..	122.9	107.1	..
Non-EU imports of goods (excl oil & erratics) ⁶	SHED	131.6	..	132.2	135.5	..	128.9	131.4	..
Non-EU import and price index (excl oil) ⁶	LKWQ	104.2	..	113.3	115.8	..	120.8	125.1	..
Non-EU export and price index (excl oil) ⁶	LKVX	102.5	..	108.1	109.8	..	113.3	116.8	..
Monetary conditions/government finances									
Narrow money: notes and coin (year on year percentage growth) ⁷	VQUU	5.8	..	5.7	5.1	..	5.9	6.8	..
M4 (year on year percentage growth)	VQJW	12.7	..	11.4	12.2	..	15.3	16.4	..
Public sector net borrowing (£m)	-ANNX	35,011	69,348	22,348	14,769	34,052	2,654	16,456	14,942
Net lending to consumers (£m)	RLMH	13,206	..	3,190	2,201	..	754	751	..

External indicators – non-ONS statistics

		2008 Jun	2008 Jul	2008 Aug	2008 Sep	2008 Oct	2008 Nov	2008 Dec	2009 Jan
Activity and expectations									
CBI output expectations balance ¹	ETCU	2	-7	-13	-16	-31	-42	-42	-43
CBI optimism balance ¹	ETBV		-40			-60			-64
CBI price expectations balance	ETDQ	29	39	30	25	13	1	4	-15

Notes:

Source: Office for National Statistics

- 1 Not seasonally adjusted.
- 2 Annual data are the average of the four quarters except for workforce jobs (June).
- 3 Monthly data for vacancies and average earnings are averages of the three months ending in the month shown. Monthly data for all other series except claimant count are averages of the three months centred on the month shown.
- 4 FBTP: food, beverages, tobacco and petroleum.
- 5 Now derived from not seasonally adjusted series.
- 6 Volumes, 2003 = 100.
- 7 Replacement for series M0 which has ceased publication.

Further explanatory notes appear at the end of the Key times series section.

FEATURE

Gareth Clancy
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The labour market and the economy 20 years reviewed

SUMMARY

This article briefly considers a few of the changes in the labour market in the last 20 years and how these adjustments relate to the economy in the UK. It acknowledges that, during 2008, the timing of movements in output indicators and labour market statistics differed. To explore this, the economic background to 2008 is discussed, by presenting aggregate economic indicators for a selection of international trade partners and looking at other statistics produced by the Office for National Statistics. Finally, the developments in commodity prices and government policy over the last year are recognised.

The labour market plays an important part in the economy, accounting for over half of the UK's national income. In the three months to June 2008, the share of national income related to the compensation of employees (wages, salaries and employers' social contributions) comprised around 52 per cent of national income (measured as compensation of employees divided by Gross National Income at market prices). Historically, the compensation of employees has accounted for a larger share of national income; nonetheless, it still remains imperative to closely analyse the labour market for macroeconomic purposes.

Labour market position in the economy

The labour market influences aggregate demand through consumption and investment, and is a key component of aggregate supply. As a factor of production in aggregate supply, the levels of employment and jobs in the UK economy represent the inputs required by firms to provide goods and services.

The relationship between macroeconomic indicators and the labour market is complex because of its influence on both supply and demand. However, over the past decade, the positive growth in Gross Domestic Product (GDP) has been accompanied by increasing employment levels. These increases have been made possible by a steady upward trend in labour demand (driven by employers), and just as significantly changes in the labour supply (which can result from

population changes, labour market policies and participation rates).¹

One of the more recent significant changes in labour supply has been as a result of international migration. Statistics released by the Office for National Statistics (ONS) in August 2008 showed that the population increased by almost 3 per cent between mid-2001 and mid-2007.² Net inward migration to the UK played an important role in this increase, accounting for 52 per cent of the increase in the 12 months to mid-2007. From an economic growth perspective, an increasing population is important because of the impact on the potential labour supply. An indication of how this has changed is given by the growth in National Insurance number applications from adult overseas nationals, published by the Department for Work and Pensions (DWP), which doubled between the financial years 2002/03 and 2007/08.³

In addition to the net inflow of overseas nationals, the labour supply has been increased by the continued rise in labour market participation by females. In the three months to September 1980, the female employment rate stood at 45.1 per cent. In the same periods in 1990 and 2008, it was 50.4 and 53.8 per cent, respectively. Offsetting this, male participation has fallen since 1980, and the average hours worked by individuals have been on a downward trend since 1990.

The relationship between levels of demand and supply within the labour market is important because of two

alternative scenarios: labour market tightness, arising when demand is not sufficiently met by supply; and labour market slackness, which is when supply exceeds demand. The first scenario can lead to rising earnings growth, while the second can cause a slowdown or decline in earnings growth.

Rapid earnings growth and the consequent upward pressure on overall labour costs is one key mechanism through which inflationary pressure may be transmitted from the labour market to consumer prices (another being commodity prices). The increasing labour supply has influenced earnings in certain sectors of the labour market reducing the size of 'cost-push' pressures.

Nominal earnings growth has been less volatile during the last two decades than it was previously. There are a number of possible reasons for this more settled wage growth position, which include factors such as changes in the labour market and industrial structure and the drivers affecting changes in the behaviour of the unemployed and the economically inactive.

For example, industrial structure has seen a continuing switch from manufacturing to services. Service sector jobs may be generally more flexible (in terms of hiring and firing); similarly, they are often seen as being less unionised. Both of these factors may reduce wage pressures within the labour market.

On a more technical note, studies have shown that the non-accelerating inflation rate of unemployment (NAIRU), that is, the rate of unemployment consistent with sustainable or trend output growth, may have changed. Put simply, it is the rate of unemployment below which inflation will start to accelerate. During the early 1980s, the UK NAIRU was widely perceived as being around 7 per cent. However, unemployment has consistently been below

this figure since 1997 without signs of significant inflationary pressure. For these reasons, the NAIRU would appear to have fallen. This could be a result of the factors above and the labour market reforms of the 1980s and 1990s increasing labour market flexibility.⁴

Any assessment of wage pressures also needs to take account of the effect of the economically inactive on total labour supply, because a significant proportion of people entering employment do so directly from inactivity, and are never classified as unemployed. An increase in the potential labour supply, resulting from either growth in the number of inactive through demographic changes or an increase in the numbers among them who are most likely to seek work, can reduce pressures within the labour market. However, the inactivity rate has not changed much over the last 30 years. The rate peaked at 22.8 per cent in the early 1980s, before dipping to 19.4 per cent later that decade, but during the 1990s and more recently it was between 21 to 22 per cent.

Another factor affecting wage pressures may have been an impact from the monetary policy framework introduced in recent years, initially with the move to direct inflation targeting in the early 1990s and then the introduction of the independent Monetary Policy Committee in 1997. If these measures have affected individuals' expectations of inflation, they may have in turn affected wage claims. Greater credibility for policy should lead individuals to expect lower, more stable, inflation, thereby tending to encourage lower pay settlements in line with those expectations.

Labour market coherence with economic performance

Since 2007, commentators on the UK economy have been forecasting a

slowdown in economic growth and even the recession.⁵ However, what is actually meant by recession can differ according to the commentator. This is because although two quarters of negative economic growth is certainly a good sign of a weakened economy, it is possible for unemployment to rise, or GDP per capita to fall without negative GDP growth. Because of this, it is important to understand the direction of commodity prices and imports (as the pressures on domestic production), the long-term potential output and actual output for an economy, financial markets and inflation. Early indicators of pressures on the UK economy, and hence the labour market, included the decline in the financial markets (see FTSE100 in the past two years) and the increase in commodity prices since 2005.

Labour market indicators were not as quick to falter. Nonetheless, the impact of the decline in GDP is now manifesting itself in labour statistics. The fact that the labour market has lagged behind other indicators is because of economic reasons. The most important of these is that firing employees is not always the most efficient or rational decision for firms because of the fixed costs associated with hiring.

In addition, the financial and business services sector is now one of the most important sectors in the economy. This increased role in the UK economy has meant that different economic influences have become more important to the labour market position than when manufacturing was the main economic driver. One of the main factors influencing the expectations of a slowdown or recession has been the now infamous 'credit crisis' (see **Box 1**). Although the sub-prime market had been identified as a threat to US economic growth in 2007, it took financial institutions across the world over a year to fully appreciate the consequences of

Box 1

The impact of the credit crisis on the labour market

The credit crisis has severely limited the ability of individuals and companies to borrow (gain credit), either to purchase goods or invest, both in the UK and globally. The problem is rooted in the way in which bad risks (debt) were packaged together by commercial and investment banks and sold on to each other. The most significant, and easily understood, bad risk was the sub-prime market that emerged in the US during 2007. The sub-prime market was typified by high-risk lending to mortgage customers who became unable to pay their instalments. However, the banks were able to carry out these innovative operations because of the ease in which debts could be spread across international financial markets, and insufficient regulation to prevent overly risky practices.

During 2008, as more banks feared they were exposed to bad debts, trust in them, of each other, and by the public, eroded. The distrust between banks was extremely costly for the economy because lending effectively ground to a halt; uncertainty therefore increased and confidence reduced in the potential of the economy. As a result of this, the labour market had to suffer at some point. As the availability of credit impacted on consumers, they were forced to revise their demand for goods and services. At the same time, companies could no longer invest in expanding output, or did not have sufficient liquidity to cover costs and therefore needed to reduce output. With less demand in the economy, there was inevitably a reduced need for labour.

their exposure to its collapse. In the UK, the culmination was the near collapse of Northern Rock, in early 2008, and subsequent injections of liquidity into markets by the Government and Bank of England. In the UK financial sector, the most aggressive labour market restructuring began following the fate of international banking brands in September 2008 (for example, the bankruptcy of Lehman Brothers and takeover of Merrill Lynch).

The economic background to 2008

The economic position of the UK in 2008 was perhaps more obviously linked to the global economic picture than in recent years. This has been highlighted by the path of world commodity prices⁶ since 2005, the unravelling of the financial crisis and the realisation that commercial banks in major economies are heavily interdependent.

In the first three quarters of 2008, and the three preceding calendar years, the UK's major international trading partners were the US, Germany, France and China, as measured by trade in goods. These relationships are important for the domestic labour market because UK exports require UK labour inputs, and imports to the UK mean that UK labour is not needed as an input.

Figure 1 shows that, between 2000 and 2003, economic growth was more volatile in France, Germany and the US than in the UK, even recording negative figures. Between 2003 and 2006, the UK, France and the US economies were similar, fluctuating around 0.5 per cent growth. GDP in Germany during this period remained unstable, but moved upwards to a peak of 1.5 per cent in 2006. In 2007, the quarterly growth figures showed weakening economic prospects for three of the four

economic areas: the US recorded a second quarter of zero growth within the calendar year, and France and the UK began to consistently record reduced growth figures. Germany dropped below 0.5 per cent growth in the first quarter of 2007, before recording 1.4 per cent growth in the first quarter of 2008. However, this spike in growth quickly turned into a contraction in the economy in the second quarter.

The deteriorating economic growth culminated in the first negative output growth for some time in all four economies (since 1992 in the UK, since 2001 in the US, since 2002 in France and since 2004 in Germany). It can be seen in Figure 1 that the timing of the negative growth differed slightly. In 2008, the US recorded two periods of weak positive growth, before reporting negative growth in the third quarter. The negative growth occurred in the second quarter of 2008 in France and Germany; however, the latest quarter growth figures shows that the German economy has contracted again, while the French economy has not. Finally, UK output reduced in successive quarters from the second quarter of 2007, and it recorded negative growth in the third quarter of 2008. The third quarter figures for the UK and US confirmed that their economies had moved from a slowdown in output to a contraction of the economy.

In terms of employment rates, the impact of the downturn of the economy on the labour market in the UK remained unclear throughout 2007, as output moved towards negative growth. In fact, the employment rate of the population below state pension age increased in 2007, from 74.4 per cent in the three months to March to 74.8 per cent in the three months to December. In 2008, the employment rate began to reflect the

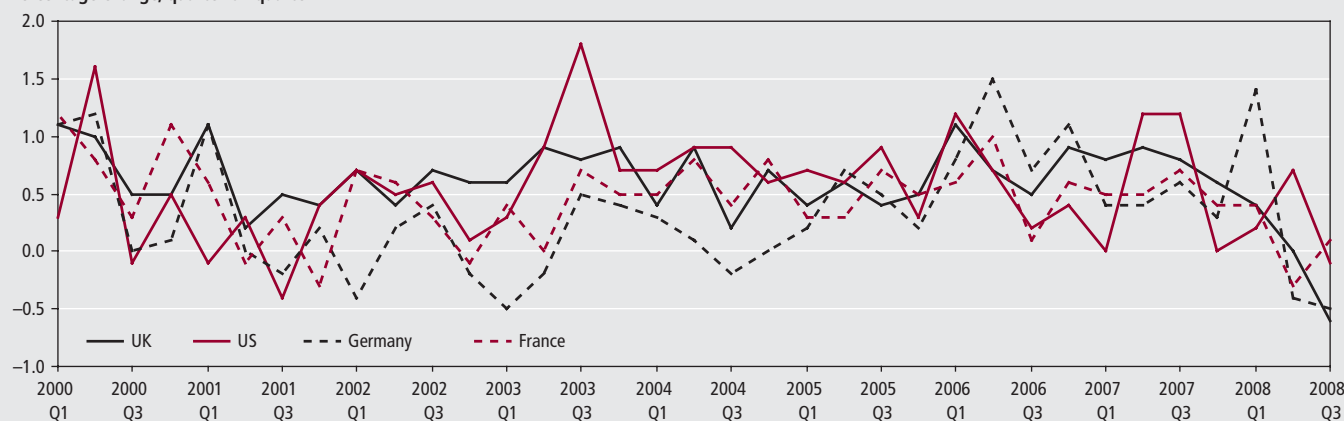
slowdown in the output indicators, as it fell almost continuously to reach 74.2 per cent in the three months to September.

Looking at both the unemployment and employment rates, a more coherent picture emerges. The slowdown in economic output can be traced on the unemployment series shown in Figure 2. The UK unemployment rate first began to rise in during 2005, before levelling off in 2006. The small fall in the unemployment rate in 2007 was replaced by five successive increases in 2008. In September 2008, the unemployment rate was 6.0 per cent, which it had not reached since 1999. In the US, unemployment increased from a low of 4.4 per cent in March 2007 to 6.7 per cent in November 2008. In contrast, the employment rate for those aged 16 and over remained close to the rate of the past four years of 66 per cent for most of 2007 and 2008. However, both November and December 2008 were below 66 per cent. Similarly, the labour market performance of the EU15 (which does include the UK) did not appear to deteriorate, when only the employment rate is considered. However, the increase in the unemployment rate throughout 2008 presents a similar picture to that of the UK and the US.

Indicators of the slowdown can also be seen in other ONS statistics. For example, there have been signs that growth in consumer demand has responded to the weak economic outlook. Quarterly growth in UK household final consumption expenditure recorded the first successive negative growth figures, in the second and third quarters of 2008, since the last officially recognised recession in 1991. Meanwhile, in the third quarter, the UK recorded zero per cent retail sales growth. Although there have been periods of weak

Figure 1
GDP growth

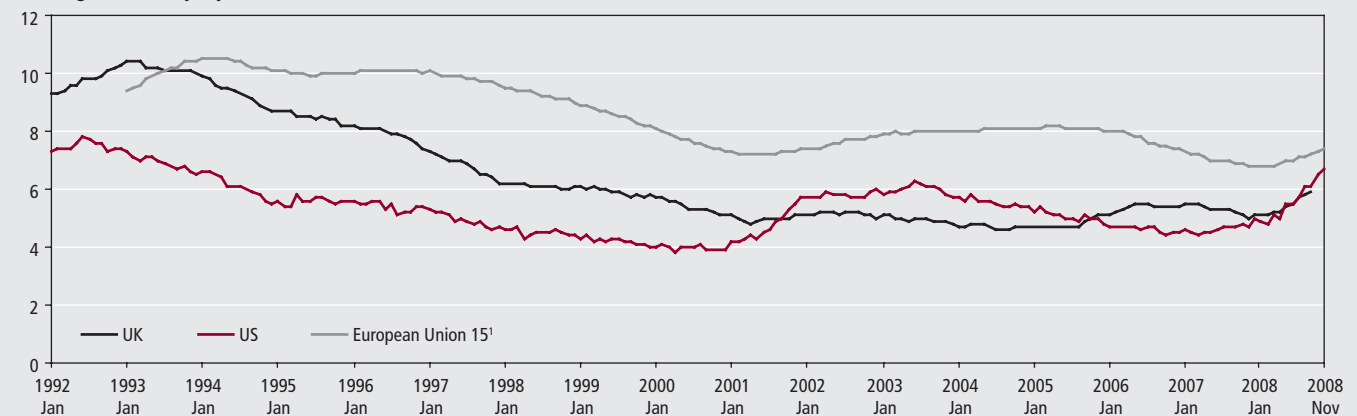
Percentage change, quarter on quarter



Source: Eurostat, National Accounts

Figure 2
Monthly unemployment rates

Percentages, seasonally adjusted



Notes:

Source: Eurostat

1 European Union 15 data are only available from 1993 and include the UK. The EU15 consists of Belgium, France, Germany, Italy, Luxembourg, Netherlands, Ireland, Denmark, Portugal, Greece, Spain, Austria, Finland, Sweden and the UK.

growth since the first quarter of 2006 (the last negative growth period), the quarter-on-quarter growth in sales has been predominantly above 1 per cent and close to 2 per cent.

Another sign of reduced labour demand is a reduction in real earnings (although this does assume that inflation is not falling as well). In the late 1990s, quarterly economic growth exceeded 0.5 per cent, as shown in Figure 1. At the same time as real earnings were increasing, both average earnings including and excluding bonuses were predominantly increasing, by 2 percentage points more than inflation (as measured by the Retail Prices Index (RPI)). A similar differential between the series existed between 2000 and 2005. However, since 2006, both average earnings indices have been much closer to the RPI, and in 2008 the RPI was higher than average earnings in the second and third quarters.

Other economic factors in 2008

Alongside the economic factors already mentioned in 2008, there were a number of specific events or factors that had an impact on the labour market during the year.

The most obvious was the development of global commodity prices throughout the year. Although some of the prices have now eased off, the scale of the increase led to people drawing comparisons with the 1970s. The International Monetary Fund reported that oil prices more than doubled between December 2006 and mid-July 2008, and over a similar time period metal prices also increased drastically. As a developed economy reliant on oil and metals for either

consumption or production, this inevitably had repercussions for aggregate demand in the UK.

Inevitably, the large increases in global commodity prices fed through to the domestic UK economy, and subsequently introduced inflationary pressures in 2007 and early 2008. The consequence of this was that the Bank of England had to be even more mindful of inflationary pressures when setting interest rates at a time when the threats to economic growth were increasing.

Government policy developments will also have impacted on the labour market. In 2008, the DWP announced proposals to influence the labour supply through incapacity benefits and lone-parent payments among other policy initiatives. HM Treasury and HM Revenue & Customs made changes to the tax system in the 2008 Budget, including abolishing the 10 per cent tax rate introduced in the previous Budget.⁷ However, it is likely that the most important government interventions for 2008 and the future related to monetary, fiscal and financial policy designed to influence the wider economy. In September 2008, this involved providing £200 billion to the Bank of England's special liquidity scheme and £50 billion to a bank recapitalisation fund. In addition to this, HM Treasury announced that public investment from 2010/11 would be brought forward to 2008/09 and 2009/10, and a temporary VAT reduction (to 15 per cent) would be in place between December 2008 and 2009.

Notes

- 1 Participation rates by gender are provided in the Labour Market First Release at www.statistics.gov.uk/statbase/product.asp?vlnk=1944
- 2 Estimates of the UK population can be found at www.statistics.gov.uk/cci/nugget.asp?id=6 and at www.statistics.gov.uk/pdfdir/popest0808.pdf
- 3 The National Insurance number applications are published by the Department for Work and Pensions at www.dwp.gov.uk/asd/tabtool.asp#ni_alloc
- 4 An article discussing the non-accelerating inflation rate of unemployment can be found at www.bankofengland.co.uk/publications/externalmpcpapers/extmpcpaper0012.pdf
- 5 A discussion of how a recession is measured can be found on *The Economist* website at www.economist.com/finance/displaystory.cfm?story_id=12207987
- 6 A discussion on world commodity prices can be found on the International Monetary Fund (IMF) website at www.imf.org/external/pubs/ft/weo/2008/02/pdf/c3.pdf
- 7 The Pre-Budget and Budget report for 2007 and 2008 can be found on the HM Treasury website at www.hm-treasury.gov.uk/prebud_pbr08_index.htm

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FEATURE

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Labour demand: The need for workers

SUMMARY

This article looks at the labour input actually employed by private firms and public organisations. This gives labour demand as the total number of jobs in the economy and the number of hours worked by people in employment. However, at any point in time, part of an employer's needs for labour may remain unmet. Unmet labour demand is presented through statistics on vacancies, and also gives an insight into whether job creation is falling or rising. In addition, the article looks at other issues relating to the demand for labour, namely job separations and re-employment, skills, and the relationship between labour demand and the economic cycle.

Labour demand is based on microeconomic foundations for each individual employer. Both private firms and public sector bodies will seek to employ an optimal combination of labour and capital. This complex calculation is the basis on which employers decide their level of labour demand, enabling the use of labour as a key input in production. Therefore, labour demand is 'derived demand' because, before firms need workers, there must first be a demand for the goods and services they produce.

Statistics of labour demand are designed to illustrate the need for labour by employers for producing their output. The statistical picture is complicated, as employers may fill vacancies with people who have more than one job, either with them, or another employer. A further complication is when people share the same job. Also, in some enterprises, part or all the demand for extra labour may be met by a self-employed person providing extra input.

Jobs and hours of work

Employers have interest in labour as an input in producing goods and services. This input can vary in two ways: first, through the number of people a firm employs, which is captured by statistics on the number of jobs in the economy, and second, through the number of hours employed people work, which is captured by statistics on hours of work.

Jobs

The number of jobs in the UK economy has been following an upward trend since

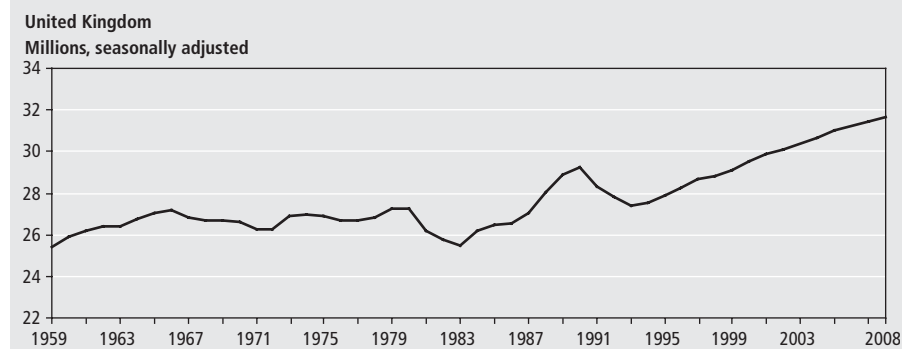
1959, when the current series first became available.¹ There have been noticeable variations around this trend, linked closely to the economic cycle. Two examples of this are the fall in the number of jobs in the periods following 1979 and 1989, which coincided with two periods of negative Gross Domestic Product (GDP) growth.^{2,3} In the three months to June 2008, there were 31.7 million jobs in the economy, which was a record high since comparable records began (**Figure 1**). However, the three months to September 2008 showed a fall to 31.5 million jobs, reflecting a fall in labour demand.

Employee jobs represent most jobs in the UK. The number of employee jobs has grown from 22.8 million jobs in the three months to June 1959 to 27.2 million in the three months to June 2008, equivalent to an increase of 19.3 per cent. However, there has been a decline in the percentage of all jobs which are employee jobs, from 89.5 per cent in 1959 to 86.0 per cent in 2008. This reflects the growth in self-employment over the period.

Jobs by industry

Figure 2 shows, for the three months to September, the number of employee jobs by industry in 1978 (when a breakdown by industry first became available) and 2008. The largest increase has been in the finance and business services industry, where the number has more than doubled. There are also large increases in public administration, education and health (up by 42.5 per cent), distribution, hotels and restaurants (up by 35.1 per cent), and other

Figure 1
Workforce jobs, 1959 to 2008¹

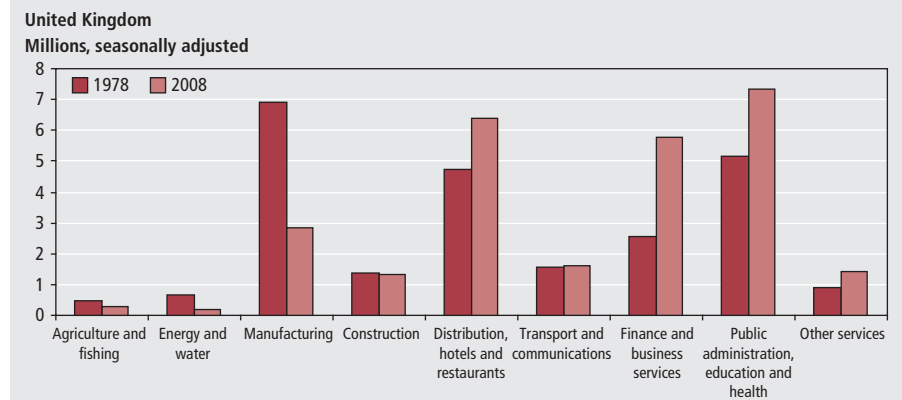


Note:

1 Three months to June.

Source: *Employee Jobs*

Figure 2
Employee jobs: by industry, 1978 and 2008¹



Note:

1 Three months to September.

Source: *Employee Jobs*

services, which includes, for example, the activities of employers' organisations and of libraries (up by 56.4 per cent). In contrast, the extraction and production industries, made up of agriculture and fishing, energy and water, manufacturing, and construction, showed a combined fall of 50.8 per cent, from 9.4 million employee jobs in 1978 to 4.6 million in 2008. Manufacturing alone accounted for around 85.3 per cent of this decline, with the number of employee jobs in this sector falling from 6.9 million in 1978 to 2.8 million in 2008.

These job figures reflect the structural changes that have taken place in the UK economy, with a declining proportion of total output produced by the extraction and production industries, and an increasing proportion of total output produced by the service sector. Employee jobs in the service sector comprised 61.4 per cent of all employee jobs in 1978, compared with 83.0 per cent in 2008. Over the same period, the percentage of employee jobs in manufacturing fell from 28.4 per cent to only 10.4 per cent (**Figure 3**).

Job densities

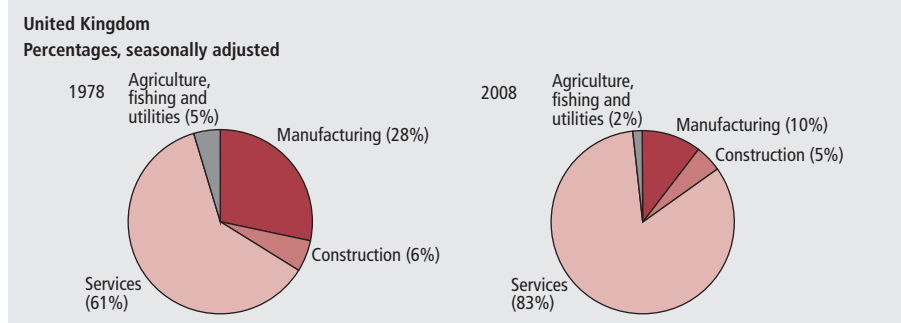
Estimates of the number of jobs in local authority areas in the UK can be compared with the population below state pension age to produce estimates of job densities (**Map 1**). These provide an indication of the level of labour demand from employers in an area (number of filled jobs), against the potential labour supply (resident population below state

pension age in an area) and should not be confused with the employment rate (which compares resident employment levels to the resident population). The main data sources for estimates of the number of jobs are employer surveys. These are then compared with the official mid-year population estimates for people below state pension age. In the analysis for this article, below state pension age is defined as all males aged between 16 to 64, and all females aged between 16 to 59. This reflects the different ages at which males and females currently become eligible for the state pension.

Areas where the job density is greater than one show more jobs in an area than residents who are below state pension age. This can signify the presence of inward commuting (although care needs to be taken in interpretation as an individual can have more than one job). Estimates of less than one show there are fewer jobs in an area than residents below state pension age. This is a possible sign of outward commuting (although, again, caution needs to be used as not all residents below state pension age in an area would want or be able to work). Although it is not covered in this article, a further insight into these patterns can be gained by comparing the job density rates for an area with the employment rates. For example, an area with a relatively low job density may still have a relatively high employment rate, which suggests outward commuting.

Map 1 shows that metropolitan areas have higher job densities, compared with most rural or semi-rural unitary authorities. The influence of London and unitary authorities along the 'M4 corridor' can be traced by moving away from these two regions to the North East, South East and South West, where the shading becomes relatively lighter (excluding

Figure 3
Composition of employee jobs: by broad industry group, 1978 and 2008¹



Note:

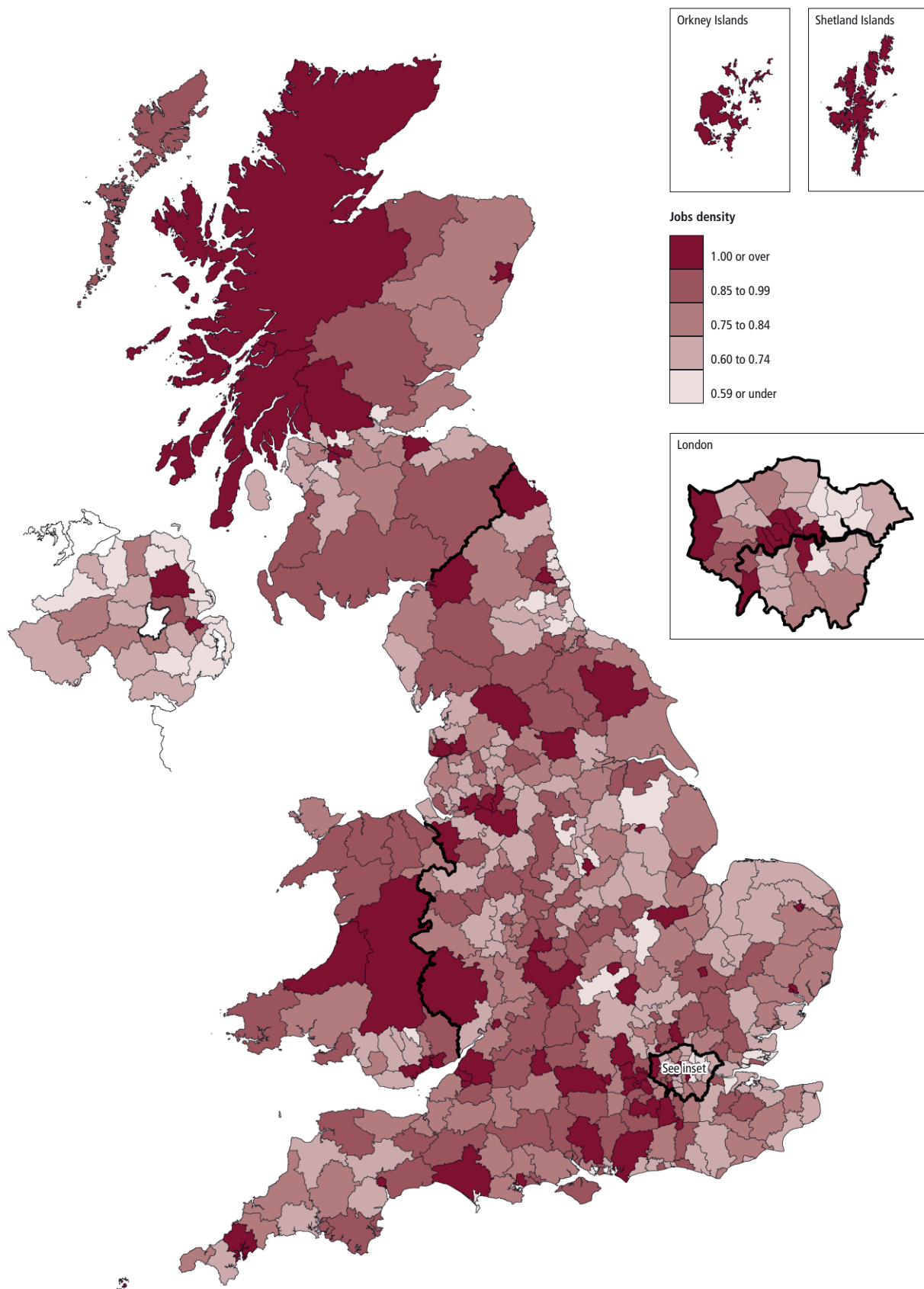
1 Three months to September.

Source: *Employee Jobs*

Map 1

Job densities:¹ by unitary authority and local authority district, 2006

United Kingdom

**Note:**

- ¹ The job density for each local authority is calculated from the number of employees taken from the Annual Business Inquiry, which refers to December of each year; they also include self-employed, HM Forces and government-supported trainees. Job densities are calculated as the number of jobs per resident of working age (16 to 59/64).

metropolitan or authorities representing large conurbations). The insert for London highlights how the concentration of jobs and population, and commuting patterns, influence this map. Broadly speaking, there is an east/west divide around the City of London authority, which is an example of an authority with a high number of jobs and a fairly low resident population. Examples of authorities with darker shading for slightly different reasons include those in north-western Scotland and mid-Wales, which are sparsely populated.

Hours of work

As mentioned earlier, employers may vary the labour input to their production process by adjusting the number of hours that employed people work. In the short run, a firm is more likely to respond to a change in the demand for its product by adjusting hours worked rather than the number of people employed. This is because firms face costs in adjusting the size of their workforce, such as training, administration and search costs. In the presence of such costs, firms may find it more profitable to adjust hours of work rather than the number of jobs.

Variation in hours worked is viewed as an indicator that is relatively responsive to changes in labour demand. For example, consider a firm that faces an unexpected increase in the demand for its product. In the short run, to meet this increased demand, it may need its workers to work overtime. Statistics on the number of jobs will not capture this change in labour demand, as the number of people employed can remain unchanged. Statistics on hours will capture the change in labour demand, by reporting an increase in total hours worked.

Figure 4 shows total weekly hours of work in the UK since 1971 and the employment rate. Total hours of work have seen large cyclical variations, which relate closely to the economic cycle (note the reduction in hours and employment rate immediately following 1979 and 1989). In earlier years, this was closely matched by employment. However, since 1999, the employment rate has become much more stable, whereas hours worked have continued to show a steady increase.

The stability of the employment rate and the increase in total hours worked confirm the increase in employment levels over the period, but also point to the increase in potential labour supply of people below state pension age. In early 2008, total actual hours of work stood at 948 million,

exceeding the previous peak in total hours observed in 2005. Since this peak, the series has shown a slight downward movement to the most recent level of 938 million hours in the three months to September 2008.⁴

Movements in total hours of work arise as the combined effect of two forces: movements in average hours worked by individuals and movements in the number of people in employment.

Average hours worked by individuals have been on a downward trend since a peak at the end of 1994 (Figure 5). During periods of economic growth, like those experienced in the UK over the past ten years, this trend could reflect supply-side factors, for example, people increasingly choosing to work fewer hours or the increase in part-time working.

The downward trend in average hours of work implies that the growth in total hours of work observed throughout the 1990s was driven by gains in employment. Indeed, although average hours remain well below the levels seen in the early 1990s,

employment growth has increased by a larger percentage, thereby compensating for the decline in average hours.

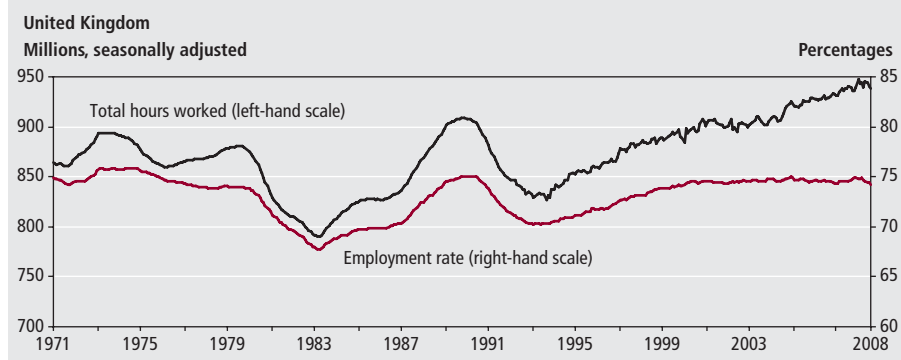
Vacancies

Despite the opportunity to vary the number of hours employees work, part of an employer's needs for labour may remain unmet. Statistics on vacancies provide estimates on the size of this unmet labour demand. Vacancies arise when creating new posts or former jobholders leave a post. These are an outward sign that employers are acting to recruit new employees. Vacancies also provide some insight into employers' behaviour, and can act as an indicator of changes in employers' opinions of economic conditions.

From a record high in the three months to March 2008 of around 687,000, reported vacancies fell to around 602,000 in the three months to September 2008. The latest three-monthly rolling averages for October and November show further decreases in the levels of vacancies reported. Looking

Figure 4

Total actual weekly hours of work¹ and employment rate,² 1971 to 2008



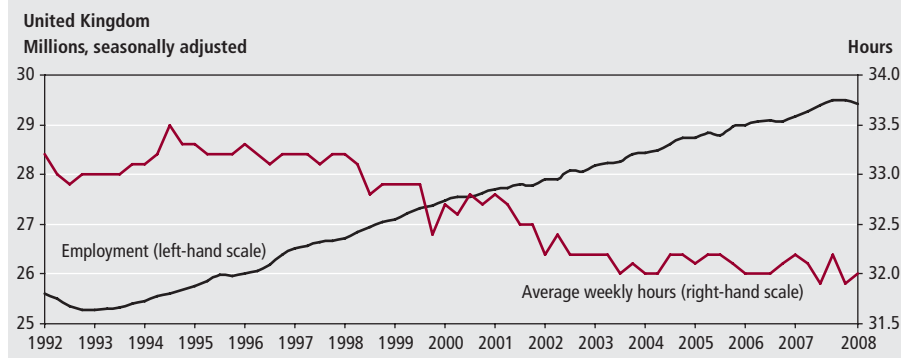
Notes:

- 1 Main and second job.
- 2 The employment rate is for people between 16 and 59/64 years of age.

Source: Labour Force Survey

Figure 5

Average weekly hours of work and total number of people in employment,¹ 1992 to 2008²



Note:

- 1 All aged 16 and over.
- 2 Each calendar quarter up to three months ending September 2008.

Source: Labour Force Survey

at vacancies by industry, these fluctuate around different levels, broadly reflecting the industry size and turnover levels. The industry with the largest number of recorded vacancies for the three months to September 2008 was distribution, hotels and restaurants, with around 163,000 vacancies (**Figure 6**). Education, health and public administration also showed a consistently higher level of vacancies than most other industries, recording around 159,000 vacancies for the same period. From 2001 to the middle of 2003, the finance and business service sector showed a significant fall in the number of vacancies, followed by an increase to a record high in August 2007 (177,000). However, since then, the series has fallen to a figure of around 144,000 in September 2008.

Job separations and re-employment

Job separations occur when an employee leaves a paid job or when an employee's job is removed. Increasing frequencies of job separation can be an indicator of changes in the labour market and the economy. In periods of economic growth, it is common to see employees leaving their job to seek better ones, while in periods of downturn, redundancies may increase.

Job separations can be voluntary, when an employee leaves a job of their own accord or involuntary, when an employer initiates the separation. Redundancies, dismissals and temporary jobs ending are classified as involuntary redundancies. All other reasons are classified as voluntary job separations, including resignations and retirement. There are well over twice as many voluntary job separations as there are involuntary ones.

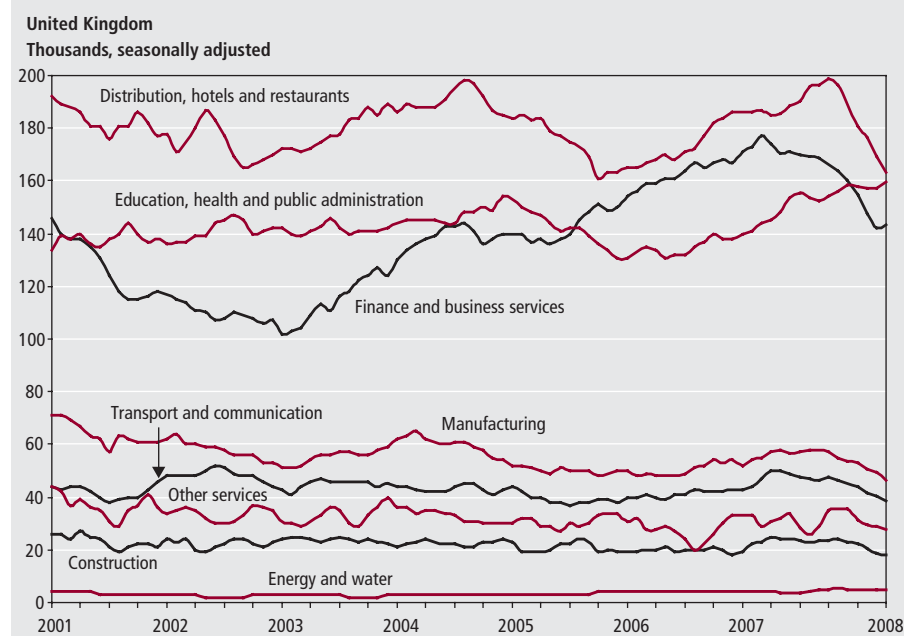
The position of job separations within the labour market can be ambiguous, unless interpreted in the overall context of the economy and/or demographic trends. Job separations may arise because of demand-side forces, for example, companies facing reduced demand for their products and, as such, needing a lower labour input. However, they may also arise because of supply-side forces, for example due to individuals' decisions to leave the labour market and enter retirement.

Job separations can be presented as levels or rates. Separation rates are the number of people below state pension age who separated from a paid job in the three months before interview divided by the number of people who said they were in employment for more than three months, plus those who had separated from a paid job.

Figure 7 shows voluntary and involuntary job separation rates for all people of working age from the three months to March 1997 to the three months to September 2008. Involuntary separations show the least change over the time period, the lowest being 1.0 per cent in the three months to June 2007 and June 2008, and the highest being 1.9 per cent in the three months to December 1998. The involuntary separation rate has not risen above 1.5 per cent since the three months ending March 2002. Voluntary job separation rates have shown more movement in the time period. They reached a low of 2.4 per cent in the three months to March 2006 and March 2008, and a high of 4.1 per cent in the three months to September 1998 and the three months to December in 1999 and 2000.

There is a strong seasonal pattern in job separations, with rates peaking in the three months to September and in the three months to December of every year. Typically, the rate in these quarters is between 0.6 and 1.1 percentage points higher than in the other quarters. This makes it difficult to use job separations as an indicator to assess the impact of reduced GDP growth. To overcome seasonality, a four-quarter average of job separations by reason for leaving is shown in **Table 1**. Two reasons stand out in terms of their effect on the overall movements in job separations: resignations and temporary workers. Resignations accounted for 39.8 per cent of the total in the 12 months to March 2008, while temporary job ending accounted for 14.0 per cent. Since 1998, there has been a fall in the total

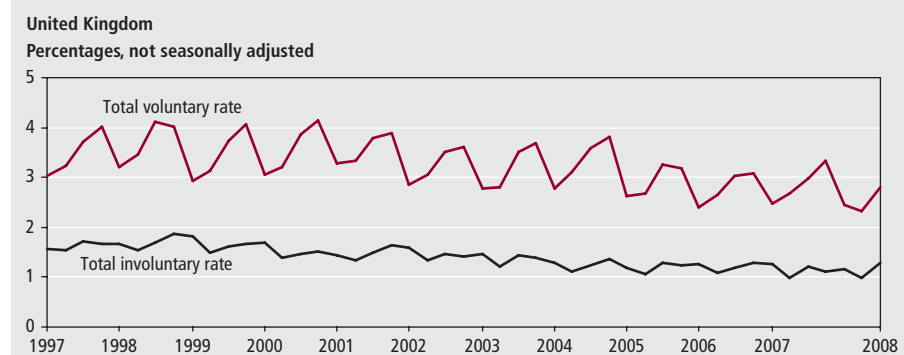
Figure 6
Vacancies: by industry, 2001 to 2008¹



Note: Source: Vacancy Survey

1 Rolling three-month averages up to three months ending September 2008.

Figure 7
Job separation rates,¹ 1997 to 2008²



Notes: Source: Labour Force Survey

1 Below state pension age.

2 Each calendar quarter up to three months ending September 2008.

Table 1

Job separations: by reason, 1998 to 2008¹

United Kingdom

Millions and percentages, not seasonally adjusted

	Involuntary separations				Voluntary separations							Total (millions)
	Dismissed	Made redundant voluntary	Temporary job ended	Total involuntary separations (millions)	Resigned	Gave up work for health reasons	Took early retirement	Retired at or after statutory retirement age	Gave up work for family personal reason	Left for some other reason	Total voluntary separations (millions)	
1998	3.0	11.9	16.5	1.6	30.3	3.4	1.6	0.6	9.7	23.0	3.5	5.2
1999	3.1	12.9	15.8	1.7	34.4	3.2	1.2	0.4	8.4	20.8	3.7	5.4
2000	3.0	12.9	15.2	1.6	35.1	3.4	1.4	0.5	8.2	20.3	3.6	5.2
2001	2.3	12.2	13.7	1.5	34.7	2.9	1.3	0.3	7.9	24.7	3.8	5.3
2002	2.3	14.3	13.3	1.6	33.2	3.3	1.0	0.5	7.2	24.9	3.6	5.2
2003	2.4	14.6	13.1	1.5	34.3	3.6	1.2	0.7	7.3	22.9	3.4	4.9
2004	2.8	12.6	13.6	1.4	34.2	3.5	1.4	0.5	7.0	24.4	3.4	4.8
2005	2.8	11.6	12.3	1.3	35.3	3.4	1.2	0.6	7.7	25.1	3.5	4.8
2006	2.9	12.9	13.5	1.3	35.9	3.3	1.6	0.6	7.0	22.3	3.1	4.4
2007	2.7	12.7	14.4	1.3	36.8	3.1	1.8	0.4	7.7	20.5	3.1	4.4
2008	2.9	10.8	14.0	1.2	39.8	2.9	1.6	0.4	7.4	20.3	3.1	4.3

Note:

1 Twelve months ending March.

Source: Labour Force Survey

number of job separations, from 5.2 million to 4.3 million. The number of temporary jobs ending has decreased from around 853,000 in the 12 months to March 1998 to around 605,000 in the 12 months to March 2008. This has the impact of driving down the number of involuntary job separations from 1.6 million to 1.2 million over the same period. Resignations continue to show a rise, but all other voluntary reasons are falling, contributing to an overall drop in the number of voluntary separations, from 3.5 million to 3.1 million.

Redundancies

In **Figure 8**, the redundancy rate is higher than the unemployment rate until the three months to June 2006, having shown a significant decline since the peak observed in the three months to March 2002. For most of the time period presented, the two series are declining or fairly flat, reflecting the strength of labour demand. However, the increase in 2008 signals a weakening of the labour market. In the three months to March 2008, the redundancy rate stood at 4.4 per thousand, a record low since comparable records began in 1995; thereafter, the increase between the three months to June 2008 and the three months to September 2008 of 1.1 per thousand employees was the largest since the three months to September 2001. At the same time, the unemployment rate increased by 0.4 percentage points to 6.0 per cent, reflecting the weakening labour market.⁴

Redundancy rates by industry are available since 1997. In recent years, they have been highest in both the manufacturing sector and construction industry. In the

three months to September 2008, the redundancy rate for manufacturing stood at 7.9 per thousand, while for construction it stood at 21.3 per thousand, the highest for any industry since 1997. Historically, the industry showing the lowest redundancy rates has been public administration, education and health, with the rate not exceeding 3 per thousand employees at any point since 1997.

Table 2 (overleaf) shows re-employment rates broken down by previous industry. Re-employment rates show the proportion of people made redundant in the three months before their Labour Force Survey (LFS) interview who were in employment again at the time of their subsequent interview. The respondent's new industry category is not necessarily the same as the industry from which they were made redundant. There appears to be little relationship between redundancy rates and subsequent re-employment. Years with high

redundancies do not necessarily show high re-employment, as many redundancies in a year suggest the economy is weak and jobs may not be available.

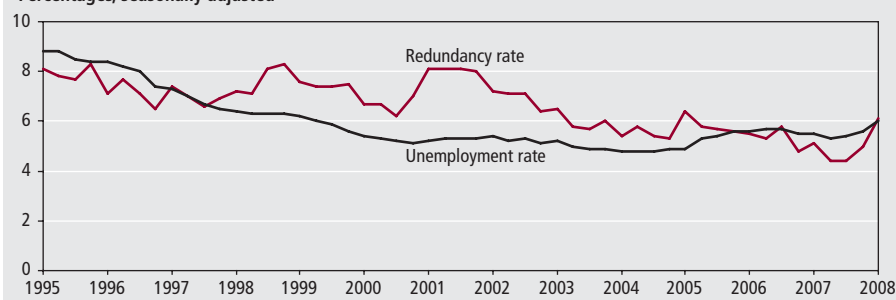
The total services re-employment rate has decreased from 43.3 per cent in the 12 months to March 1999 to 40.6 per cent in the 12 months to March 2008, reflecting an increasingly unhealthy labour market. As the data are only available from 1997, it is not possible to compare the current re-employment rate with that observed during an economic recession. However, the total services rate has dropped sharply since peaking in the 12 months to March 2005, at 48.8 per cent. In the 12 months to March 2008, the highest re-employment rates were for people previously employed in agriculture (54.5 per cent), followed by distribution, hotels and restaurants (45.4 per cent). The lowest re-employment rate was in public administration, education and health (30.6 per cent).

Figure 8

Redundancy and unemployment rates, 1997 to 2008¹

United Kingdom

Percentages, seasonally adjusted

**Note:**

1 Calendar quarters up to three months ending September 2008.

Source: Labour Force Survey

Table 2

Re-employment rates in the three months after redundancy: by previous industry, 1999 to 2008¹

United Kingdom

Percentages, not seasonally adjusted

	Agriculture, fishing, energy and water	Manufacturing	Construction	Distribution, hotels and restaurants	Transport and communication	Banking, finance and insurance	Public administration, education and health	Total services
	(A–C, E)	(D)	(F)	(G–H)	(I)	(J–K)	(L–N)	(G–Q)
1999	38.9	42.1	38.7	44.1	43.4	47.5	37.8	43.3
2000	48.2	41.0	45.7	48.1	57.2	46.6	39.8	46.9
2001	50.7	43.5	43.2	45.1	59.6	54.7	46.0	49.9
2002	51.0	43.0	45.0	47.9	42.0	44.2	34.6	44.3
2003	41.7	41.7	42.4	39.6	44.4	40.1	37.5	40.4
2004	51.1	44.4	37.2	49.7	43.6	47.1	43.4	46.2
2005	46.8	47.4	58.6	54.0	49.8	44.0	47.7	48.8
2006	41.8	39.2	47.0	45.1	33.4	38.5	46.8	41.6
2007	50.0	40.5	42.7	44.9	37.7	35.9	32.5	38.5
2008	54.5	40.0	38.9	45.4	37.2	41.7	30.6	40.6

Note:

Source: Labour Force Survey

1 Twelve months ending March.

Skills

The level of skills in the workforce is of particular importance to employers and is an important feature in the demand for labour. This is because a rise in the skills level of people employed by a firm is associated with an increase in productivity. In addition, there is a link between investment in skills and innovation and flexibility. As a result, skills and skill shortages have a significant impact on many economic measures such as productivity, GDP growth, employment and earnings.

Over the past century, the UK has experienced dramatic changes in the structure of the economy, with a shift from an economy based on manufacturing to one where the service sector is dominant. The labour market has had to adjust in response to the changing demand for certain skills to avoid a mismatch between demand and supply. When a mismatch exists, employers may face skill shortages or skills gaps.

Skill shortages and gaps

Skill shortages are defined as recruitment difficulties caused by a shortage of individuals with the required skills in the accessible labour market. Skills gaps are deficiencies in skills of an employer's existing workforce, both at the individual level and overall, which prevent the firm from achieving its business objectives. Skills gaps arise from inadequate training.

The 2007 National Employers Skills Survey (NESS), which covers business activity in England, found that 7 per cent of establishments reported having hard-to-fill vacancies (HtFV). Also, 5 per cent of establishments reported skill-shortage vacancies (SSV) as part of the reasons these positions were proving hard to fill.

Comparison with previous surveys since 2001 shows that, while the proportion of all employers facing HtFVs and HtFVs caused by skills shortages has remained stable, the number of SSVs as a proportion of total employment fell from 2001 to 2007.

The pattern of recruitment difficulties by occupation showed a particular concentration of skills shortages among 'skilled trades' and 'associate professionals'. These occupation groups both accounted for 14 SSVs per thousand employees and, together, only 14 per cent of those in total employment (as covered by NESS). Conversely, 'managers' accounted for around 18 per cent of total employment and only 2 SSVs per thousand employees.

Regionally, London faced the most acute problem in skill shortages in 2007. It accounted for 18 per cent of total employment (as covered by NESS) and 25 per cent of all SSVs. This is in direct contrast to the situation that existed at the time of the 2005 NESS, when London had a similar proportion of employment, but had only 11 per cent of SSVs. The South East region also reflected high levels of competition for skilled workers, with 16 per cent of total employment and 20 per cent of all SSVs. For all other regions, the proportion of SSVs was in line with their share of employment.

Looking at the nature of skills lacking with SSVs, technical and practical skills (excluding IT skills) were the most commonly cited problem by employers, followed by communication, customer handling and problem-solving skills. Employers recorded skills gaps as being present when they thought members of staff were not fully able to meet the needs of the job. Data from the 2007 NESS show that

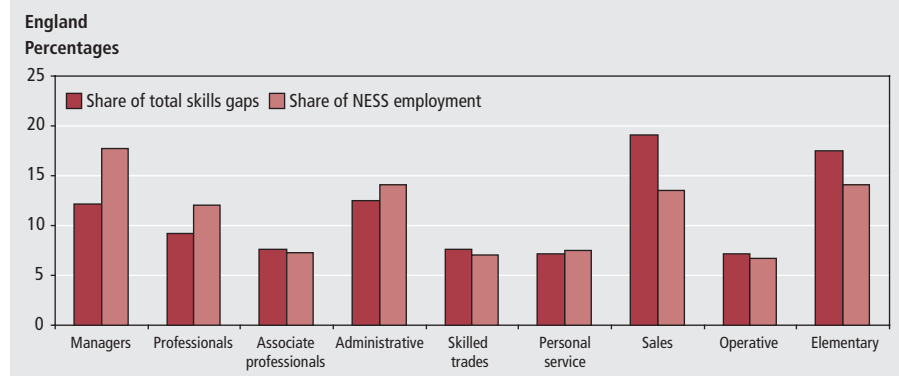
15 per cent of all establishments reported skills gaps in their workforce. In addition, employers reported that 6 per cent of their workforce were not fully proficient. As such, the volume of skills gaps far exceeded that of recruitment problems, which accounted for 0.8 per cent of total employment.

Looking at skills gaps by occupation (**Figure 9**), 'sales' and 'elementary' occupations accounted for 36.6 per cent of all skills gaps, much higher than their share of total employment (27.6 per cent). In terms of density, that is the number of skills gaps as a percentage of total employment, these two occupational groups recorded the highest density of skills gaps (8.5 and 7.5 per cent, respectively). Density was lowest among managers and professionals, with only 4.1 per cent of staff in these occupations described as not being fully proficient. It should be noted that the share of employment for each occupation group in NESS differs from that estimated by the LFS. However, the LFS cannot provide estimates of skills gaps, so it is not possible to compare the sources.

Looking at the causes of skills gaps, the main reasons employers gave about why their staff were not fully capable in their job is a lack of experience or recent recruitment to the position. This may suggest that most of these gaps in skills are temporary as, over time, staff become more familiar with the tasks required of them. In around one-fifth of cases where staff were deemed not to be fully proficient, employers credited this partly to their own failure to train and develop these staff properly.

One of the most common ways of dealing with internal skill shortages is for employers to provide training for their staff. According to the LFS, the percentage of

Figure 9
Distribution of skills gaps and employment: by occupation, 2007



Source: Employers Skills Survey

employees receiving job-related training has increased slightly, from 25.0 per cent in the 12 months to March 1998 to 26.6 per cent in the 12 months to March 2008. However, it is worth noting that this final figure is below the peak achieved in the 12 months to March 2003 (**Table 3**). Levels of job-related training vary significantly over both industry and occupation. On an individual level, training is concentrated among those employees who already have the highest level of qualifications. However, there has been an increase from 7.9 per cent in 1998 to 8.4 per cent in 2008 of the percentage of people who hold no qualifications receiving job-related training.

Labour demand and the economic cycle

The link between the demand for labour and the demand for goods and services in the economy is fundamental to understanding the cyclical variations observed in the labour market. There is a strong relationship between growth in GDP and several labour market indicators. For example, the number of jobs and the number of total hours worked, with a one or two-quarter time lag between the two (**Figure 10**). Historically, the cyclical pattern observed in the labour market is closely related to the economic cycle. This is far more obvious before 1993, when the economy was susceptible to greater fluctuations, often referred to as 'boom and bust'. The more stable economic climate up to 2007 has meant the link between the demand for labour and the demand for goods and services in the economy is not as clear.

When demand for goods and services in the economy is strong, firms try to meet this demand by producing more output. To achieve this increase in production, a firm may increase its labour input, either by hours of work (for example, through paid

and unpaid overtime) or by the number of people employed. As such, cyclical variations in the labour market can be attributed to changes in the demand for labour, resulting from the changing demand for goods and services in the economy.

The cyclical pattern in **Figure 10** is hard to distinguish after 1995; however, GDP has gone through a relatively consistent period of continued growth since 1995, and smaller variations in the pattern might therefore be expected. However, the strong downward

movement in GDP from 3.3 per cent in 2007 to 0.3 per cent in 2008 Q3, and recent similar downward movements in total actual hours and workforce jobs suggest that the economic link in the statistical series continues.

Productivity

Labour productivity measures the economy's output in relation to its labour input. High productivity of labour signals efficient production of goods and services and a competitive economy. Changes in labour productivity may result from a number of factors, such as the level of capital investment, the organisational structure of firms and the level of skills in the workforce. Three measures of productivity are produced: output per worker, output per filled job and output per hour worked.

Productivity is generally increasing over time (**Figure 11**). This primarily reflects technological growth, but also other factors such as organisational change, higher human capital through education and increased competition in the economy. The period between 1990 and the three months ending in June 2008 recorded unbroken

Table 3
Job-related training: by highest level of qualifications¹

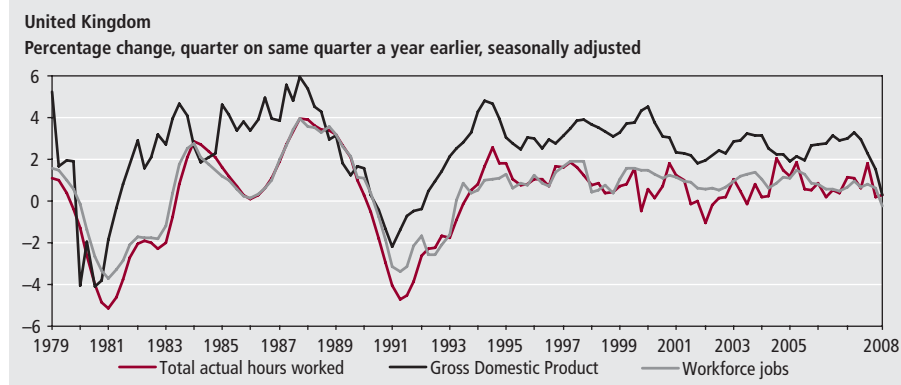
United Kingdom		Percentages, not seasonally adjusted		
	1998	2003	2008	
Degree or equivalent	39.9	42.4	37.2	
Higher education	38.7	40.9	35.4	
GCE A level or equivalent	24.3	27.3	25.6	
GCSE grade A–C or equivalent	25.6	27.9	24.4	
Other qualifications	17.1	21.9	18.7	
No qualification	7.9	10.2	8.4	
All levels of qualification ²	25.0	29.0	26.6	

Notes:

- 1 Twelve months ending March.
- 2 This includes people who did not answer the qualification question. It does not include people who did not answer the job-related training question.

Source: Labour Force Survey

Figure 10
Output, total hours worked and workforce jobs¹



Note:

- 1 Calendar quarters up to three months ending September 2008.

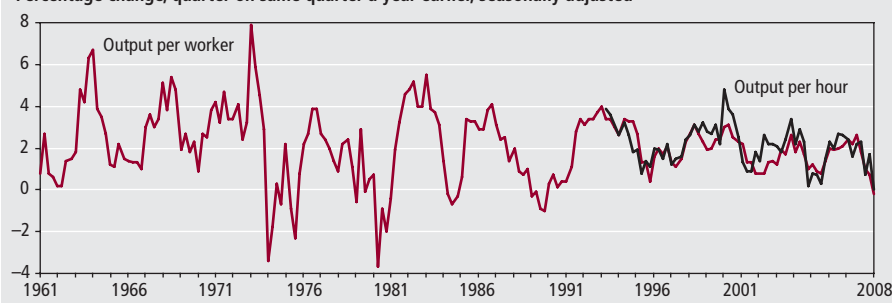
Source: National Accounts; Labour Force Survey; Workforce Jobs

Figure 11

Whole economy output per worker and output per hour¹

United Kingdom

Percentage change, quarter on same quarter a year earlier, seasonally adjusted

**Note:**

1 Calendar quarters up to three months ending September 2008.

Source: ONS Productivity

positive output per worker. This is five years longer than the last unbroken positive productivity growth period which ended in 1974. Figure 10 also shows that the two periods of negative productivity growth have coincided with periods of negative GDP figures (just before 1981 and just before 1991), reflecting the weakening of demand in the economy.⁴

The 'per worker' and 'per hour' series have followed similar paths over the last ten years. There are occasional differences, such as the higher spike in 2000 in the 'per hour' series. This reflected strong employment growth over the year, but a fall in average hours worked, leading to slower growth in total hours worked.

In 2008 Q3, output per worker and output per filled job reduced at an annual rate of -0.8 per cent and -0.5 per cent, respectively, while output per hour neither increased nor decreased (0 per cent change). This represents a significant decline in productivity and is the first time since 1989 that negative growth has been recorded for output per worker and output per filled job. The slowdown in

output growth that began at the end of 2007 was not reflected in the employment and hours figures. As a consequence of this labour demand being sustained, labour productivity has declined.

Notes

- 1 Articles explaining workforce jobs statistics can be found at www.statistics.gov.uk/statbase/product.asp?vlnk=9765
- 2 A guide to gross domestic product (GDP) can be found at www.statistics.gov.uk/cci/nugget.asp?id=56
- 3 Time series statistics for gross domestic product (GDP) can be found at www.statistics.gov.uk/cci/nscl.asp?id=5900
- 4 Time series workforce jobs, weekly hours of work, redundancies, productivity and unemployment statistics can be found using the time series data link at www.statistics.gov.uk/statbase/product.asp?vlnk=1944

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FEATURE

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Employment

Changes over 30 years

SUMMARY

Employment occurs when a contract is in place between an employer and an employee. Over the last 30 years, many changes have occurred in employment patterns within the UK. These include the changing structure of the population, growth in women working, growth in service industries and decline in manufacturing industries and changing employee and consumer demands.

This article presents employment levels and rates, using Labour Force Survey data. It compares the employment rate of people by sex, age, ethnicity, disability, county of birth and qualifications held. It also considers the employment patterns in the public sector.

Employment is analysed within a framework of labour supply statistics. This is designed to illustrate to what extent the population of the country is engaged in paid work and the extent to which people would be engaged in such work if their personal circumstances were different, or if jobs that attracted them were available.

Figure 1 shows the structure of actual and potential labour supply in terms of the main forms of employment, unemployment and inactivity. In reality, the labour market is far from static, with people moving between different categories as their personal and overall economic conditions change.

Demographic trends

Demographic trends such as population growth or the movement of people between regions or countries, have a significant impact on labour market supply. The Office for National Statistics (ONS) produces the latest population estimates and population projections. In mid-2007, the estimated population of the UK was 61.0 million. It is projected to increase to 71.1 million by 2031, an increase of 10.1 million or 17 per cent. Accompanying this increasing population is a shift in age distribution. The average age is projected to rise from 39.7 years in 2007 to 42.6 years in 2031. In 2007, there were similar numbers of children aged under 16 and people of state pension age or above (the latter group accounting for 0.5 per cent more). However, by 2031, the number of people of state pension age or

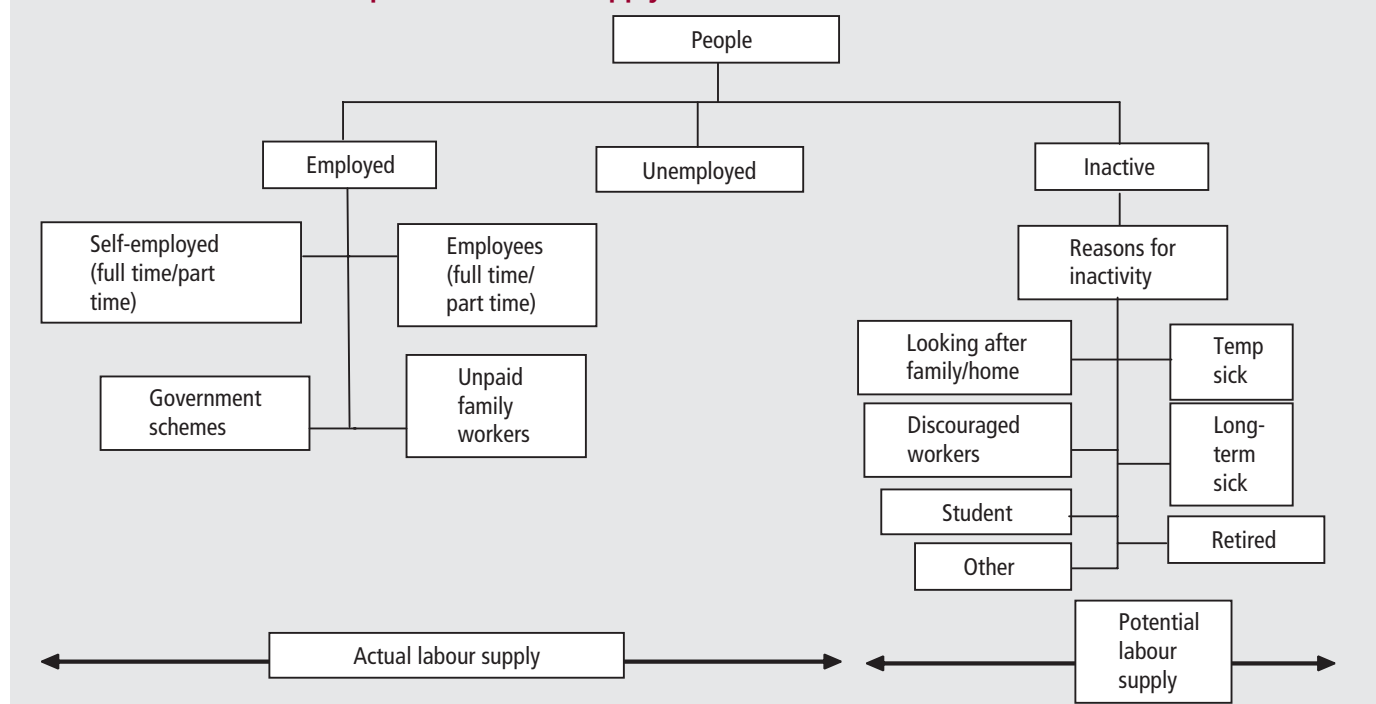
above is projected to exceed the number of children by 2.1 million (16.8 per cent).

Between 2010 and 2020, the state pension age for women will gradually increase from 60 to 65. The number of people aged 16 and over and below state pension age is projected to rise from 37.9 million in 2007 to 43.4 million by 2031. These people are the main group of labour supply although more and more people are active in the labour market above state pension age. In 2007, there were more people aged 16 to 39 compared with people aged 40 to state pension age. Through the ageing of the population and the change in state pension age for women, by 2020, there will be more people aged 40 to state pension age than those aged 16 to 39.

Employment

Changes have been occurring over recent decades in the composition and structure of the workforce. The age composition of the workforce is shifting with the ageing of the UK population. The diverse nature of the workforce has increased through the growth in the numbers of women working, the employment behaviour of students and an increase in the number of foreign workers. Structural changes encompass several well-documented trends, such as the growth in the service industry, decline in manufacturing and improved technological capacity. These wide-ranging changes are the response from employers trying to address changing employee and consumer demands, individuals trying to achieve a work-life balance and governments trying

Figure 1

The structure of actual and potential labour supply

to reduce economic inactivity and absences from work.

The Labour Force Survey (LFS) provides the preferred measure of the number of people in employment. Using the standard International Labour Organisation (ILO) definition, people are classed as employed if they are aged 16 or over and have done at least one hour of work in the reference week or are temporarily away from a job (for example, on holiday). Analysis of employment in this article excludes children aged under 16 who may be employed but are not considered to be economically active.

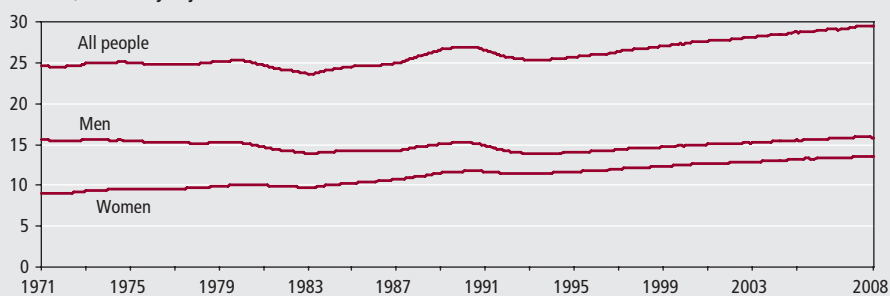
Figure 2 shows the level of employment in the UK for 1971 to 2008. This level has been generally rising over the last three decades, from 24.6 million at the beginning of 1971, to 29.4 million for the three months to September 2008. The level of employment was at its lowest during 1983, at 23.6 million.

As the UK population increases, it will impact on the number of people in employment. To compare employment patterns with differing populations, an employment rate is used which is the percentage of people below state pension age who are in employment. **Figure 3** shows the employment rate for 1971 to 2008. In 1971 it stood at 74.9 per cent and has varied throughout the period to stand at 74.4 per cent for three months to September 2008. Employment rates tend to increase through periods of strong economic growth and decline through periods of recession (as seen in the early 1980s and early 1990s).

Figure 2

Levels of employment: by sex,¹ January to March 1971 to July to September 2008

United Kingdom
Millions, seasonally adjusted



Note:

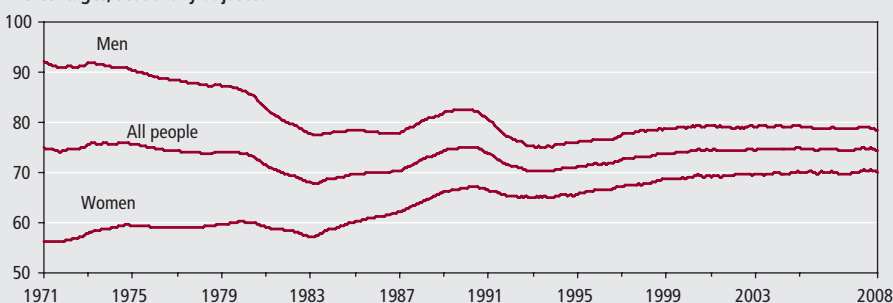
1 All aged 16 and over.

Source: Labour Force Survey

Figure 3

Employment rate: by sex,¹ January to March 1971 to July to September 2008

United Kingdom
Percentages, seasonally adjusted

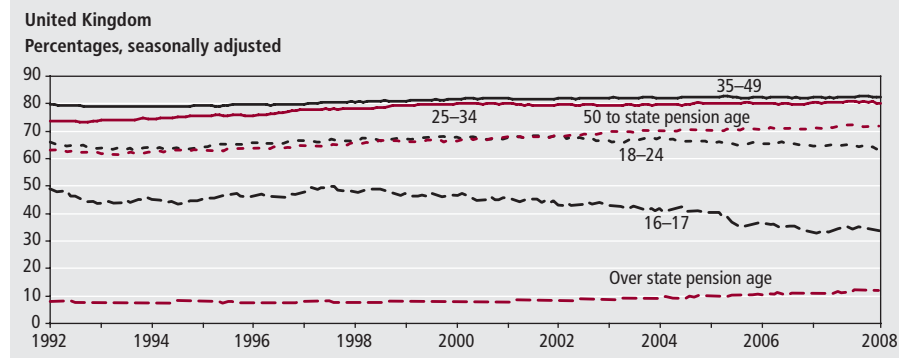


Note:

1 Men aged 16 to 64 and women aged 16 to 59.

Source: Labour Force Survey

Figure 4
Employment rate:¹ by age group, March to May 1992 to July to September 2008



Note:

1 Denominator equals all people in the relevant age group.

Source: Labour Force Survey

Characteristics of people in employment

Employment rates vary among different subgroups of the population in terms of sex, age, region, ethnic origin, disability status, country of birth and qualifications held.

Sex

At the start of 1971, the employment rate for men was 92.1 per cent and for women it was 56.4 per cent, a difference of 35.7 percentage points. After 1971, the difference narrowed to reach 15.8 percentage points by 1987. The difference remained stable until 1991, but then has continued to narrow at a much slower pace. For the three months to September 2008, the employment rate for men was 78.3 per cent and for women 70.1 per cent, a difference of 8.2 percentage points.

Age

Information about employment by age is available on a seasonally adjusted basis back to 1992. As well as differences in employment rates for men and women, variations exist by age. **Figure 4** shows the employment rate by age group. The employment rate for people of state pension age and above is lowest at 11.7 per cent and highest for 35 to 49-year-olds at 82.3 per cent for the three months to September 2008. Since 1992, the employment rates for people aged 18 to 24 and 35 to 49 have remained fairly stable, with some small variations throughout the period. For those aged 25 to 34, it has increased, with the increase coming through the 1990s and being fairly stable since the turn of the century. For the 16 to 17 age group, the employment rate has decreased by 15.5 percentage points since 1992 to 33.3 per cent in the three months

to September 2008. The employment rate of people aged 50 and over has increased steadily since 1992. For those aged 50 to state pension age, the rate has increased by 8.6 percentage points and for those individuals of state pension age and above, the increase has been 3.6 percentage points. This has resulted in an increasing number of older people in the workforce.

Location

The Annual Population Survey survey is derived from the quarterly LFS, but also includes extra respondents, specifically to provide more robust estimates for local areas. **Figure 5** shows the employment rate for people below state pension age by Government Office Region in England, Scotland, Wales and Northern Ireland for the 12 months to March 2008. It also shows the spread of employment rates, giving the highest and lowest estimate for each local area in each region. Between the parts of the UK, the spread of the employment rate was 8.4 percentage

points, the highest being in the South East (78.5 per cent) and the lowest in London (70.1 per cent).

Differences in employment rates in local areas within regions are greater than the differences between regions. In the 12 months to March 2008, the greatest contrast between local authorities was in London. This region contains Tower Hamlets, with the lowest employment rate in Great Britain (58.4 per cent), and the City of London, with the highest employment rate of 92.9 per cent. Wales has the narrowest spread of employment rates, with 13.5 percentage points between Flintshire with the highest rate (77.5 per cent) and Ceredigion with the lowest rate (64.0 per cent).

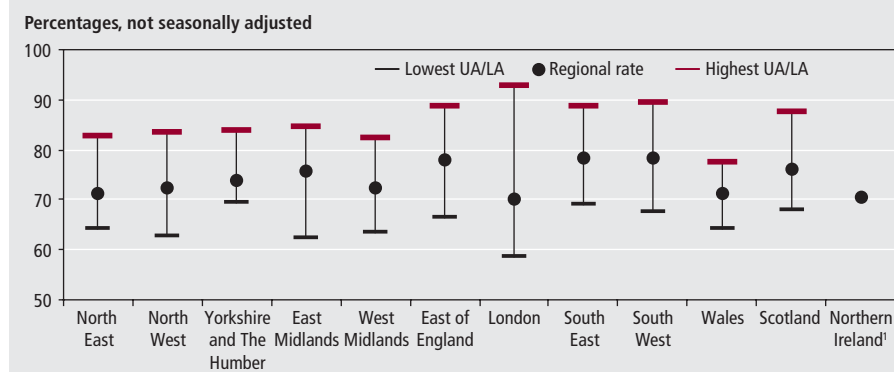
Ethnic origin

Employment rates can be compared across ethnic groups. It should, however, be noted that care must be taken when using ethnicity data as the different ethnic groups often have different demographics, such as differing proportions of people within each age group, which can affect employment rates. **Figure 6** shows employment rates for the UK by ethnic group for three months to September 2008. The employment rate of the white group was highest at 76.3 per cent and lowest for the Asian or Asian British group, at 60.3 per cent.

Disability

In the three months to September 2008, the employment rate among those long-term disabled below state pension age was 50.7 per cent compared with 80.2 per cent for people who were not. The employment rate of long-term disabled has continually increased from 43.4 per cent in 1998 when the LFS began recording disability status.

Figure 5
Employment rate: by English region and UK country, April 2007 to March 2008

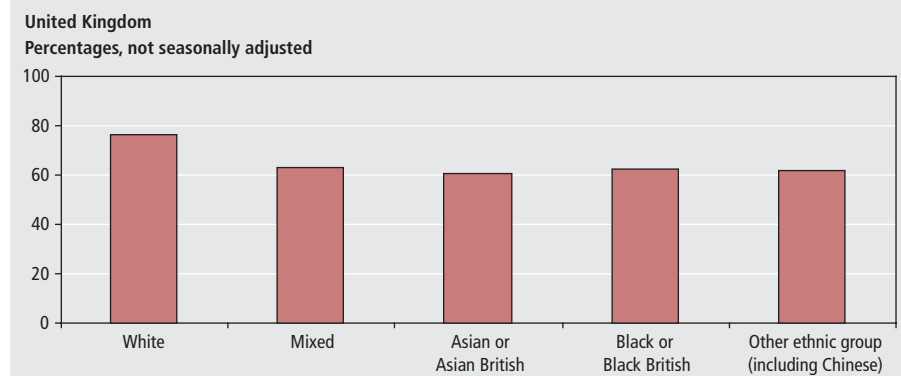


Note:

1 Northern Ireland local area data are not available.

Source: Annual Population Survey

Figure 6
Employment rate: by ethnic group,¹ 2008²



Notes:

- 1 Men aged 16 to 64 and women aged 16 to 59.
2 July to September quarter.

Source: Labour Force Survey

This results in a narrowing of the gap between long-term disabled and not long-term disabled employment rates, from 35.9 percentage points in 1998 to 29.6 percentage points in three months to September 2008.

Country of birth

The ONS definition for migrant workers is those people in employment who were born outside the UK. Most of the increase in the number of people aged 16 and over in employment over the last decade has been driven by an increase in the number of foreign born workers in the UK. In the three months to September 1998, of the 27.0 million people aged 16 or over in employment, 7.7 per cent or 2.1 million were born overseas. In the three months to September 2008, of the 29.5 million people in employment, 12.6 per cent or 3.7 million were born overseas. Most of the increase in foreign workers has come from large employment increases from the eight Central and Eastern European countries that joined the European Union in May 2004. There have also been increases in employment of people born in Africa, India, Pakistan and Bangladesh over the last decade. The number of people in employment born in Western Europe (known as the EU14) has remained fairly constant.

Looking at the employment rate for people below state pension age, for those born in the UK, it has increased by just 0.7 percentage points from 74.9 per cent in 1998 to 75.6 per cent in the three months to September 2008. For people born outside the UK, there has been a larger increase in the employment rate over the last decade. In the three months ending September 1998, it stood at 63.6 per cent and has increased by 5.6 percentage points to stand at 69.2 per cent in the

same three-month period in 2008. There are differences in the employment rate depending on which country an individual is born in. Some of the highest rates come from people born in the eight Central and Eastern European Countries, Australia, New Zealand and South Africa and some of the lowest for those people born in Pakistan and Bangladesh.

Qualifications

The skill level of those in employment can be measured through the highest level of qualification held. This allows differentiation between those in employment who have progressed to further and higher education and those who have not. **Figure 7** shows the employment rate of people in the UK below state pension age, by highest qualification for the three months to September 2008. Those with no qualifications are less likely to be in employment than those with higher qualifications. Only 46.5 per cent of those with no qualification were in employment

compared with 86.4 per cent of people with a degree or equivalent.

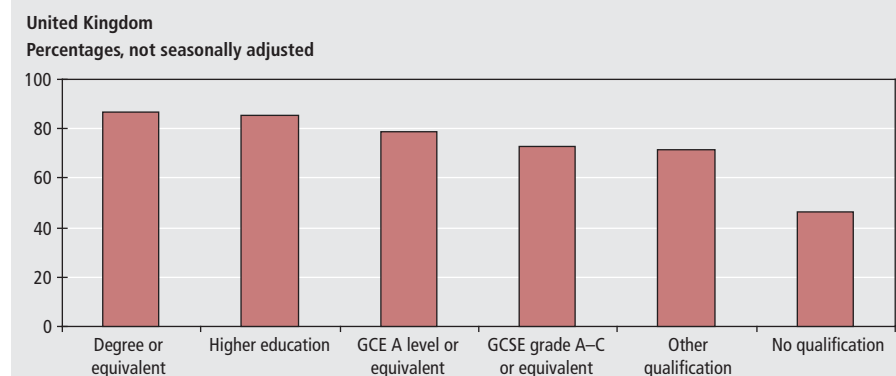
Occupation

Figure 8 shows the percentage of employed people by occupation in the three months to September 2008. The largest occupational group in the UK is 'managers and senior officials' which includes retail managers (15.6 per cent of employed people). Only 7.1 per cent were employed in the 'process, plant and machine operatives' occupations, which include occupations such as HGV drivers. There are clear differences in the choice of occupation by sex: 19.0 per cent of men in employment name their occupation as being a 'skilled trade', for example electricians, compared with only 1.8 per cent of women in this group. In contrast, more women are employed in the 'administrative and secretarial occupations' which cover occupations such as office assistants and accounts clerks: 19.1 per cent in three months to September 2008 compared with 4.5 per cent of men.

Usual hours

Figure 9 shows the distribution of usual weekly hours worked by people in their main job since the three months to September 1992. Throughout the early to mid-1990s, the percentage of people working over 45 hours increased, from 24.0 per cent in the three months to September 1992 to a high of 26.3 per cent in late 1996. Over the last decade, the percentage has consistently fallen and in the three months to September 2008, just 20.2 per cent of people employed worked more than 45 hours, the lowest since the series began. This fall could be partly explained by the introduction of the working time regulations in 1998, which include a weekly working time limit of 48 hours.

Figure 7
Employment rate:¹ by highest qualification, 2008²



Notes:

- 1 Men aged 16 to 64 and women aged 16 to 59.
2 July to September quarter.

Source: Labour Force Survey

Figure 8
Distribution of occupations¹ among men and women in employment,² 2008³

United Kingdom

Percentages, not seasonally adjusted



Notes:

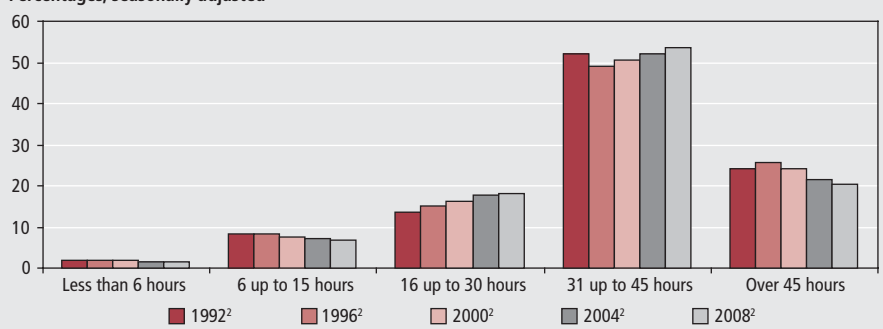
- 1 Standard Occupational Classification 2000.
- 2 Men aged 16 to 64 and women aged 16 to 59.
- 3 July to September quarter.

Source: Labour Force Survey

Figure 9
Those in employment: by usual hours worked¹

United Kingdom

Percentages, seasonally adjusted



Notes:

- 1 Main job only.
- 2 July to September quarter.

Source: Labour Force Survey

Self-employment

There has been an increase in the number of people who are self-employed, from 3.4 million in 1992 to 3.8 million in three months to September 2008. However, the percentage of all people in employment who are self-employed has remained steady at around 13 per cent.

The patterns of usual hours worked by those who are self-employed are different from employees. In the three months to September 2008, the percentage of self-employed people working over 45 hours was 31.1 per cent, which is higher than the percentage of employees who work over 45 hours, 18.7 per cent. Comparing men and women, 36.3 per cent of self-employed men and 17.2 per cent of self-employed women were working for over 45 hours.

Working patterns

Figure 10 shows the percentage of people in employment working part time in the three months to September for 1992 and 2008. Among all those in employment, the percentage working part time has increased from 23.6 per cent in 1992 to 25.5 per cent in 2008. This increase has been driven by men, where the percentage working part time increased, as opposed to the percentage of women working part time which decreased. However, part-time employment has traditionally been dominated by females and this is still the case. In the three months to September 2008, 41.8 per cent of women in employment were working part time compared with 11.6 per cent of men.

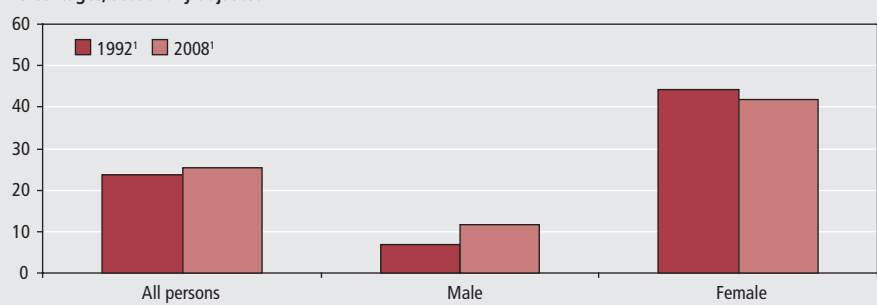
The main reason given for working part time remains, for both men and women, that a 'full-time job is not wanted'. This reason accounted for 48.5 per cent of men and 78.8 per cent of women working part time in the three months to September 2008. For the same period, 17.6 per cent of part-time men say the main reason for working part time was that they couldn't find a full-time job, compared with 7.1 per cent part-time women.

A fall in the number of temporary workers can be a sign of labour market improvement. The level of temporary workers has gradually fallen from a high of 1.8 million in the three months to June 1997 to 1.4 million in the three months to September 2008. The rate of temporary workers expressed as the proportion of temporary workers out of all in employment was 5.4 per cent in the three months ending September 2008. This is a record low since the beginning of the series in 1992, indicating that temporary work is less prevalent in the labour market.

Figure 10
Percentage of people in employment working part time: by sex

United Kingdom

Percentages, seasonally adjusted

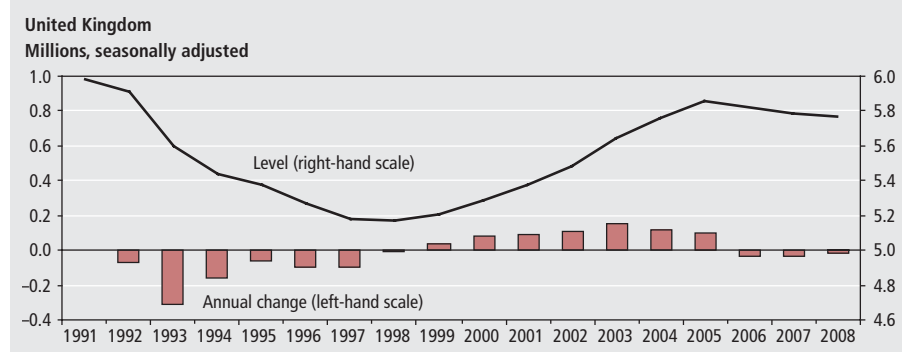


Note:

- 1 July to September quarter.

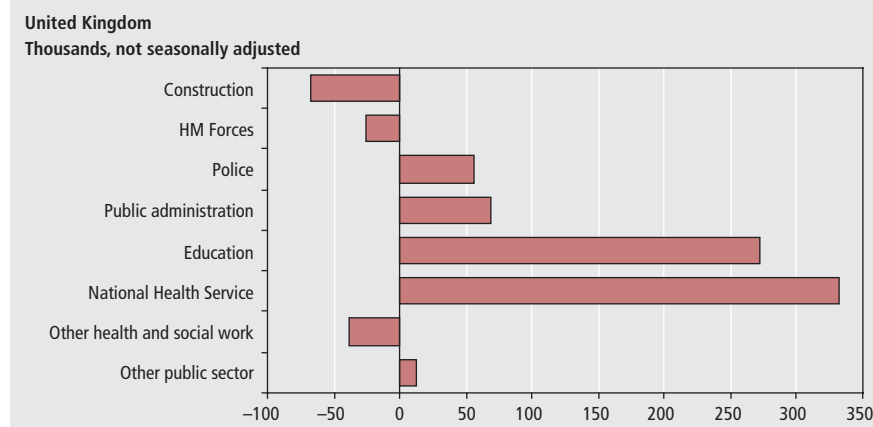
Source: Labour Force Survey

Figure 11
Public sector employment, level and change



Source: Public Sector Employment (ONS)

Figure 12
Public sector employment growth: by industry, April to June 1998 to April to June 2008



Source: Public Sector Employment (ONS)

Public sector employment

Public sector employment comprises employment in central government, local government and public corporations as defined by the UK National Accounts. Estimates for public sector employment come from ONS Quarterly Public Sector Employees Surveys (available since 1991) and other sources.

Figure 11 shows employment levels in the public sector from 1991 to 2008. Public sector employment fell in each year between 1991 and 1998, from 6.0 to 5.2 million in 1998. Between 1998 and 2005, it rose to reach 5.9 million, and then fell slightly in each of the following three years, to 5.8 million in the three months to June 2008. A public and private sector split is produced by taking the whole UK economy employment level from the LFS and subtracting the public sector employment estimates to produce a private sector series. The level of private sector employment was 23.8 million in the three months to June 2008, which was 80.5 per cent of total employment.

Figure 12 shows the change in public

sector employment, by industry sector, since its lowest point in 1998 to 2008. Over this period, employment levels in the National Health Service and in education increased by 332,000 and 272,000, respectively (27.6 and 23.9 per cent). There were also rises of 69,000 (6.1 per cent) in public administration and 57,000

(24.9 per cent) in the police service. There were falls in construction, HM Forces and other health and social.

Underemployment

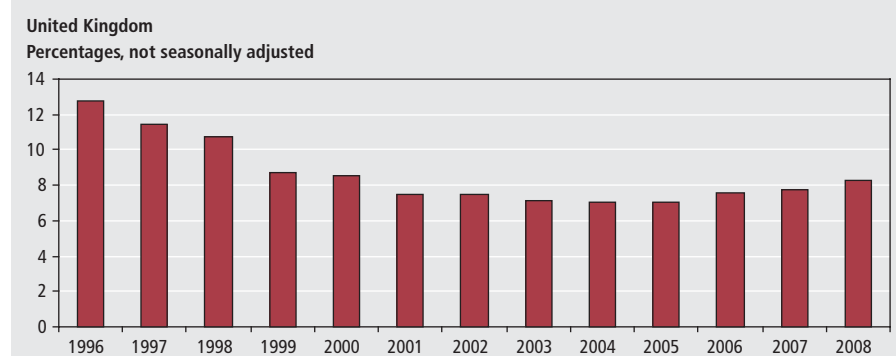
The standard ILO definitions of employment and unemployment are useful for measuring headline figures but are less effective at capturing the diversity that exists in the UK labour market. An example of this is underemployment. Someone who is working for at least one hour a week is, in ILO terms, classified as employed. In reality, this individual may be overemployed (working more than they want to), fully employed or underemployed, and this will have an impact on their future labour market behaviour.

Underemployment occurs, for example, when someone wants to work extra hours in their current job at their normal wage rate. Estimates of this are available from 1996 and Figure 13 shows the percentage of underemployed people below state pension age. This excludes people who would like to work more hours at a higher wage rate, so are not underemployed. In the three months to September 2008, the percentage of people who would like to work more hours was 8.3 per cent down from 12.8 per cent in the same period in 1996, with a low point of 7.0 per cent in 2004 and 2005.

Families

The LFS household datasets have been designed specifically for analysis at family unit and household levels, and for person-level analysis, involving the characteristics of the family unit or household in which people live. In the three months to June 2008, there were 24.7 million people below state pension age without dependent

Figure 13
Percentage of people wanting to work more hours in their current job,¹ 1996 to 2008²



Notes:

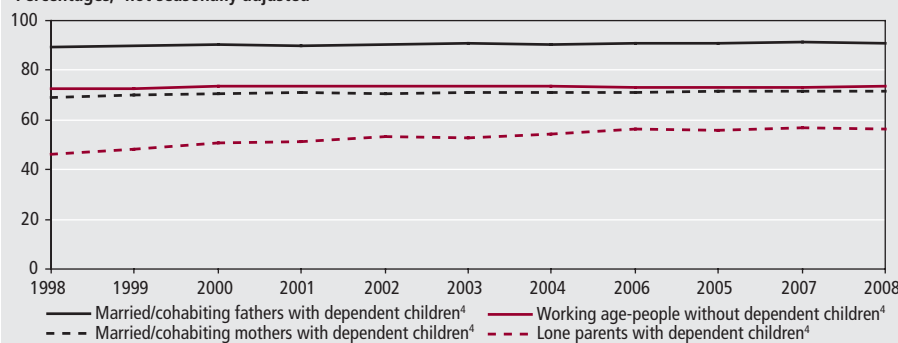
- 1 Men aged 16 to 64 and women aged 16 to 59 in employment.
- 2 July to September quarter.

Source: Labour Force Survey

Figure 14

Employment rate:¹ by parental status, 1998 to 2008²

United Kingdom

Percentages,³ not seasonally adjusted**Notes:**

- 1 Men aged 16 to 64 and women aged 16 to 59.
- 2 April to June quarter.
- 3 Base for percentages excludes people with unknown employment status.
- 4 Dependent children are those under 16 and those aged 16 to 18 who have never married and are in full-time education.

Source: Labour Force Survey Household dataset

children and 13.0 million parents below state pension age with dependent children. This can be broken down into three main subgroups: married and cohabiting mothers (5.6 million), married and cohabiting fathers (5.6 million) and lone parents (1.9 million).

Figure 14 shows the employment rate for each of these groups for 1998 to 2008. In three months to June 2008, married and cohabiting fathers had the highest employment rate, at 91.0 per cent, and lone parents had the lowest employment rate, at 56.3 per cent. This represents an increase in the lone-parent employment rate of 10.3 percentage points, from 46.0 per cent in 1998. In comparison, the employment rate for married and cohabiting mothers was 71.7 per cent, up 2.9 percentage points from ten years earlier.

Sickness absence of people in employment

The LFS collects information on whether a respondent took days off because of sickness or injury in the reference week (usually the week before the survey interview). Direct costs of sickness absence to employers include statutory sick pay, the expense of covering absence with temporary staff, and lost production.

Indirect costs, such as low morale among staff covering for those absent because of sickness, and lower customer satisfaction, are harder to measure, but also impact on the overall levels of output.

In the 12 months to June 2008:

- women had higher sickness absence rates than men (2.9 per cent, compared with 2.2 per cent)
- younger employees were more likely to take sickness absence than older employees
- public sector workers had higher sickness absence rates than those in the private sector (2.9 per cent compared with 2.4 per cent)
- people working in smaller organisations were less likely to take sickness absence than those in larger organisations
- 4.8 per cent of those working in a customer service occupation have taken at least one day off sick in the week before their survey interview, compared with a national average of 2.5 per cent. Transport associate professionals recorded the lowest sickness absence rate, at 0.8 per cent

As sickness absence trends vary throughout the year, a four-quarter average is used.

CONTACT✉ elmr@ons.gsi.gov.uk**REFERENCES**

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FEATURE

Debra Leaker

Office for National Statistics

Unemployment

Trends since the 1970s

SUMMARY

Unemployment occurs when an individual is available and seeking work but is without work. There are various causes of unemployment, but it normally relates to the economic cycle. When the economy is strong, employers create more jobs and unemployment falls. Conversely when the economy is weak, there is a reduction in job opportunities and unemployment rises.

This article examines unemployment trends using information from the Labour Force Survey and Jobcentre Plus administrative system. It shows trends in unemployment from the early 1970s, and compares the number of people who classify themselves as unemployed with those who are claiming unemployment-related benefits. It also looks at the characteristics of unemployed people to describe variations among different subgroups of the population.

The number of unemployed people in the UK is measured through the Labour Force Survey (LFS) following the internationally agreed definition recommended by the International Labour Organisation.

Unemployed people are those:

- without a job, want a job, have actively sought work in the last four weeks and are available to start work in the next two weeks, or
- out of work, have found a job and are waiting to start it in the next two weeks

Unemployment trends

The Office for National Statistics (ONS) publishes two different measures of people who want to work but do not have a job. They are LFS unemployment and the claimant count.

The LFS provides estimates of both the unemployment level and the unemployment rate. The rate is the best indicator because it measures the proportion of the economically active population who are unemployed. This means that it takes account of changes in the size of the population over time, as well as changes in the level of unemployment and movements between economic activity and inactivity.

The claimant count is a count of claimants of unemployment-related benefits, based on the administrative records of people claiming these benefits. Changes to the rules governing entitlement to unemployment-related benefits directly affect the claimant count. This

means that changes to the benefit system affect comparisons over time. Using the two sources together provides a more comprehensive picture of the labour market.

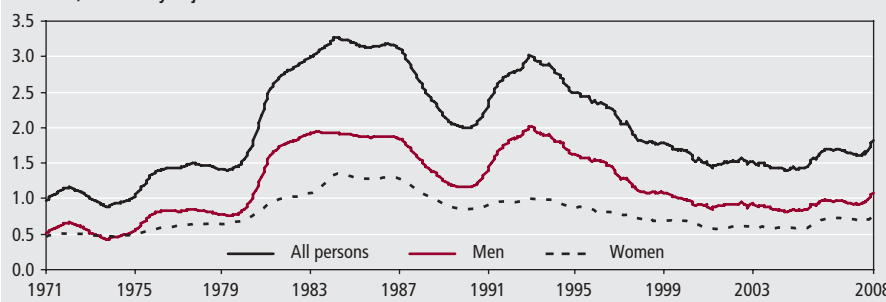
Unless otherwise stated, analysis in this article is based on those aged 16 and over.

There will always be a certain level of unemployment, even within a healthy economy, as people enter or re-enter the labour force or move between jobs. This is known as 'frictional unemployment'.

LFS data, which are available back to 1971, show that unemployment follows a cyclical pattern. **Figure 1** and **Figure 2** show that during the early 1970s, unemployment was relatively low at around 1 million or around 4 per cent of the economically active population. Unemployment increased in the mid 1970s, before levelling off at around 1.5 million (5 per cent) in the late 1970s. Because of the recession in the early 1980s, unemployment rose sharply, peaking at over 3 million (just under 12 per cent) in 1984. The late 1980s saw an economic recovery, with unemployment falling to around 2 million (7 per cent) before the recession of the early 1990s drove it back up to 3 million (around 10 per cent). Since this peak in 1993, unemployment has decreased gradually to reach levels and rates similar to those last seen in the late 1970s; this trend continued to 2004. The unemployment level and rate for the three months to October 2004, at 1.4 million and 4.7 per cent respectively, were the lowest on record since 1976. In the three months to September 2008, the unemployment level stood at 1.8

Figure 1
Levels of unemployment: by sex,¹ January to March 1971 to July to September 2008

United Kingdom
Millions, seasonally adjusted



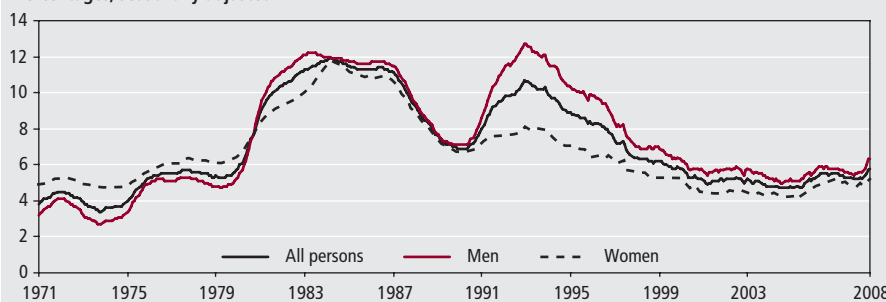
Note:

1 All aged 16 and over.

Source: Labour Force Survey

Figure 2
Unemployment rate: by sex,¹ January to March 1971 to July to September 2008

United Kingdom
Percentages, seasonally adjusted



Note:

1 All aged 16 and over.

Source: Labour Force Survey

million (up by 182,000 from a year earlier) and the unemployment rate was 5.8 per cent (up by 0.5 percentage points from a year earlier).

Broadly speaking, as the country experiences economic growth, the number of jobs grows and unemployment falls, though any mismatches between the skill needs of the new jobs and the skills of those available for work may slow this process. Conversely, as the economy slows and goes into recession, unemployment tends to rise.

A breakdown of unemployment by duration is available on a seasonally adjusted basis back to 1992. Long-term unemployment, when a person is unemployed for over 12 months, rose to a peak of 1.3 million (44.2 per cent of the unemployed total) in the early 1990s. In the three months to August 2004, the number of people unemployed for more than 12 months was the lowest on record, at 273,000 (19.4 per cent of the unemployed total). In the three months to September 2008, long-term unemployment stood at 435,000.

Trends in the number of people claiming

unemployment-related benefits have followed a similar pattern to the LFS measure of unemployment, although there are periods of divergence and convergence.

Figure 3 shows that the claimant count reached two peaks of around 3 million during the recessions of the mid-1980s and

1990s and has been falling over the last decade. In January 2008, the claimant count was 795,000, the lowest level since 1975. Since then, the level has increased to reach 981,000 in October 2008.

Jobseeker's Allowance (JSA) is one of the benefits received by unemployed people. JSA claimant count data are based on information provided monthly to the ONS from the JSA payment system run by Jobcentre Plus. **Figure 4** (overleaf) shows that, in October 2008, most women receiving JSA were seeking work in sales and customer service, administrative and secretarial and elementary occupations. Men concentrated their search more in elementary, skilled trades, and process, plant and machine operative occupations.

Characteristics of unemployed people

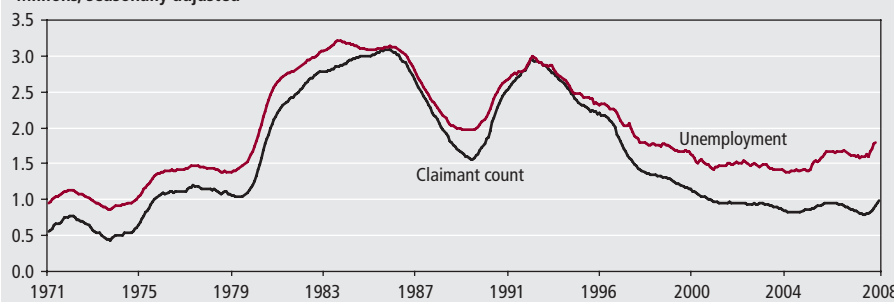
Unemployment rates vary among different subgroups of the population in terms of sex, age, location, ethnic origin, disability status, qualification levels, parental status and previous occupation.

Sex

Unemployment rates for men and women have followed similar cyclical trends, but the recessions of the 1980s and 1990s had a greater impact on men (Figure 1 and Figure 2). The 1980s' recession resulted in a sharp increase in the unemployment rate for men, which overtook the rate for women in the latter half of 1980 and has stayed above it since. In the three months to September 2008, the unemployment rate for men was 6.3 per cent, while the rate for women was 5.2 per cent. However, it is worth remembering the unemployment rate is expressed as a proportion of the economically active population and does

Figure 3
Unemployment¹ and the claimant count, February 1971 to October 2008²

United Kingdom
Millions, seasonally adjusted



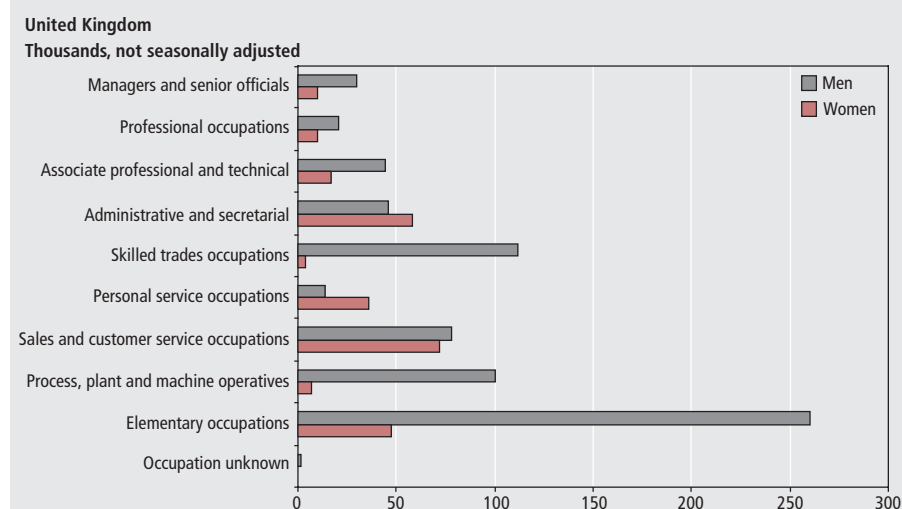
Notes:

1 Men aged 16 to 64 and women aged 16 to 59.

2 Unemployment data are only available to August 2008.

Source: Labour Force Survey, Jobcentre Plus administrative system

Figure 4
JSA claimants: by sought occupation and sex, October 2008



Source: Jobcentre Plus administrative system

not include those who are economically inactive. Therefore, the unemployment rate should not be used to measure the proportion of a group who are not working as it excludes those who are economically inactive. Although the unemployment rate was higher for men than for women in the three months to September 2008, a higher proportion of women aged over 16 than their male counterparts were economically inactive (43.2 per cent compared with 29.2 per cent).

Age

Information about unemployment rates by age is available on a seasonally adjusted basis back to 1992. **Figure 5** shows that unemployment rates for younger age groups have been consistently higher than those in older age groups. In the three months to September 2008, the unemployment rate for those aged 16 to 17 was 25.7 per cent. This compares with rates of 13.7 per cent for those aged 18 to 24, 4.4 per cent for those aged 25 to 49, and 3.2 per cent for those aged 50 and over (including those above state pension age).

Figure 6 shows that people aged under 25 account for an increasing proportion of the unemployed total. In the three months to September 2008, some 41.7 per cent of unemployed people were under 25 years old, compared with 30.9 per cent in the three months to September 1992. The group aged 16 to 17 increased from 5.2 per cent of the unemployed total to 10.0 per cent over the same period.

Location

The Annual Population Survey is derived from the quarterly LFS, but also

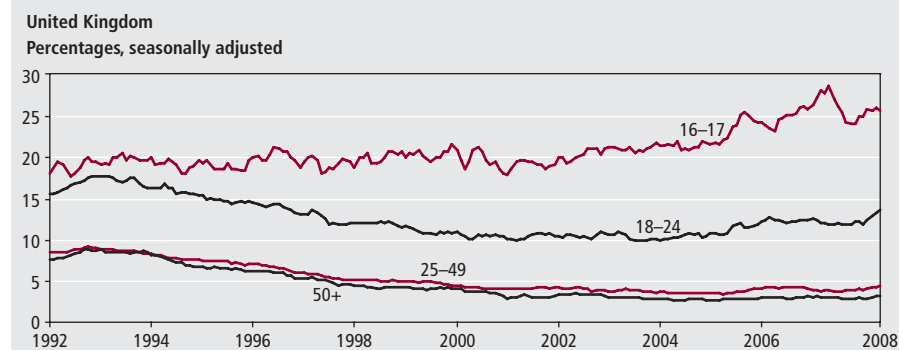
includes extra respondents, specifically to provide more robust estimates for local areas. **Figure 7** shows the differences in unemployment rates by Government Office Region in England, Wales, Scotland and Northern Ireland for the 12 months to

March 2008. The spread of unemployment rates between these parts of the UK was just 2.9 percentage points between the lowest unemployment rate (3.8 per cent) in the South West, and the highest unemployment rate (6.7 per cent) in London. The differences in unemployment rates in local areas within regions are greater than the differences between regions. In the 12 months to March 2008, the region with the greatest contrast between local authorities was London, with 8.1 percentage points between the areas with highest and lowest unemployment rates. The highest unemployment rate was in Tower Hamlets, at 11.7 per cent and the lowest rate was in Richmond-upon-Thames, at 3.6 per cent. The region with the narrowest spread of unemployment rates was the South West, with 3.3 percentage points between the lowest, Purbeck in Dorset at 2.5 per cent, and the highest, Plymouth at 5.8 per cent.

Ethnicity

As with employment, care must be taken when using ethnicity data for analysis. The different ethnic groups often have

Figure 5
Unemployment rate:¹ by age group, March to May 1992 to July to September 2008

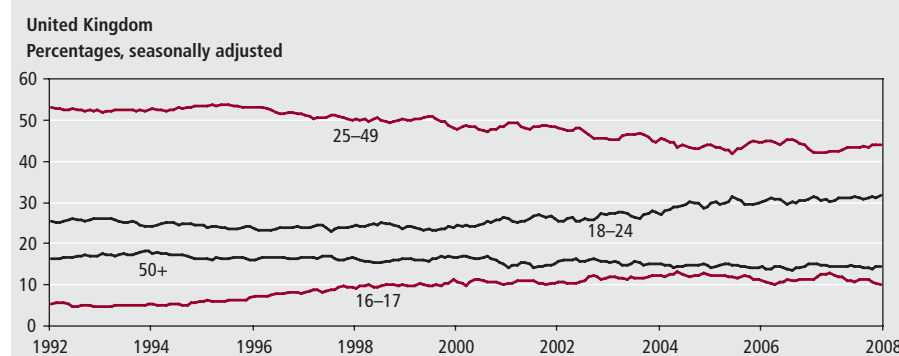


Note:

1 Denominator equals all active people in the relevant age group.

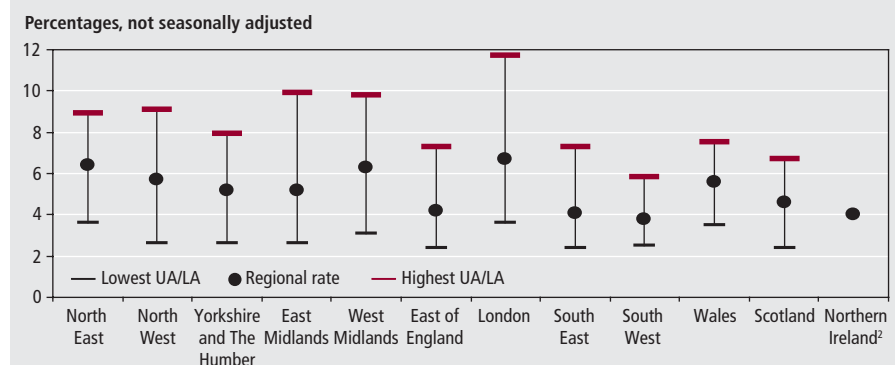
Source: Labour Force Survey

Figure 6
Unemployment proportions: by age group, March to May 1992 to July to September 2008



Source: Labour Force Survey

Figure 7
Unemployment rate: by English region and UK country,¹
April 2007 to March 2008



Note:

Source: Model-based estimates, Office for National Statistics

- These unemployment data for local authorities are derived using a statistical model which takes unemployment estimates from the Annual Population Survey and improves them by 'borrowing strength' from the accurately known administrative data on numbers of Jobseeker's Allowance claimants.
- Northern Ireland local area data are not available.

different demographics, such as differing proportions of people within each age group. In the three months to September 2008, the lowest unemployment rates were for people of 'White' ethnic origin (5.6 per cent). Unemployment rates were highest for people of 'Mixed' ethnic origin (14.9 per cent) and the Black or Black British group (14.0 per cent).

Disability

Unemployment rates are higher among people below state pension age who are long-term disabled than they are for people who are not. **Figure 8** shows that, in the three months to September 2008, the unemployment rate among long-term disabled people below state pension age was 9.5 per cent, down by 1.5 percentage points from ten years earlier. This compares with 5.8 per cent for those who are long-term disabled, down by 0.2 percentage point from ten years earlier. One-fifth of the unemployed population below state pension age had a long-term health problem or disability (20.1 per cent).

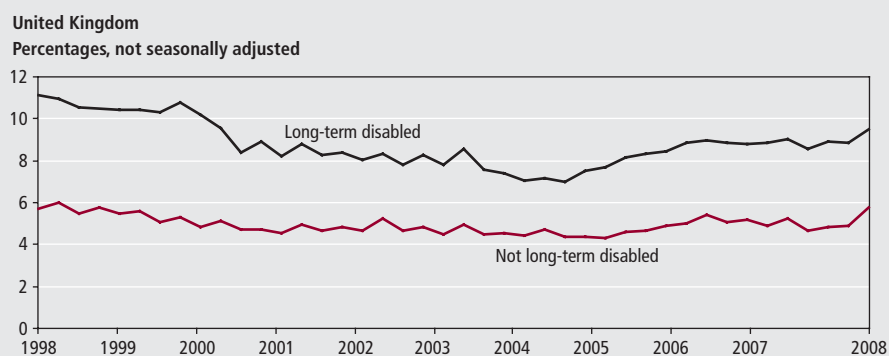
Qualifications

People with no qualifications are more likely to be unemployed than those with, particularly if these qualifications are at higher levels of educational attainment. In the three months to September 2008, the unemployment rate for people below state pension age with no qualifications was 13.4 per cent. This compares with rates of 5.0 per cent for those qualified to GCE A level or equivalent, and 3.7 per cent for graduates. Around one-sixth of the unemployed population below state pension age had no qualifications (17.3 per cent).

Parental status

The LFS household datasets have been designed specifically for analysis at the family unit and household levels, and for person-level analysis involving the characteristics of the family unit or household in which people live. **Figure 9** shows the unemployment rate for people by parental status for 1998 to 2008. In the three months to June 1998, the unemployment rate for lone parents was 15.7 per cent, decreasing to 9.1 per cent in the three months to June 2005. Since then, the unemployment rate has risen to 11.8 per cent, the highest rate among the family groups. Married and cohabiting mothers have the lowest unemployment rate, at 3.1 per cent. In the three months to June 2008, the unemployment rate for those without dependent children was 5.6 per cent, down 1.0 percentage points from ten years earlier.

Figure 8
Unemployment rate:¹ by disability, April to June 1998
to July to September 2008

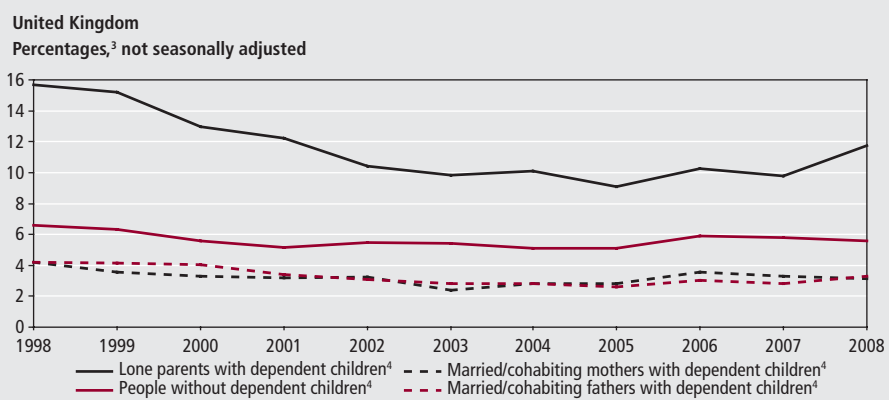


Note:

Source: Labour Force Survey

- Men aged 16 to 64 and women aged 16 to 59.

Figure 9
Unemployment rate:¹ by parental status, 1998 to 2008²



Notes:

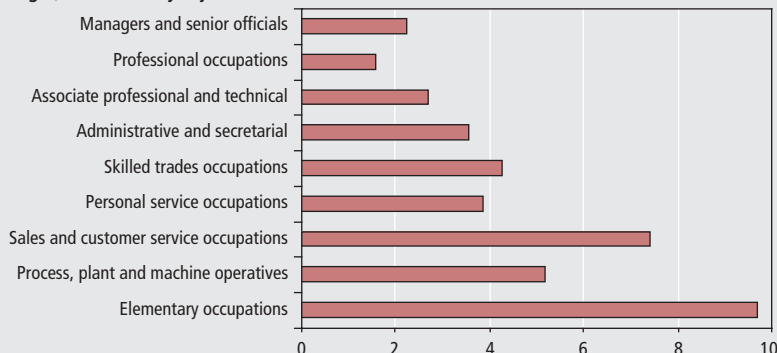
Source: Labour Force Survey Household dataset

- All aged 16 and over.
- April to June quarter.
- Base for percentages excludes people with unknown employment status.
- Dependent children are those under 16 and those aged 16 to 18 who have never married and are in full-time education.

Figure 10
Unemployment rate:¹ by previous occupation,² 2008³

United Kingdom

Percentages, not seasonally adjusted



Notes:

1 All aged 16 and over.

2 Standard Occupational Classification 2000.

3 July to September quarter.

Source: Labour Force Survey

Previous occupation

The LFS asks unemployed respondents who have worked within the last eight years questions about their last job. This information is used to calculate unemployment rates by previous occupation, as shown in **Figure 10**. In the three months to September 2008, unemployment rates were highest among those who previously worked in the elementary occupations, at 9.7 per cent. These include hospital porters, bar staff, traffic wardens and cleaners. This compares with Figure 4 where the majority of people claiming JSA were looking for a job in an elementary occupation. Unemployment rates were lowest among those who previously worked in professional and managerial occupations (1.6 and 2.2 per cent, respectively).

Job searching

The LFS also asks unemployed respondents about the type of work they have been looking for and their main method of job search. In the three months to September 2008, most unemployed people were looking for work as an employee (88.4 per cent), while 2.6 per cent were seeking self-employment, 0.7 per cent were seeking a place on a government employment or training programme and the remaining 8.3 per cent had no preference. Of those who were looking for work as an employee or had no preference over working as an employee or self-employed, most (71.4 per cent) were looking for full-time work or had no preference, while 28.6 per cent were looking specifically for part-time work. Unemployed women were more likely

to be looking for part-time work than unemployed men (45.0 per cent and 16.9 per cent, respectively).

The most common method of job search was studying or replying to advertisements in newspapers, journals or on the internet. This was used by 45.9 per cent of unemployed people, while 24.9 per cent visited Jobcentres as their main method, 10.3 per cent applied directly to employers, and 7.3 per cent mainly sought work through friends and relatives.

CONTACT

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Office for National Statistics *Unemployment by age, duration and sex* at

www.statistics.gov.uk/statbase/product.asp?vlnk=8272

Office for National Statistics (Nomis) *Further regional and local area labour data* at www.nomisweb.co.uk/default.asp

FEATURE

Economic inactivity

Debra Leaker

Office for National Statistics

SUMMARY

The economically inactive are defined as people who are not in employment or unemployed. There are many reasons why an individual may be inactive, for example, they might be studying, looking after family or long-term sick. These individuals are not part of the supply of labour but are important as they are potential labour supply in the future.

This article examines inactivity trends using information from the Labour Force Survey. It shows trends from the early 1970s and the characteristics of inactive people. It then looks at some of the reasons for people being inactive.

People who are neither employed nor unemployed are classified as economically inactive. International standard definitions distinguish between the unemployed and the economically inactive by whether or not the individual is looking and available for work. The economically inactive include those who want a job but have not been seeking work in the last four weeks, those who want a job and are seeking work but are not available to start work, and those who do not want a job.

In recent years there has been increasing recognition of the need for analysis to consider the size and composition of the inactive group. This analysis is useful in assessing potential labour supply and the likelihood of people in the inactive group moving into the labour market at some point in the future. In addition, there has been a greater policy focus on the scope for reducing inactivity, as well as unemployment, as a means of boosting economic performance. It is therefore important to try to understand the various groups within the inactive category to build a fuller picture of the reasons why these people are not economically active.

Economic inactivity trends

Data from the Labour Force Survey (LFS) back to 1971 show that the overall inactivity rate has remained fairly stable over the period, even though there have been notable variations in the economic cycle. Despite this stability, there have been some distinctive changes in the composition of the economically inactive group.

Unless otherwise stated, analysis in this article is based on those aged 16 and over and below state pension age (that is, 60 for women and 65 for men).

The total number of economically inactive people in the UK stood at 7.9 million for the three months to September 2008, a rise of around 864,000 since the beginning of 1971. Despite this, the economic inactivity rate has remained stable over this period because the total population for this age group has also increased.

Figure 1 shows that the proportion of the population who were economically inactive fluctuated around 21 and 22 per cent throughout the 1970s. Inactivity increased during the early 1980s' recession, with the rate reaching 23 per cent during the first half of 1983. As the economy improved in the 1980s, the rate fell to around 19.3 per cent. However, the recession in the 1990s drove the rate back up to the level experienced in the 1970s. In the three months to September 2008, the economic inactivity rate was 20.9 per cent (down by 0.2 percentage points from a year earlier).

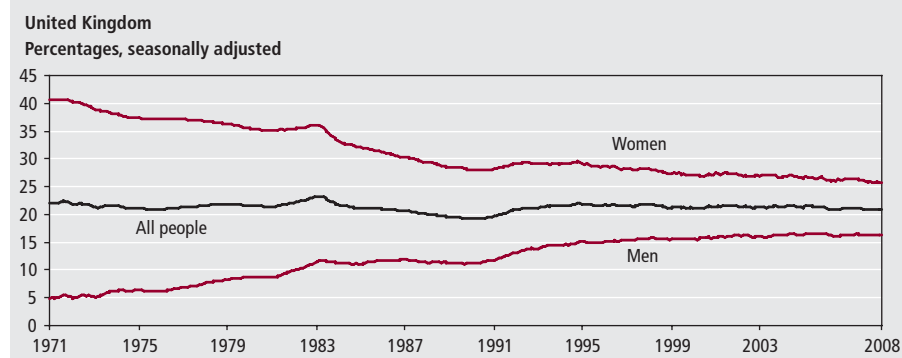
Characteristics of economically inactive people

Economic inactivity rates vary among different subgroups of the population in terms of sex, age, location, ethnic origin, disability status and qualification levels.

Sex

The relative stability of the economic inactivity rate in the UK masks the different trends for men and women over time.

Figure 1
Economic inactivity rate: by sex¹, January to March 1971 to July to September 2008



Note:

1 Men aged 16 to 64 and women aged 16 to 59.

Source: Labour Force Survey

Among men, the inactivity rate has grown from 4.9 per cent in 1971 to 16.3 per cent in 2008. In comparison, the female inactivity rate has declined from 40.6 per cent in 1971 to 25.8 per cent in 2008 (Figure 1). This is a result of the increase in the number of women continuing their employment or re-entering the labour market after having children.

Age

Information about economic inactivity rates by age is available on a seasonally adjusted basis back to 1992. **Figure 2** shows that there has been an increase in economic inactivity among young people. In the three months to July 1997, the inactivity rate for those aged 16 to 17 reached a low point of 38.7 per cent. Over the last decade, this rate has been gradually increasing: in the three months ending September 2008, the inactivity rate for this age group was 55.2 per cent. In part this reflects the growing number of young people staying on in full-time education until they are 18. Inactivity has also increased among those aged 18 to 24. The rate for this age group increased from 21.8 per cent in the three months ending May 1992, the earliest figures which are available, to 26.4 per cent in the three months ending September 2008. Economic inactivity rates have remained stable for those aged 25 to 34 and 35 to 49, while the rates for those aged 50 to state pension age have been gradually decreasing. Data for people over state pension age is also included in Figure 2. This shows that economic inactivity rates for those over state pension age remain high but have been gradually decreasing.

Location

The Annual Population Survey is derived from the quarterly LFS, but also includes

extra respondents, specifically to provide more robust estimates for local areas.

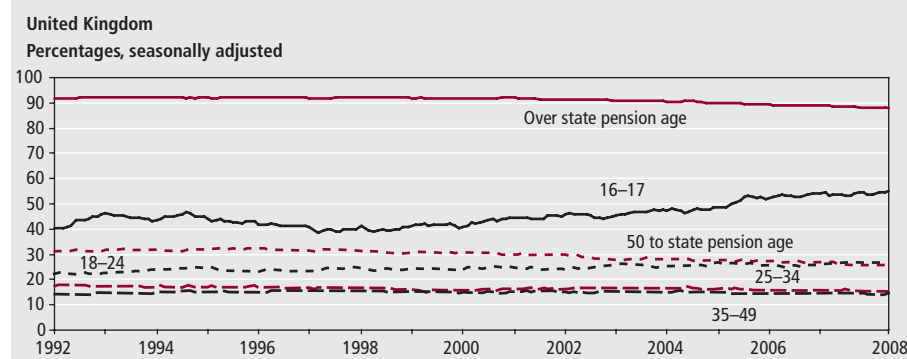
Figure 3 shows the difference in inactivity rates for people below state pension age by Government Office Region of England, Wales, Scotland and Northern Ireland for the 12 months ending March 2008. The

spread of inactivity rates between regions was 6.8 percentage points, the South East having the lowest (at 18.0 per cent) and London having the highest (at 24.8 per cent). Differences in economic inactivity rates in local areas within regions are greater than differences between regions. In the 12 months ending March 2008, the region with the greatest difference between the highest and lowest inactivity rates was the East Midlands, where 19.8 percentage points separate the highest and lowest inactivity rates of local authorities in the region. Nottingham, at 32.8 per cent, had the highest inactivity rate, while the lowest inactivity rate was just 13.0 per cent, in Blaby (Leicestershire). The narrowest spread of inactivity rates occurs in Wales, with 12.3 percentage points between the highest in Ceredigion (32.0 per cent) and the lowest rate in Wrexham (19.7 per cent).

Ethnicity

Care must be taken when using ethnicity data for analysis; different ethnic groups

Figure 2
Economic inactivity rate:¹ by age group, March to May 1992 to July to September 2008

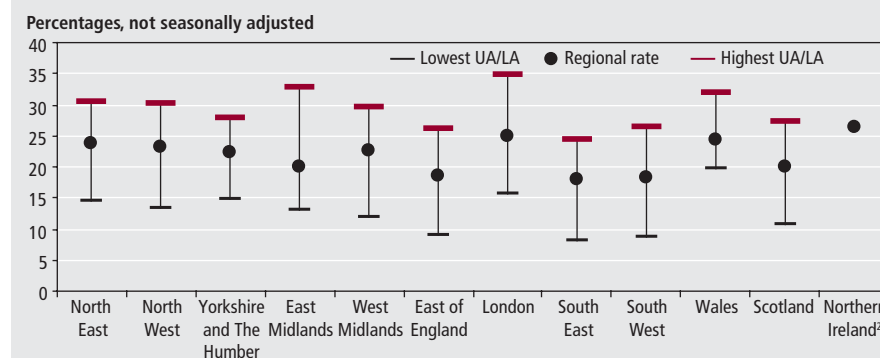


Note:

1 Denominator equals all people in the relevant age group.

Source: Labour Force Survey

Figure 3
Economic inactivity rate:¹ by English region and UK country, April 2007 to March 2008



Notes:

- 1 Men aged 16 to 64 and women aged 16 to 59.
- 2 Northern Ireland local area data are not available.

Source: Annual Population Survey

often have different demographics, such as differing proportions of people within each age group. **Figure 4** shows that, in the three months to September 2008, the Asian or Asian British ethnic group had the highest inactivity rates, at 33.1 per cent. In the same period, people of the White ethnic group had the lowest inactivity rates, at 19.0 per cent.

Disability

Information on disability status is available in the LFS back to 1998. It shows that people with a long-term disability were more likely to be economically inactive than those without. In the three months to September 2008, 44.0 per cent of people with a long-term disability were inactive, a fall of 6.2 percentage points from the same period in 1998. In comparison, 14.8 per cent of people without a long-term disability were inactive in the three months to September 2008, a rise of 0.4 percentage points from the same period in 1998.

Qualifications

Economic inactivity rates vary by highest educational qualification. **Figure 5** shows that, in the three months to September 2008, 36.4 per cent of males with no qualifications were inactive. This compares with only 15.7 per cent of those whose highest qualification was a GCSE or equivalent and 8.6 per cent of those with a degree. The same pattern was evident among females, although those with no qualifications were more likely to be inactive than their male counterparts. Among graduates, the difference in inactivity rates between males and females was much smaller. For example, there was a gap in the inactivity rate of 20.2 percentage points between males and females with no qualifications compared with 3.6 percentage points for those with a degree.

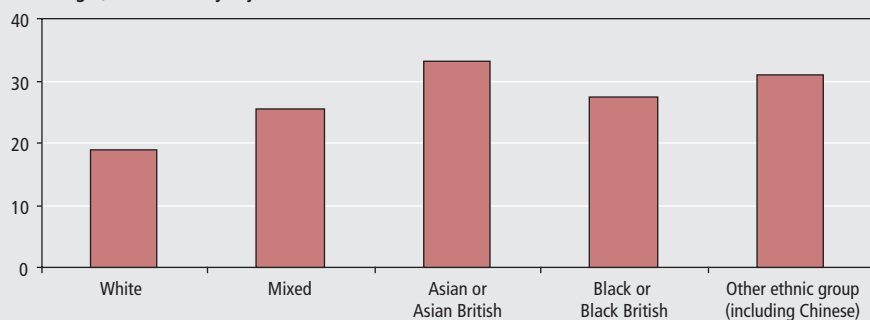
Reasons for economic inactivity

The analysis above highlights some of the characteristics of the economically inactive population. These characteristics do not, however, explain why certain people are more likely to be inactive than others. The LFS asks respondents the main reasons they are inactive, with the four largest groups being the long-term sick or disabled, those looking after the family or home, students and retired.

Figure 6 shows that the largest group among the economically inactive is looking after the family or home. The size of this group has, however, declined in recent years as more women, particularly

Figure 4
Inactivity rate:¹ by ethnic group, 2008²

United Kingdom
Percentages, not seasonally adjusted



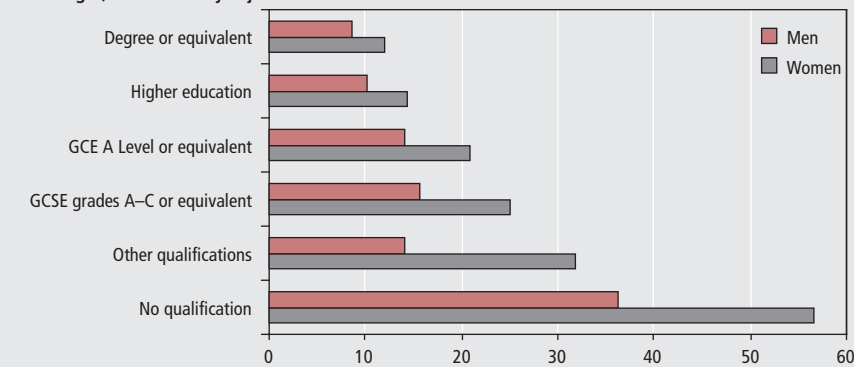
Notes:

- 1 Men aged 16 to 64 and women aged 16 to 59.
- 2 July to September.

Source: Labour Force Survey

Figure 5
Inactivity rate:¹ by highest educational qualification, 2008²

United Kingdom
Percentages, not seasonally adjusted



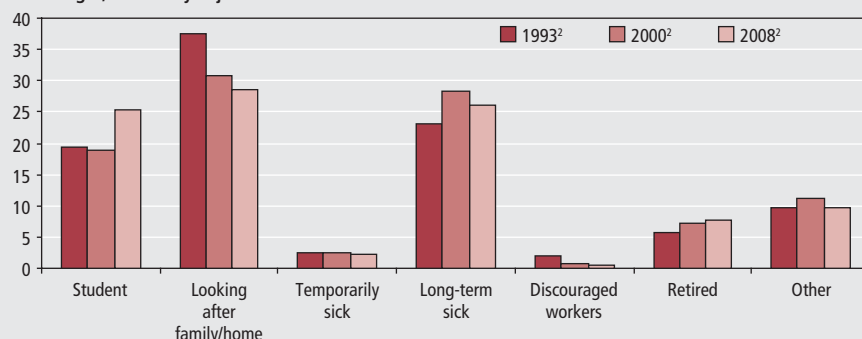
Notes:

- 1 Men aged 16 to 64 and women aged 16 to 59.
- 2 July to September.

Source: Labour Force Survey

Figure 6
Inactivity:¹ by reason

United Kingdom
Percentages, seasonally adjusted



Notes:

- 1 Men aged 16 to 64 and women aged 16 to 59.
- 2 July to September.

Source: Labour Force Survey

those with children, enter the labour market. In the three months to September 2008, 28.5 per cent of people reported looking after the family/home as their

reason for inactivity. In the same period, 2.1 million people were inactive due to long-term sickness, 26.1 per cent of all those who were inactive.

Table 1
Main reasons for economic inactivity: by age and sex,¹ 2008²

United Kingdom			Percentages, not seasonally adjusted		
	16–24	25–34	35–49	50–59/64	Total
Men					
Long-term sick/disabled	6.2	37.2	62.8	49.1	37.0
Looking after family/home	1.8	10.0	14.6	5.8	6.5
Student	77.1	23.4	3.8	0.4	27.0
Retired	-	-	0.4	33.4	14.2
Other	14.8	29.4	18.4	11.3	15.4
Women					
Long-term sick/disabled	3.4	9.6	24.6	41.0	19.8
Looking after family/home	25.7	70.3	60.3	26.2	45.4
Student	59.4	10.0	3.6	0.5	18.9
Retired	-	-	0.4	15.9	3.8
Other	11.5	10.0	11.0	16.4	12.2
All people					
Long-term sick/disabled	4.7	16.5	34.8	45.5	26.7
Looking after family/home	15.1	55.4	48.1	14.9	29.7
Student	67.2	13.3	3.7	0.4	22.1
Retired	-	-	0.4	25.6	8.0
Other	13.0	14.8	13.0	13.6	13.5

Notes:

1 Men aged 16 to 64 and women aged 16 to 59.

2 July to September.

Source: Labour Force Survey

Table 1 shows that, between the sexes, the main differences in the reasons for inactivity were related to family responsibilities. For females aged 25 to 34, 70.3 per cent gave this as their reason for inactivity, compared with 10.0 per cent of males in the same age group. About three in five inactive females aged 35 to 49 also gave looking after the family or home as their reason for inactivity; this compares with around one in seven males in the same age group. One noticeable aspect is that, among all men aged over 25 years, the main reason for inactivity reported was long-term sickness and disability. For

those aged 35 to 49, more than three in five men were inactive due to a long-term sickness or disability.

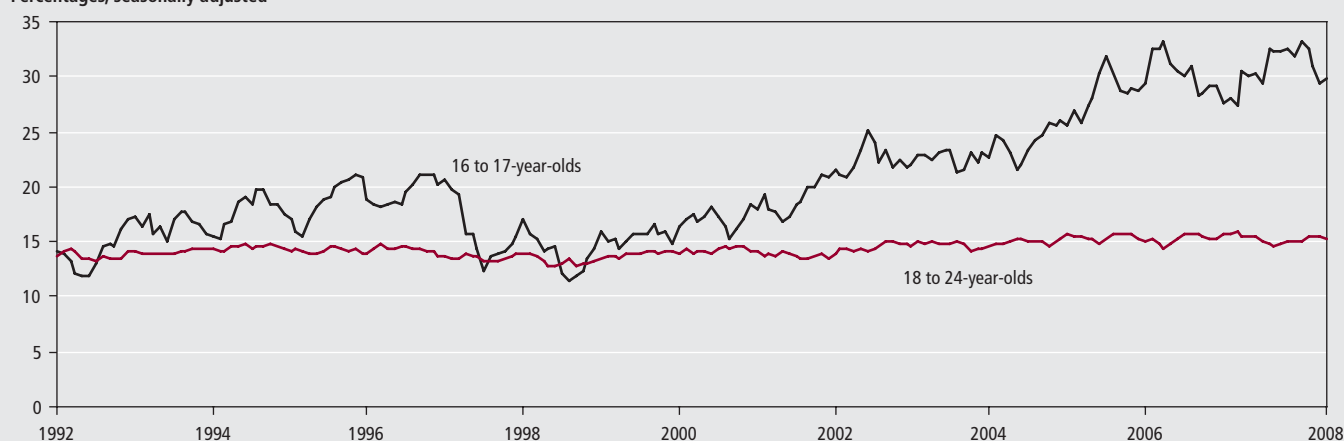
The economically inactive student group has grown since 1993 (Figure 6). As a proportion of the inactive population, inactive students increased from a low point of 18.0 per cent in the three months to July 1997 to 25.3 per cent in the three months to September 2008. This equates to around 637,000 more inactive students. However, full-time education does have an impact on future employment prospects: those with higher educational qualifications are highly likely to enter the labour market in the

future. By investing in 'human capital', they are more likely to have better employment prospects and access to higher earnings later in life.

While growth in the number of full-time students has been a cause in an increased inactivity rate for young people, there has also been an increase in inactivity among young people not in full-time education. This has been particularly marked among those non-students aged 16 to 17, with the inactivity rate rising from a low of 11.4 per cent in the three months to December 1998 to 29.9 per cent in the three months to September 2008. **Figure 7** shows that, for

Figure 7
Inactivity rate among young people not in full-time education, March to May 1992 to July to September 2008

United Kingdom
 Percentages, seasonally adjusted



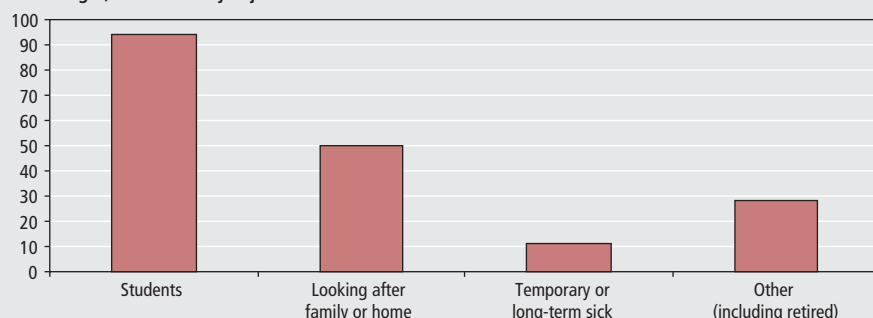
Source: Labour Force Survey

Figure 8

Economically inactive¹ who think they will definitely work in the future: by reason, 2008²

United Kingdom

Percentages, not seasonally adjusted

**Notes:**

Source: Labour Force Survey

- 1 Men aged 16 to 64 and women aged 16 to 59; excludes those inactive people who did not answer.
 2 Four-quarter average of Q4 2007 to Q3 2008.

those aged 18 to 24, the rate has remained fairly stable over the last decade and in the three months to September 2008, the inactivity rate for those not in full-time education was 15.2 per cent.

The LFS introduced two new questions in spring 2005 to find out if someone who is inactive is likely to work in the future and when this might be. This can be used to identify those who are inactive on their inclination to work in the future. **Figure 8** shows that, in the 12 months to September 2008, 94.5 per cent of students and 50.7 per cent of those looking after the family and home think they will definitely work in the future; only 12.7 per cent of the temporary/long-term sick think that they definitely will work in the future.

Workless households

A 'workless' household is one where none of the adults below state pension age are in employment. This includes households where all adults are unemployed, those where all adults are economically inactive and a mixture of both unemployed and economically inactive.

Results from the 2008 'Work and worklessness among households' First Release show that, in the three months to June 2008:

- there were 3.1 million workless households. This represented 15.8 per cent of all households that include at least one person below state pension age, down 0.2 percentage points from the previous year and down 0.2 percentage points from five years earlier
- there were 4.3 million people below state pension age living in workless households. This represented 11.4 per cent of the population aged over 16 and below state pension age, down 0.4 percentage points from the previous year and down 0.3 percentage points from five years earlier
- there were 1.8 million children living in workless households. This represented 15.4 per cent of all children in households that include at least one person below state pension age, down 0.3 percentage points from the previous year and down 0.6 percentage points from five years earlier
- the proportion of people below state pension age living in workless households was highest for the Chinese ethnic group, at 28.3 per cent, and lowest for the Indian ethnic group, at 7.6 per cent; 10.7 per cent of those in the White ethnic group lived in a workless household

CONTACT✉ elmr@ons.gsi.gov.uk**REFERENCES**

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Office for National Statistics *Economic Inactivity by reason* at www.statistics.gov.uk/statbase/product.asp?vlnk=8277

Office for National Statistics *Educational status, economic activity and inactivity of young people by sex* at www.statistics.gov.uk/statbase/product.asp?vlnk=8293

Office for National Statistics *Labour Force Survey (LFS) historical quarterly supplement data* at www.statistics.gov.uk/statbase/product.asp?vlnk=14365

Office for National Statistics *Local area labour market statistical indicators* at www.statistics.gov.uk/statbase/product.asp?vlnk=14160

Office for National Statistics *UK unemployment levels and rates* at www.statistics.gov.uk/statbase/product.asp?vlnk=8292

Office for National Statistics *Work and worklessness among households First Release* at www.statistics.gov.uk/statbase/product.asp?vlnk=8552

Office for National Statistics (Nomis) *Further regional and local area labour data* at www.nomisweb.co.uk/default.asp

FEATURE

Labour costs

Sarah Conn

Office for National Statistics

SUMMARY

Labour costs cover all aspects of costs incurred by employers when employing workers. These include wages and salaries, National Insurance and social contributions, redundancy payments, benefits in kind, overheads and other non-wage components.

This article gives a brief overview of the structure of labour costs and then focuses on earnings (the largest component of labour costs). It shows how earnings in the whole economy have changed over time and also the earnings distribution by occupation. The other topics of interest analysed in the article are the gender pay gap both over time and by various personal characteristics, as well as estimates of how many people are paid below the National Minimum Wage.

Labour costs and the distribution of pay straddle both labour demand and labour supply within the labour market framework. From the demand side, labour is a necessary factor of production: firms need people to make their output, which they will trade with consumers.

From the supply side, people choose to trade their time in order to increase their real income, in order to buy the goods and services that others produce. In other words, people choose to work so that they are paid. If there is a shortage of people with the required skills to do the work then a firm will have to increase wages to attract workers. Conversely, if there is an increase in the size of the available labour force, wages can be decreased as there is a larger supply of labour and more competition for jobs. These are the dynamics of labour supply, labour demand and labour costs, represented at the most simplistic level.

Labour costs

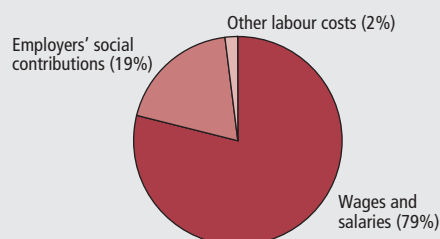
Labour costs are the whole range of costs employers incur when employing workers. They include wages and salaries, National Insurance and social contributions, redundancy payments, benefits in kind, overheads and other non-wage components. On the labour demand side, an employer has to consider all these costs in assessing the impact on the business of recruiting and employing staff.

Figure 1 shows that by far the largest component of labour costs is wages and salaries, which makes up four-fifths of the total.

On the supply side, the disposable income of an individual is made up of wages and salaries, occupational pensions, investments, non-government sources and government sources (cash benefits), less any direct taxes, National Insurance contributions and council tax. All of these sources of income influence

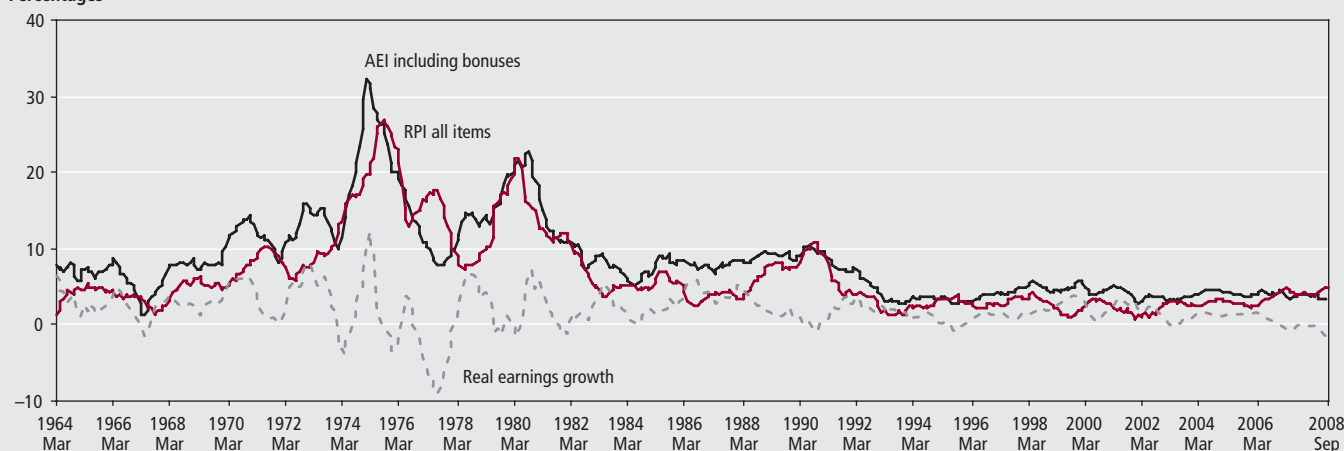
Figure 1
The structure of labour costs, 2004

United Kingdom
Percentages



Source: Labour Cost Survey, 2004

Figure 2

AEI whole economy growth rate (including bonuses), year-on-year growth of the RPI (all items) and derived real earnings growth¹Great Britain/United Kingdom
Percentages**Note:**

1 The AEI covers Great Britain and the RPI covers the United Kingdom.

Source: Average Earnings Index, Retail Price Index

an individual's decision to supply their labour.

Analysis of labour costs and distribution is limited by the availability of relevant information. For this reason, the Office for National Statistics (ONS) mainly focuses on earnings (wages and salaries), the largest and most important component of labour cost and the most collected, in the majority of its analyses.

Earnings

The growth in whole economy earnings is measured by the Average Earnings Index (AEI), which uses a fixed distribution of employees to monitor change from one period to the next. The AEI 'including bonus series' shows that earnings rose by 3.3 per cent in the year to September 2008, which is a slower rate of growth than in previous years. This was the slowest rate of increase since mid-2003. It was also much slower than the growth observed in the 1970s, 1980s and early 1990s.

Although the annual growth figure for September is an 'including' bonus figure, it will be less affected by growth in bonuses, because it falls outside the season when most bonuses are paid – which runs from December to April. Compared with September, earnings growth during the bonus season has tended to be higher in recent years: for example, in March 2008 it was 4.0 per cent, and in March 2007 it was 4.3 per cent. ONS also publishes an excluding bonus series which has remained steady over the last couple of years, despite an increasing Retail Prices Index (RPI). The excluding bonus series increased by

3.6 per cent in the year to September 2008 compared with an increase of 3.7 per cent in the year to September 2007. Either measure shows that the overall picture is of steady growth in earnings.

Growth in average earnings can be compared with growth in the price of goods, to help understand real earnings growth. This is more indicative of the purchasing power of earnings. In other words, it indicates whether the growth in earnings allows people to purchase more, or if the cost of goods has also gone up.

Figure 2 displays the real earnings growth, calculated from AEI earnings growth (including bonuses) minus the all items RPI, an indicator of domestic inflation. In September 2008, the annual rate of increase in the all items RPI was 5.0 per cent, which was above earnings growth, implying a fall in real earnings of 1.7 per cent in the year to September 2008. Real

earnings growth was positive from 1996 to 2006; however, it was negative in the last 18 months, as it was in the mid-1970s, early 1980s, 1990 and 1995.

The Average Weekly Earnings (AWE) is an experimental monthly series that uses the same data source as the AEI, the Monthly Wages and Salaries Survey. It estimates the average weekly wage and can produce a number of analyses that were previously unavailable from other short-term earnings statistics. **Figure 3** compares earning levels including bonuses and arrears (total pay) and earning levels excluding bonuses and arrears (regular pay). As the figure shows, there has been a steady increase in both total and regular pay since the beginning of 2000, with regular pay reaching its highest point in September 2008, at £418. The figure also highlights the seasonal effect of bonuses on the AWE, which causes the peaks in the winter months.

Figure 3

Average weekly earnings in the whole economy

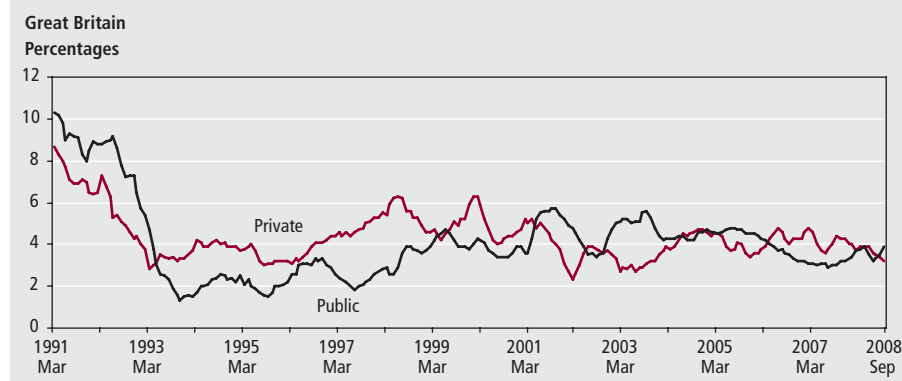
Great Britain

£



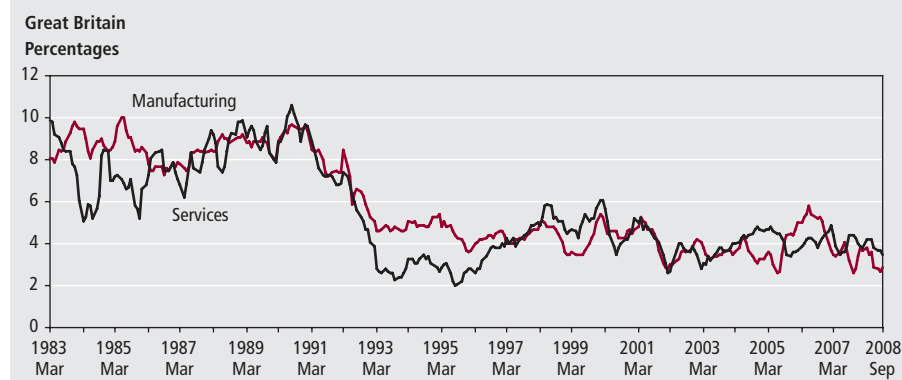
Source: Average Weekly Earnings

Figure 4
Year-on-year growth rates of public and private sector earnings
(including bonuses)



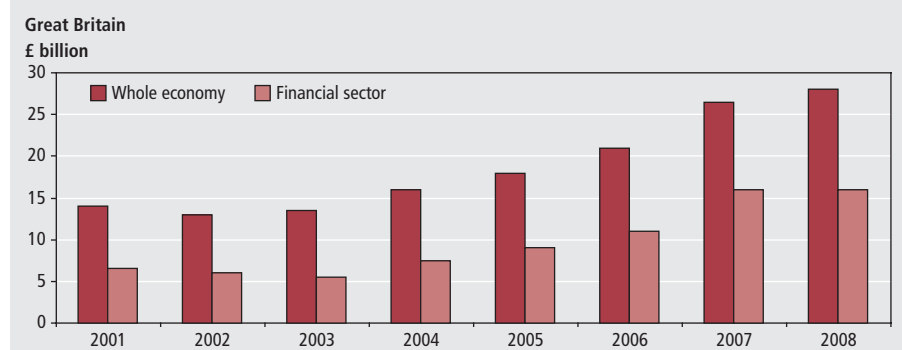
Source: Average Earnings Index

Figure 5
Year-on-year growth rates in the manufacturing and services sectors
(including bonuses)



Source: Average Earnings Index

Figure 6
Bonus payments for the financial sector and whole economy¹



Note:

Source: Average Weekly Earnings

¹ The figures are derived from the experimental Average Weekly Earnings series. All data relate to the period December of the previous year to April in the current year: for example, 2008 relates to the period December 2007 to April 2008.

Using the AEI and looking at earnings growth by sector in the year to September 2008, the private sector earnings growth (including bonuses) was 3.2 per cent compared with public sector earnings growth of 3.9 per cent (**Figure 4**).

In the year to September 2008, earnings

(including bonuses) in the manufacturing sector grew by 2.9 per cent, which represents a decrease in growth since a recent high of 4.1 per cent in the year to July 2007 (**Figure 5**). In the year to September 2008, earnings in the services sector increased by 3.5 per cent, which is a

deceleration of growth since the most recent peak of 4.2 per cent in the year to May 2008.

Bonus growth

Bonus payments are a major influence on pay growth. Changes in their level or the month in which they are paid can have a significant effect on growth rates for the economy. Bonus payments across the whole economy doubled from about £14 billion to about £28 billion over the period 2001 to 2008 (**Figure 6**). Over the same period, payments in the financial sector grew from £6.5 billion to £16 billion. Growth in the financial sector therefore contributed about two-thirds of the growth in the whole economy.

For the latest year, bonus payments across the whole economy amounted to about £28 billion in the period December 2007 to April 2008, up £1.5 billion on the same period a year earlier. Payments in the financial sector amounted to £16 billion, unchanged on a year earlier.

Non-wage costs

The experimental Index of Labour Costs per Hour (ILCH) provides a timely indicator of changes in the cost of labour per hours worked. It reflects the changes in wages and salaries, non-wage costs and the quantity of hours worked over time. This measure assists in the analysis of inflationary pressures originating from the labour market which result from changes in total labour costs per hour. It can be used alongside other earnings indicators (such as the AEI or the AWE, both covered earlier) to see how the movement of non-wage costs affect the overall cost of labour. The non-wage costs included in the index are sickness, maternity and paternity costs, pension contributions, benefits in kind and National Insurance contributions.

The ILCH is more sensitive to movements in employment patterns throughout the year than other measures of earnings (**Figure 7**). The main difference is in the third quarter of the year, where the ILCH has higher growth. Fewer hours are worked in the summer months and wages stay broadly constant, so the relative cost of labour increases. This effect is removed when the index is seasonally adjusted.

The year-on-year growth rate of total labour costs fell to 2.5 per cent in 2008 Q3. The last time it was lower was three years earlier, in 2005. The growth rate in total other costs reached the lowest it had been since the series began in 2001, with a growth rate of 0.9 per cent in 2008 Q3. The very high growth rate for total other costs

Figure 7

Year-on-year growth rates of total labour costs, total wage costs and total other costs

Source: Index of Labour Costs per Hour

shown for 2003 Q2 can be explained by the significant increase in National Insurance contributions.

Earnings distribution

Information on earnings is available from the Annual Survey of Hours and Earnings (ASHE), along with a number of employee characteristics. The AEI is the preferred measure of growth in earnings but ASHE is used to look at the distribution of earnings.

According to ASHE, the median gross weekly pay for full-time employees in the UK grew to £479 in 2008. The median is the middle point of a population with exactly the same number of data values above and below. It is a better way of comparing the levels of earnings than the mean as it is less influenced by extreme values at the top end of the pay distribution. The median gross hourly earnings of full-time employees grew to £11.87 in 2008, up by 4.5 per cent on 2007. This is based on adults who worked full time and whose pay was unaffected by absence and excludes overtime.

The overall growth in earnings has led to noticeable changes in the rate of growth for the highest and lowest earners in 2008 compared with the previous year. Full-time employees in the bottom 10 per cent earned less than £262 a week (including overtime) in 2008, 3.5 per cent higher than in 2007. Full-time adults in the top 10 per cent earned more than £947 a week (including overtime), 4.4 per cent higher than in 2007. **Figure 8** shows the ratio of the amount the top 10 per cent earned compared with the amount the bottom 10 per cent earned (the 90/10 ratio). In 2008, the weekly amount the top 10 per cent earned was 3.62 times higher than the amount the bottom 10 per cent earned; in 2007 it was 3.59 and in 1998 it was 3.52.

Figure 9 shows the levels of earnings in 2008 by occupation, compared with the UK average. It presents comparisons of the

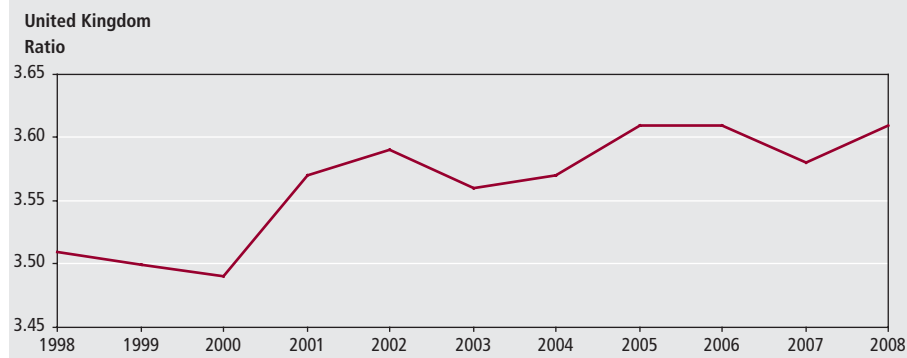
median levels of gross weekly earnings for full-time employees whose pay was not affected by absence. In 2008, the median gross weekly pay for the UK was £479. The 'managers and senior officials' occupation group had the highest median pay in 2008 (£693), while the 'sales and customer service' occupations had the lowest (£287).

Gender pay gap

The gender pay gap is a measure of the difference between the earnings of men and women. It is determined by calculating women's average pay as a percentage of men's. The pay gap is the difference between this and 100 per cent. So, for example, the gender pay gap is 15 per cent if women's pay is 85 per cent of men's pay.

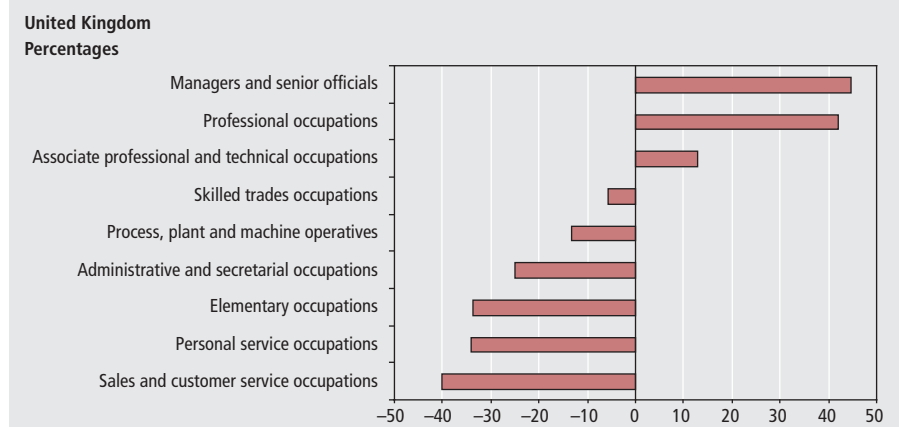
There are various ways to measure the gender pay gap, for example, using the median or mean earnings of men and women in the calculation. ONS focuses on the median rather than the mean, for the reason mentioned previously. Although median hourly pay provides a useful comparison between the earnings of men and women, it does not necessarily indicate differences in rates of pay for comparable jobs. Average pay is affected by the different work patterns of men and women, such as the proportions in different occupations and their length of time in jobs. These differences may also be attributed to gender factors, for example,

Figure 8

Ratio of the 90th to the 10th percentile of gross median weekly earnings of full-time employees

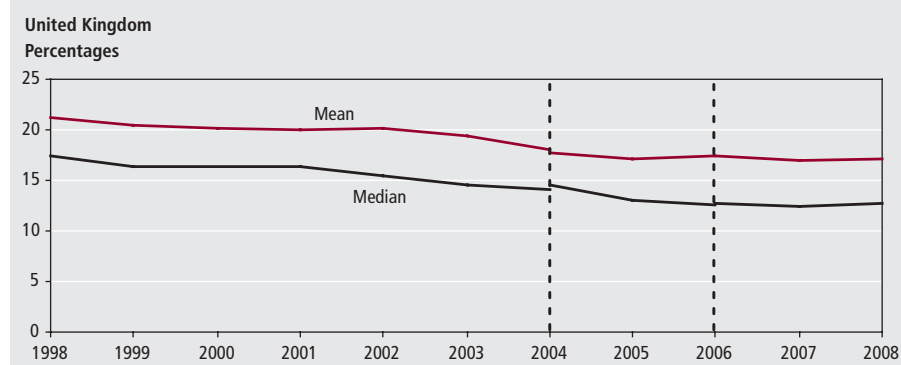
Source: Annual Survey of Hours and Earnings

Figure 9

Percentage difference from average gross weekly pay for full-time employees: by occupation, 2008

Source: Annual Survey of Hours and Earnings

Figure 10
Gender pay gap of full-time employees^{1,2}

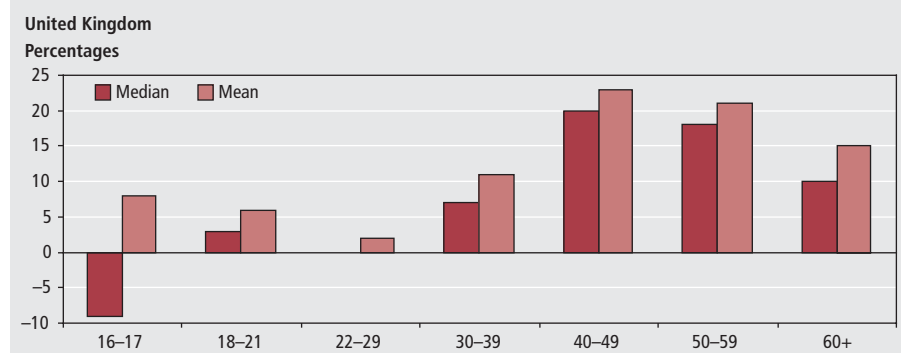


Notes:

- 1 Includes those on adult rates of pay, excluding overtime and unaffected by absence.
- 2 ASHE was introduced in 2004, replacing the New Earnings Survey by implementing a new imputation and weighting methodology. In 2006, further methodological changes were made to the sample design and automated occupation coding. These are the discontinuities shown above.

Source: Annual Survey of Hours and Earnings

Figure 11
Gender pay gap of full-time employees' average hourly pay: by age band,¹ 2008



Note:

- 1 Includes adult rates of pay (and junior rates of pay for 16 to 17-year-olds), excluding overtime and unaffected by absence.

Source: Annual Survey of Hours and Earnings

different patterns of childcare for women and men.

The gender pay gap using ASHE (as measured by the median hourly pay of full-time employees, excluding overtime) widened between 2007 and 2008. The gap between women's and men's median hourly pay was 12.8 per cent, compared with the 12.5 per cent recorded in 2007 (**Figure 10**).

Using a measure based on mean earnings, women's average hourly pay (excluding overtime) was 17.1 per cent less than men's pay, a widening from the 2007 figure of 17.0 per cent.

Another alternative way of measuring the gender pay gap is for all employees rather than restricting it to those working full-time only. On this basis, the gender pay gap between women's and men's median hourly pay grew from 21.9 per cent in 2007 to 22.5 per cent in 2008.

Figure 11 represents the gender pay gap of full-time employees by age band. The estimates show that the gender pay gap is

fairly small until the 30 to 39 age group. The gender pay gap increases to a peak for the 40 to 49 age group. Older women are more likely to have career breaks from paid work to care for children and other dependents. These breaks impact on women's level of work experience, which in turn can impact their pay rates.

There is a negative pay gap for those aged 16 to 17 based on median earnings, where women earn more than men in that age group (although the pay gap is reversed when mean earnings are used). This suggests that 16 and 17-year-old men's earnings are more diverse and some of them earn a lot more while women's earnings tend to be more grouped around a midpoint.

There is a very small gender pay gap for those aged 18 to 21 and 22 to 29 years. Based on median hourly earnings of full-time employees, it is 3.1 per cent for the 18 to 21 years group and non-existent for those aged 22 to 29 years. The 22 to 29 age

group has the smallest pay gap between men and women. The small gap for this group corresponds with the age people tend to finish higher education and have been in the workforce for a relatively short length of time. **Figure 11** also shows that the largest pay gap of full-time employees in 2008 exists for those aged 40 to 49, at 19.6 per cent for median earnings, using ASHE data. They are closely followed by those aged 50 to 59, where the pay gap is 18.2 per cent, based on median earnings. The mean hourly earnings measure shows a slightly larger pay gap between men and women than the median earnings, across all age groups.

The Labour Force Survey (LFS) is another source of earnings data, which includes additional information and characteristics, of interest when analysing the gender pay gap. The LFS results shown in **Table 1** are calculated from actual pay and hours including overtime for an individual's main job, restricted to those from age 16 to state pension age. In the LFS, whether a respondent is working full time is down to their own assessment of their job; it is not determined by the number of hours worked. The results shown from the LFS are for July to September 2008.

Family characteristics

Table 1 shows that men and women who are not married or cohabiting have similar median hourly pay, £9.20 for men and £9.50 for women, resulting in a negative gender pay gap of 3.2 per cent. However, the gender pay gap for married/cohabiting couples is 16.3 per cent.

The gender pay gap is largest where two dependent children are present, with a pay gap of 21.6 per cent, followed very closely where four or more dependent children are present, with a pay gap of 21.1 per cent. In comparison, the gender pay gap is smallest where no dependent children are present. Full-time women without dependent children earn £10.00, compared with £11.00 for full-time men without dependent children, resulting in a gender pay gap of 9.1 per cent.

Personal characteristics

The hourly pay of full-time disabled women is £9.40 compared with £10.30 for full-time disabled men, resulting in a gender pay gap of 9.0 per cent. In comparison, the results for those who do not classify themselves as disabled show the hourly pay of a full-time women as £10.10, compared with £11.70 for full-time men, resulting in a gender pay gap of 13.4 per cent.

The gender pay gap of full-time employees varies considerably across ethnic group. The

Table 1

Gender pay gap of full-time employees' gross median hourly pay: by various characteristics, 2008¹

United Kingdom

	Median hourly earnings (£)			Gender pay gap (per cent)
	Female	Male	Persons	
Married/cohabiting				
Married/cohabiting/civil partner	10.4	12.5	11.7	16.3
Non-married	9.5	9.2	9.3	-3.2
Number of dependent children				
No dependent children	10.0	11.0	10.6	9.1
One dependent child	9.6	11.6	10.8	16.5
Two dependent children	10.9	13.9	12.8	21.6
Three dependent children	11.3	12.5	12.2	9.9
Four or more dependent children	8.0	10.1	10.1	21.1
Disability				
Disabled	9.4	10.3	9.9	9.0
Not disabled	10.1	11.7	11.1	13.4
Ethnicity				
White	10.1	11.6	11.0	13.0
Mixed	7.7	11.6	8.9	33.2
Asian/Asian British	9.4	10.0	9.6	6.2
Black/Black British	11.5	10.4	10.9	-10.8
Other (including Chinese)	11.1	11.1	11.1	0.5
Education				
Degree or equivalent	14.7	17.4	16.0	15.6
Higher education	11.5	14.4	12.7	20.1
GCE A level or equivalent	8.4	10.9	9.9	22.4
GCSE grades A-C or equivalent	8.3	9.4	8.9	11.7
Other qualifications	8.0	8.6	8.5	7.5
No qualification	6.5	8.2	7.6	20.7

Note:

Source: Labour Force Survey, July to September 2008

1 Estimates are based on full-time employees from age 16 to state pension age.

widest pay gap is for the ethnicity group 'Mixed', at 33.2 per cent. 'Black or Black British' women earn on average £11.50 per hour while their male counterparts earn £10.40 per hour, resulting in a negative gender pay gap of 10.8 per cent.

Educational attainment

According to the LFS, the level of qualification obtained also has an impact on the gender pay gap. The widest gender pay gaps are for those educated to A level, at 22.4 per cent, closely followed by those with 'no qualification' and 'higher education', where the gender pay gap is 20.7 and 20.1 per cent, respectively. The gender pay gap of full-time employees is narrowest for those with 'other qualifications', at 7.5 per cent.

Overall, the analysis has shown there is a gender pay gap present, but the pay position of women working full-time has improved over time compared with that of full-time men. The gender pay gap does, however, vary depending on an individual's circumstances,

for example, marital status and number of dependent children. For further information on the gender pay gap and characteristics of those who tend to be more affected by the gender pay gap, see Leaker (2008). Further analysis on the gender pay gap which takes account of some characteristics of employees is also available (Barnard 2008). This analysis demonstrated that even after controlling for some characteristics available from the ASHE dataset, there was still a gender pay gap present which cannot be explained.

National Minimum Wage

ASHE estimates for spring 2008 show that there were 288,000 jobs held by people aged 16 and over who were paid below the National Minimum Wage (NMW). This equates to 1.1 per cent of the number of UK jobs (see Table 2, overleaf). It is estimated that 17,000 (3.9 per cent of jobs held by employees in this age group) were held by people aged 16 and 17, 47,000 (2.6 per cent of jobs) by people aged 18 to 21 and 224,000 (0.9 per cent) by those aged 22 and over.

The percentage of jobs below the NMW in 2008 (1.1 per cent) was the same as in 2007 and slightly lower than in 2006 (1.2 per cent). In spring 2008, the NMW was £3.40 for those aged 16 and 17, £4.60 for those aged between 18 and 21 and £5.52 for those aged 22 and over.

It should be noted that estimates of jobs paid below the NMW do not measure non-compliance with the NMW legislation. This is because the survey data used to provide the estimates do not indicate whether an individual is eligible for the minimum wage. For example, some people, such as apprentices or new trainees, are exempt from the minimum wage or are only entitled to lower rates. Also, if employees receive free accommodation, employers are entitled to offset hourly rates.

CONTACT✉ elmr@ons.gsi.gov.uk**REFERENCES**

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Office for National Statistics *Labour Costs Survey* at www.statistics.gov.uk/statbase/product.asp?vlnk=10176

Office for National Statistics *Retail Prices Index* at www.statistics.gov.uk/statbase/tsdataset.asp?vlnk=229

Table 2

Percentage of jobs and level of jobs paid below the National Minimum Wage¹

United Kingdom

	Percentage of jobs				Level of jobs (thousands)			
	16–17 ²	18–21	22 and over	All jobs	16–17 ²	18–21	22 and over	All jobs
1998 ^{3,4}	–	7.2	5.4	5.6	–	110	1,170	1,280
1999	–	2.4	2.1	2.1	–	40	460	490
2000	–	2.2	0.9	1.0	–	30	190	230
2001	–	2.1	0.9	1.0	–	40	210	240
2002	–	2.7	1.3	1.4	–	50	290	340
2003	–	2.3	0.9	1.0	–	40	210	250
2004 ⁵	–	2.3	1.0	1.1	–	44	233	276
2005	4.0	3.0	1.0	1.2	20	55	233	308
2006	3.8	2.3	1.0	1.2	14	44	238	296
2007	4.0	2.6	1.0	1.1	16	49	231	296
2008	3.9	2.6	0.9	1.1	17	47	224	288

Notes:*Source: Labour Force Survey; Annual Survey of Hours and Earnings*

1 Estimates are from spring each year.

2 The minimum wage for 16 and 17-year-olds was introduced in October 2004.

3 Estimates for 1998 to 2003 are based on a central estimate from both the Labour Force Survey and the Annual Survey of Hours and Earnings.

4 Figures for spring 1998, before the National Minimum Wage was introduced, are for the number of jobs paid at less than £3.00 per hour (aged 18 to 21) or £3.60 per hour (aged 22 and over).

5 A new methodology using only ASHE data was introduced in 2004. This improved coverage of the low end of the pay distribution and estimating the number of jobs below the National Minimum Wage.

FEATURE

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Regional economic indicators

A focus on enterprise – driving regional productivity

SUMMARY

This quarter, the regional economic indicators article focuses on enterprise – one of the drivers of regional productivity. The regular part of the article then gives an overview of the economic activity of UK regions in terms of their gross value added (GVA), GVA per head and labour productivity. This is followed by a presentation of headline indicators of regional welfare, other drivers of regional productivity and regional labour market statistics. The indicators cover the nine Government Office Regions of England and the devolved administrations of Northern Ireland, Scotland and Wales. These 12 areas comprise level 1 of the European Nomenclature of Units for Territorial Statistics (NUTS level 1) for the UK. The term 'region' is used to describe this level of geography for convenience in the rest of this article.

Focus on enterprise

This article focuses on enterprise, one of the productivity drivers identified by HM Treasury and the Department for Business, Enterprise & Regulatory Reform (BERR). Enterprise – along with investment, innovation, competition and skills – is seen as key to productivity growth. Over the long term, increased productivity is the key determinant of economic growth, and together with higher employment, is the primary route to higher living standards (ONS 2007).

Enterprise is defined as the seizing of new business opportunities by both start-ups and existing firms. New enterprises can bring innovative processes and technologies to the market forcing existing ones to improve their productivity in order to remain competitive. As a result, numbers and rates of business start-ups, closures and survival rates are among key indicators of enterprise.

In November 2008, BERR published its VAT-registered business start-ups and closures series for the last time. At the same time, the Office for National Statistics (ONS) introduced a more comprehensive series in line with a new European Commission Structural Business Statistics Regulation. The new series, called 'Business demography, enterprise births and deaths' includes not only enterprises registered for VAT, but also those that are only registered for pay-as-you-earn (PAYE). In 2007, these accounted for approximately 20 per cent of all VAT

and/or PAYE-registered enterprises. The VAT-registered series did not include these enterprises and as a result the figures for business stocks, start-ups and closures in the new series are more complete, and therefore higher. It needs to be noted that enterprise statistics in general relate to the place of registration of the enterprise. The enterprise, however, may consist of more than one local unit, some possibly in different regions.

A more complete discussion of the methodology and the differences between the series published by ONS and BERR is contained in Grierson and Allen (2008).

As the ONS series is more comprehensive, figures on enterprise stocks, births and deaths quoted in this article are based on the new series unless stated otherwise.

Numbers of enterprises by region

The number of active enterprises in each region varies considerably, not least because some regions have larger populations than others. **Table 1** shows that there were a total of 2.3 million enterprises active in the UK in 2007. The region with the highest count was London (389,000) followed by the South East (369,000). Northern Ireland and the North East had the fewest enterprises (58,000 and 62,000, respectively).

When calculated as a rate to take into account the different population sizes across regions, there was still a considerable variation between regions. Again, London

Table 1
Enterprise counts and enterprises per 10,000 adults:
by NUTS1 region, 2007

	Active enterprises (thousands)	Active enterprises per 10,000 adults (numbers)
United Kingdom	2,301	469
North East	62	299
North West	233	421
Yorkshire and The Humber	166	400
East Midlands	157	444
West Midlands	191	444
East of England	233	515
London	389	641
South East	369	555
South West	206	489
Wales	91	378
Scotland	145	347
Northern Ireland	58	424

Source: Business Demography, Office for National Statistics

and the South East had the highest rates, at 641 and 555 active enterprises per 10,000 resident adults, respectively. The North East had the lowest rate, at 299 per 10,000 adults. Despite the small number of enterprises in Northern Ireland, the rate of 424 per 10,000 adults was higher than the rate for the three northern English regions (the North East, the North West and Yorkshire and The Humber), Wales and Scotland.

Births and deaths of enterprises

Table 2 shows the number of births and deaths of enterprises in 2007. London and the South East had the highest number of both births and deaths, while Northern Ireland and the North East had the lowest. The picture is broadly similar for rates per 10,000 adults, with the exception that Wales had the lowest rate of enterprise births followed by the North East and Northern Ireland.

An alternative way of calculating rates is enterprise births and deaths as a proportion of the active enterprise stock in a particular period. The difference between the two represents the net change, which can also be calculated as a proportion of total stock.

Figure 1 shows that the North East and Scotland had the highest rate of net change, at 4.8 per cent, closely followed by London, at 4.7 per cent. Wales and the

South West had the lowest rates, at 1.6 and 2.3 per cent, respectively. In 2007, across regions, the relatively modest net changes were the result of much larger proportions of enterprises joining and leaving the stock. These proportions were largest in London, followed by the North East. A relatively large proportion of enterprises joining and leaving the stock can be seen as desirable, as new enterprises entering the market are considered to bring innovative processes and technologies that drive up productivity

and force unproductive enterprises to leave the market.

Survival rates

As well as analysing births and deaths of enterprises, it is useful to look at how long these enterprises survive. The Business Demography series contains data showing the number of years survived by enterprises born in the years 2002 to 2006.

Figure 2 shows the proportion of enterprises born in 2002, 2003 and 2004 that survived for at least three years. It shows that, overall in the UK, survival rates increased over the period, rising from 62.9 per cent of enterprises born in 2002 to 65.3 per cent of those born in 2004.

Patterns were similar across regions, with all but Northern Ireland having higher survival rates for enterprises born in 2004 than in 2002. Northern Ireland saw a fall from 69.2 to 67.4 per cent; however, this was still higher than the UK average of 65.3 per cent. Among enterprises born in 2004, those in the South West had the highest three year survival rate, at 68.9 per cent.

London stands out as the region with the lowest rate, at 60.0 per cent. **Figure 1** has shown that London had the highest percentage of births and deaths of

Table 2
Enterprise births and deaths: by NUTS1 region, 2007

	Births			Deaths ¹		
	Count of births (thousands)	Births per 10,000 adults	Percentage of active enterprises	Count of deaths (thousands)	Deaths per 10,000 adults	Percentage of active enterprises
United Kingdom	302	61.5	13.1	228	46.5	9.9
North East	9	43.2	14.5	6	28.7	9.6
North West	31	56.8	13.5	24	42.7	10.1
Yorkshire and The Humber	21	50.9	12.7	17	40.8	10.2
East Midlands	19	54.2	12.2	15	41.9	9.5
West Midlands	24	55.8	12.6	19	44.6	10
East of England	29	63.6	12.3	22	49.0	9.5
London	64	105.4	16.5	46	75.4	11.8
South East	45	67.4	12.1	36	53.4	9.6
South West	24	56.4	11.5	19	45.2	9.2
Wales	10	42.1	11.1	9	36.1	9.5
Scotland	19	46.1	13.3	12	29.6	8.5
Northern Ireland	6	43.8	10.3	4	29.4	6.9

Note:

1 Provisional.

Source: Business Demography, Office for National Statistics

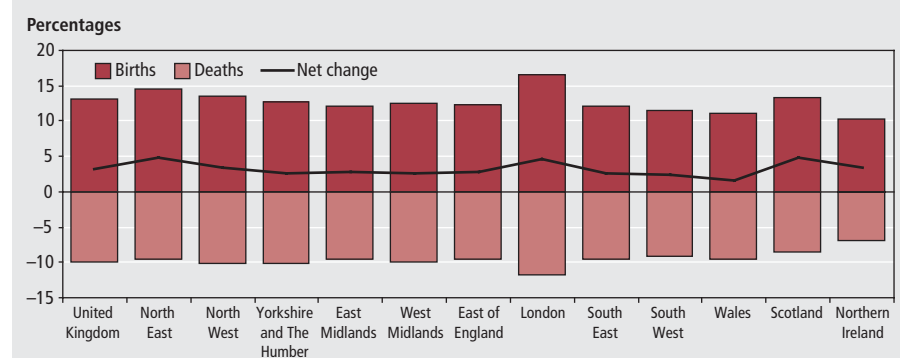
Box 1

Limitations of the use of rates for enterprise statistics

Although the use of rates takes into account the size of the resident adult population in different regions, there are a number of other factors that may influence the enterprise rates. For example, the industrial structure of a region could affect the average number of people employed in each enterprise, and therefore the number of enterprises. Also, rates based on resident populations

are subject to commuting effects in areas with high levels of inward or outward commuting, such as London and the South East. Further analysis would be required to establish the exact nature of these relationships. Users should therefore be cautious in the interpretation of differences in rates.

Figure 1
Enterprise births, deaths¹ and net change as percentages of enterprise stock: by NUTS1 region, 2007



Note:

1 Provisional.

Source: Business Demography, Office for National Statistics

Figure 2
Percentage of enterprises surviving three years: by year of birth and NUTS1 region



Source: Business Demography, Office for National Statistics

enterprises; therefore, it is not surprising that survival rates were relatively low. They could be an indication of London's ability to exploit short-term business opportunities. At the same time, it may suggest that many of the new enterprises born will not provide long-term growth and employment.

Enterprise size

The Business Demography series also gives information on the size of enterprises in the enterprise stock and of those enterprises joining and leaving the business stock.

It can be argued that a large number of small enterprises show greater

entrepreneurial activity than a smaller number of large enterprises, as a greater number of business opportunities have been identified and exploited by a larger number of individuals.

Table 3 shows the percentages of enterprises that were born and died in each region with 0 to 4, 5 to 9, 10 to 19 and 20+ employees in 2007. This is compared with the percentages in each employment size band for the total enterprise stock. In the UK overall, 77.6 per cent of the enterprise stock had employment of 0 to 4, ranging from 69.3 per cent in Northern Ireland to 81.3 per cent in London. The North East, followed by Northern Ireland and Scotland, had the highest proportion of enterprises with employment of 20 or more, at 6.2 and 6.0 per cent, respectively. London had the lowest proportion of larger enterprises at 4.1 per cent.

Across all regions, enterprises that were born in 2007 were more likely to be in the smallest size band than for the stock as a whole. In all regions, over 90 per cent of enterprises born had fewer than five people in employment, with a UK average of 91.9 per cent. Variation between regions was small, ranging from 90.3 per cent in Northern Ireland to 93.6 per cent in London.

The proportion of deaths accounted for by the smallest enterprises (88.7 per cent) was slightly lower than for births, but considerably higher than the national average of the enterprise stock (77.6 per cent). Only London had a figure above 90 per cent; all other regions ranged from 84.9 to 89.9 per cent. The proportion of deaths in the 20+ size band was lower than the 20+ proportion of the overall enterprise stock.

Table 3
Percentage of enterprise stocks, births and deaths in different employment size bands: by NUTS1 region, 2007

	Percentages											
	Stock				Births				Deaths ¹			
	0-4	5-9	10-19	20+	0-4	5-9	10-19	20+	0-4	5-9	10-19	20+
United Kingdom	77.6	11.9	5.6	4.8	91.9	5.6	2.0	0.4	88.7	7.3	2.8	1.2
North East	73.3	13.7	6.8	6.2	90.9	6.6	1.9	0.6	85.9	9.0	3.3	1.8
North West	76.5	12.4	6.0	5.2	91.2	6.1	2.1	0.5	87.1	8.2	3.2	1.4
Yorkshire and The Humber	75.1	13.0	6.4	5.4	90.6	6.6	2.3	0.4	87.6	7.8	3.0	1.5
East Midlands	76.9	12.2	5.8	5.1	91.7	5.9	2.0	0.4	88.0	7.9	2.8	1.3
West Midlands	77.0	12.1	5.8	5.0	92.1	5.5	1.9	0.5	88.1	7.6	3.0	1.3
East of England	79.2	11.3	5.1	4.4	92.6	5.2	1.8	0.4	89.9	6.7	2.4	1.0
London	81.3	9.8	4.8	4.1	93.6	4.2	1.9	0.3	90.9	5.5	2.6	1.0
South East	79.8	10.8	5.1	4.3	92.4	5.4	1.9	0.4	89.9	6.7	2.5	0.9
South West	76.6	12.9	5.9	4.6	90.7	6.5	2.3	0.5	87.6	8.1	3.1	1.3
Wales	76.1	13.5	5.5	4.9	90.5	7.0	2.1	0.4	88.9	7.8	2.5	0.8
Scotland	73.6	13.9	6.5	6.0	90.5	6.4	2.6	0.5	85.2	9.4	3.7	1.7
Northern Ireland	69.3	16.6	8.0	6.0	90.3	6.5	2.4	0.8	84.9	9.8	3.8	1.6

Note:

1 Provisional.

Source: Business Demography, Office for National Statistics

Although the proportions of births and deaths among larger enterprises are relatively small, the impact on employment of these enterprises can be disproportionately large. For example, a small number of births of large enterprises could have a hugely positive impact on a local area or even an entire region.

Time series data

In the November 2008 release, ONS only published 2007 data on enterprise stocks and deaths at the regional level. However, enterprise births per 10,000 resident adult population is one of the 198 indicators forming the basis of Local Area Agreements between central and local government. These agreements aim to set priorities for local areas, and indicators by which progress towards achieving them can be measured. As a result, ONS produced births data for 2002 to 2007.

Figure 3 compares the number of enterprise births per 10,000 resident adult population in 2002 and 2007.¹ All regions experienced an increased enterprise birth rate, although proportionately the largest increases were in Scotland and London, where the rate increased by around one-third. The lowest increases were in the South West and Wales.

Although time series statistics on enterprise deaths and stocks are not currently available in the Business Demography dataset, they are available from the VAT-registrations series for stocks published by BERR. **Figure 4** shows that, between 1998 and 2008, the number of enterprises as a proportion of the resident adult population increased steadily in all regions.

Self-employment

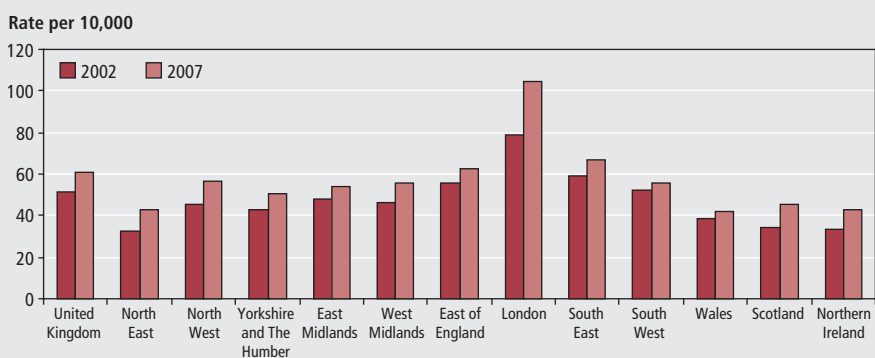
Another indicator of enterprise is the proportion of self-employed people among the working population. Self-employment indicates entrepreneurial activity in that the self-employed often identify a business opportunity and establish an enterprise to exploit it.

Data on self-employment is available from the Annual Population Survey (APS), the continuous household survey conducted by ONS. The APS asks respondents in employment about their employment status and whether they are an employee or self-employed.

Patterns of self-employment vary between the regions of the UK. This will at least in part reflect the different regional economies and labour markets.

Figure 3

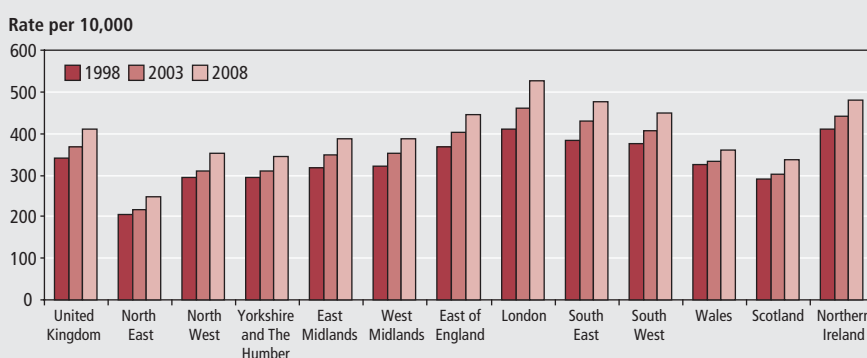
Enterprise births per 10,000 resident adult population: by NUTS1 region



Source: Business Demography, Office for National Statistics

Figure 4

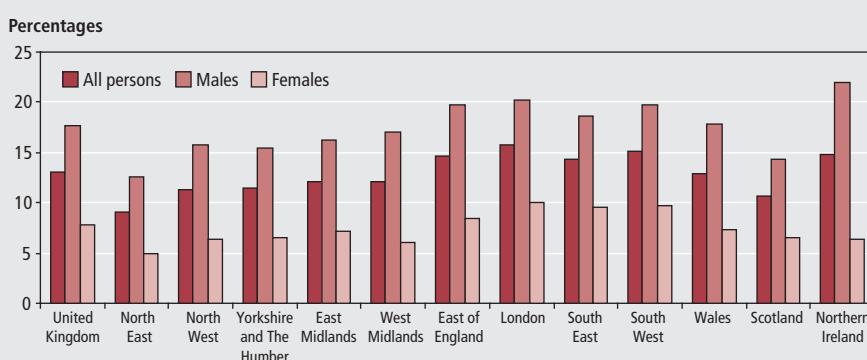
Stock of VAT-registered enterprises per 10,000 resident adult population: by NUTS1 region, 1998, 2003 and 2008



Source: Department for Business, Enterprise & Regulatory Reform

Figure 5

Self-employment among the working population: by NUTS1 region, July 2007–June 2008



Source: Annual Population Survey, Office for National Statistics

Figure 5 shows the percentage of those in employment who were self-employed in the 12 months to June 2008, broken down by region and sex. It shows that the highest proportion of self-employment was in London, with 15.7 per cent of employed people being self-employed compared with a UK average of 13.1 per cent. The lowest figure was in the North East, with a figure of 9.1 per cent. Across all regions, a higher

proportion of men were self-employed than women, typically more than twice as many.

Differences across regions are more pronounced when analysing the sexes separately. Among men, Northern Ireland had the highest rate of self-employment, at 21.9 per cent, compared with a UK average of 17.6 per cent. Again, the North East had the lowest rate, at 12.6 per cent. The proportion of women who were self-

employed in Northern Ireland was lower than the UK average, at 6.3 per cent, compared with 7.8 per cent. The highest rate of self-employment among female workers was in London, at 10.0 per cent.

The rate of self-employment as a whole has increased slightly in recent years, rising from 12.0 per cent for the UK in 2000 to 13.2 per cent in 2007. All regions for which data are available saw an increase over the period, although London and the East of England saw the largest rises proportionately.

Regional overview

Key figures on a regional basis indicate that:

- in 2007, workplace-based GVA was highest in London (£250 billion), followed by the South East (£175 billion) and the North West (£121 billion), while Northern Ireland (£29 billion), the North East (£40 billion) and Wales (£44 billion) had the lowest workplace-based GVA
- London was the region with the highest productivity, in terms of GVA per hour worked, at 22.9 percentage points above the UK average in 2006. Northern Ireland had the lowest productivity in 2006, at 16.1 percentage points below the UK average
- in 2008 Q3, the North East, Wales and the East of England had the strongest increases in the value of exports to the European Union (EU), at 20.1, 12.9 and 11.7 per cent, respectively, compared with 12 months earlier. Scotland (−4.0 per cent) and the East Midlands (−2.0 per cent) experienced declines in their exports to the EU over the same period

- the South East had the highest employment rate in 2008 Q3, at 79.0 per cent, while Northern Ireland had the lowest rate, at 70.1 per cent, compared with the UK employment rate of 74.4 per cent

Headline indicators

In order to gain an overview of the economic performance of UK regions, this article discusses a selection of economic indicators. Currently, the most widely used indicator of regional economic performance is Gross Value Added (GVA) per head. Policymakers frequently use GVA per head as a headline indicator of regional productivity and regional incomes and, therefore, the welfare of people living in a region, when comparing and benchmarking regions that differ in geographical size, economic output and population. However, as Dunnell (2009) has explained, productivity and income are very different concepts.

GVA per head is calculated as the simple ratio of the economic activity in a region divided by the number of people living in a region, while productivity is defined as the ratio of GVA divided by the labour input (jobs or hours worked) used to create it. GVA per head does not take account of:

- people commuting in and out of regions to work
- regional differences in the percentages of residents who are not directly contributing to GVA, such as young people or pensioners, and
- different labour market structures across regions, such as full- and part-time working arrangements

Therefore, GVA per hour worked or GVA per filled job are more appropriate productivity indicators.

Similarly, Gross Disposable Household Income (GDHI) per head is a better measure of regional incomes than GVA per head. For example, due to commuting, residents might derive their incomes from economic activity in another region, which is not captured by GVA per head. They may also have sources of income which are unrelated to current work, such as pensions and investment incomes.

Regional performance

In December 2008, ONS published new GVA estimates for 2007 and revised estimates for previous years. **Table 4** shows the regional economic performance in terms of workplace-based GVA, the average annual growth over the period 2000 to 2007 and the proportion of each region as a percentage share of total UK GVA in 2007.

The estimates show that London's GVA made up more than one-fifth of total UK GVA, which was followed by the South East (14.4 per cent) and the North West (9.9 per cent); Northern Ireland, the North East and Wales made up the lowest percentage shares, each below 4 per cent. Compared with 2006, the regional breakdown stayed roughly unchanged.

In terms of average annual percentage growth between 2000 and 2007, the East Midlands, London, Northern Ireland and the East of England had the highest GVA growth (each at 5.8 per cent), while the West Midlands (4.4 per cent) and Wales (4.9 per cent) had the lowest. This compares with average annual growth of 5.4 per cent

Table 4

Workplace-based gross value added at current basic prices: by NUTS1 region

£ million and percentages

	UK ¹	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
2000	842,542	28,282	84,683	61,461	52,590	68,394	72,332	168,976	123,283	64,204	31,686	67,194	19,458
2001	887,096	29,541	89,129	64,921	55,999	71,363	76,164	176,277	129,905	68,765	33,512	71,295	20,225
2002	937,292	31,223	94,301	69,240	59,737	75,090	79,224	185,237	137,970	72,772	35,733	75,701	21,063
2003	994,942	32,760	98,288	72,677	64,559	78,372	86,266	199,165	146,282	77,526	37,209	79,369	22,469
2004	1,047,873	35,339	103,938	76,779	67,412	81,652	91,483	209,826	152,131	81,633	39,503	84,104	24,074
2005	1,089,892	36,624	107,199	79,431	69,526	84,113	94,533	221,976	157,848	84,860	40,340	88,289	25,151
2006	1,147,862	37,956	112,359	82,477	73,796	86,902	100,809	235,656	166,716	89,014	41,985	93,373	26,823
2007 ²	1,216,835	40,277	120,520	87,235	78,068	92,165	107,005	250,148	175,303	94,152	44,308	98,877	28,781
Average annual percentage growth 2000 to 2007 ²	5.4	5.2	5.2	5.1	5.8	4.4	5.8	5.8	5.2	5.6	4.9	5.7	5.8
2007 ² regional breakdown (percentages)	100.0	3.3	9.9	7.2	6.4	7.6	8.8	20.6	14.4	7.7	3.6	8.1	2.4

Notes:

- 1 UK less Extra-region and statistical discrepancy.
- 2 Provisional.

Source: Regional Accounts, Office for National Statistics

Table 5

Workplace-based gross value added per head of population at current basic prices: by NUTS1 region

	£ per head and percentages												
	UK ¹	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
2000	14,308	11,120	12,501	12,395	12,617	12,979	13,457	23,350	15,429	13,057	10,900	13,272	11,562
2001	15,007	11,630	13,160	13,045	13,366	13,514	14,103	24,074	16,191	13,911	11,515	14,078	11,972
2002	15,800	12,288	13,913	13,843	14,150	14,181	14,583	25,163	17,146	14,632	12,238	14,976	12,415
2003	16,706	12,890	14,453	14,456	15,175	14,755	15,757	27,045	18,089	15,490	12,694	15,694	13,197
2004	17,510	13,901	15,241	15,162	15,709	15,329	16,600	28,397	18,723	16,192	13,407	16,561	14,076
2005	18,093	14,364	15,673	15,552	16,066	15,720	16,993	29,771	19,286	16,683	13,658	17,329	14,585
2006	18,946	14,851	16,395	16,039	16,909	16,193	17,980	31,369	20,238	17,372	14,156	18,248	15,401
2007 ²	19,956	15,706	17,558	16,850	17,744	17,125	18,902	33,102	21,099	18,183	14,869	19,221	16,361
Average annual percentage growth 2000 to 2007 ²	4.9	5.1	5.0	4.5	5.0	4.0	5.0	5.1	4.6	4.8	4.5	5.4	5.1
Indices (UK ¹ =100), 2007 ²	100.0	78.7	88.0	84.4	88.9	85.8	94.7	165.9	105.7	91.1	74.5	96.3	82.0

Notes:

1 UK less Extra-region and statistical discrepancy.

2 Provisional.

Source: Regional Accounts, Office for National Statistics

for the UK as a whole. It needs to be noted that these growth rates are nominal and so do not take account of inflation or regional differences in prices.

Although GVA per head is not a good indicator of regional productivity or regional incomes, it takes account of variations in geographical size among UK regions and therefore allows better comparisons than in Table 4. **Table 5** shows that, in 2007, GVA per head for the UK was £19,956. London was the region with the highest GVA per head in 2007, at £33,102, well above (by 65.9 per cent) the UK average. The GVA per head of the South East was 5.7 per cent above the UK average, at £21,099. Wales and the North East had the lowest GVA per head, at less than 80 per cent of the UK average.

Labour productivity

To compare regions in terms of productivity, GVA per hour worked is the preferred indicator. At lower levels of geography, 'hours worked' estimates are not yet available and GVA per filled job should be used. These two measures of productivity divide GVA by the labour input, namely hours worked in each job or the number of jobs used to create it.

GVA per hour worked and GVA per filled job take account of commuting effects and different age profiles, and the former also accounts for variations in labour market structures, such as full- and part-time working arrangements and job share availability. Therefore, these productivity measures exhibit smaller differences from the UK average than the catch-all indicator of GVA per head. This is mainly caused by commuting patterns.

London, for example, has a very high GVA per head, mainly due to incoming workers generating a high GVA, which is then divided by a much lower resident population.

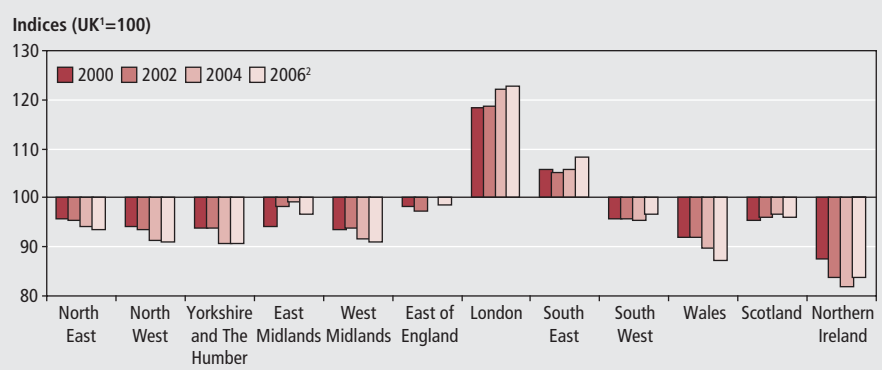
On 11 February 2009, new productivity estimates for 2007 were published. These estimates make use of the new and revised GVA figures, which are presented in Table 4, and updated 'filled jobs' and 'hours worked' estimates. At the time of writing this article, these estimates were not available and the following investigates productivity estimates up to 2006.

Figure 6 shows the regional GVA per hour worked productivity index on a time series basis. London and the South East were the only two regions with a productivity performance above the UK average. Both regions further improved their relative performance from 2000 to 2006, therefore diverging further from the UK average. Northern Ireland and Wales had the lowest

relative productivity in 2006. These regions also experienced the strongest divergence from the UK average productivity from 2000 to 2006. This implies that these regions' productivity grew by less than UK average productivity, therefore widening the productivity gap between regions.

Income of residents

The above has investigated productivity – a workplace indicator. The following discusses regional incomes, which is a residence-based indicator that serves as a key determinant of the welfare of residents living in a region. GDHI represents the amount of money available to households after taxes, National Insurance and pension contributions, property costs and other interest payments have been deducted. To allow comparisons across regions, household income per head of the resident population is used. Current GDHI estimates go up to 2006. They are published at current basic prices and so do

Figure 6
GVA per hour worked: by NUTS1 region**Notes:**

1 UK less Extra-region and statistical discrepancy.

2 Provisional.

Source: Office for National Statistics

not take inflation effects or regional price differences into account.

Figure 7 shows GDHI per head estimates from 2000 to 2006, indexed to the UK average GDHI per head. London, the South East and the East of England were the only three regions where household income was above the UK average. The North East had an average household income lower than £12,000 per head, which was 86 per cent of the UK average. Northern Ireland and Wales also had household incomes per head below 90 per cent of the UK average in 2006.

The North East, which had the lowest household income per head in 2006, experienced the second largest growth in this indicator of all English regions. Northern Ireland and Wales had the strongest growth of all UK regions. London, the region with the highest household income per head in 2006, grew at the same rate as the UK average, while the South East and the East of England, which also had household incomes per head above average,

had growth rates below the UK average growth, therefore converging towards the UK average. This implies that convergence of household income per head towards the UK average, particularly of those regions below the UK average, has taken place.

Comparing these outcomes with the regional productivity performance shown in Figure 6 shows that, unlike income per head, productivity has been diverging from the UK average in most regions. Moreover, in terms of productivity, some regions have been performing close to the average while their income per head shows stronger divergences from average. The North East, for example, has had a close to average but declining productivity performance since 2000 and at the same time the lowest, but increasing, income per head. One reason for this might be the region's low employment and high unemployment rates (see labour market section).

Gross median weekly earnings represent another indicator for regional welfare.

Figure 8 shows the gross median weekly

pay for all full-time employees, split into female and male full-time employees, in each region in April 2008. As in previous years, London was the region with the highest gross median weekly pay, at £612.70, followed by the South East, at £499.80. These were the only regions above the UK average of £478.60. Northern Ireland (£417.60), the North East (£420.60) and Wales (£421.00) experienced the lowest earnings in April 2008. The figure shows that there were big differences between the weekly pay for male and female full-time employees across regions. In Northern Ireland, the discrepancy was smallest, while it was largest in London and the South East. The weekly pay for male full-time employees was above the UK average pay for all full-time employees in nine of the 12 NUTS1 regions, while the weekly pay of female full-time employees was only above the UK average in London.

Other drivers of productivity

The focus section of this article has covered enterprise – one of the productivity drivers identified by HM Treasury and BERR. Alongside enterprise, investment, innovation, competition and skills have been identified as productivity drivers and can help explain differences in productivity across regions.

It is important to realise that alongside these five key drivers, other factors, such as connectivity, industrial structure and region-specific assets have a strong influence on regional productivity performance.

This article uses expenditure on Research and Development (R&D) by businesses as a measure of innovation; UK regional trade in goods serves as a measure of competition; and the qualifications of the current working-age population and those of young people, who represent the future workforce, to provide an indicator for the skills driver.

Investment

Investment in physical capital, such as machinery, equipment and buildings, enables workers to produce more and higher quality output. Therefore, investment can have a significant positive impact on productivity. Due to quality concerns regarding the regional allocations of investment, which is recorded at the level of the enterprise and not at the local level, this article does not currently include data on investment.

Nevertheless, as Dunnell (2009) has

Figure 7
Headline gross disposable household income per head: by NUTS1 region

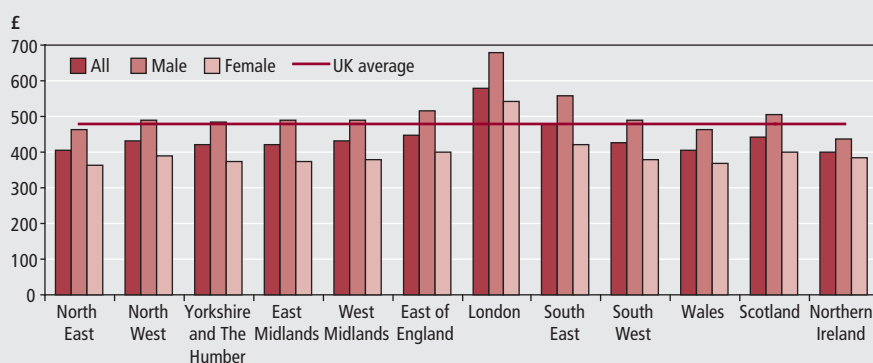


Notes:

- 1 UK less Extra-regio.
- 2 Provisional.

Source: Regional Accounts, Office for National Statistics

Figure 8
Gross median weekly pay of full-time employees: by NUTS1 region, April 2008



Source: Annual Survey of Hours and Earnings, Office for National Statistics

pointed out, inflows of foreign direct investment (FDI) projects and estimated numbers of associated jobs by region can serve as a narrow indicator of investment. However, FDI does not cover all investment in a region and there is no requirement to notify UK Trade & Investment when undertaking FDI.

Innovation

Innovation is a necessary, although not sufficient, condition for economic success and is therefore recognised as an important driver of productivity. Innovation comprises, among others, the development of new technologies that increase efficiency and the introduction of new, more valuable goods and services. It also includes intangibles such as new methods of working and improvements to services.

R&D represents one of the determinants to the innovation process and is defined by the Organisation for Economic Co-operation and Development (OECD) in its Frascati Manual, which proposes a standard practice for surveys on R&D, as 'creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to create new applications'. The OECD definition of R&D covers the following:

- basic research: experimental and theoretical work to obtain new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view
- applied research: work undertaken to acquire new knowledge, which is directed primarily towards a specific practical aim, and
- experimental development: systematic work, drawing on existing knowledge, which is directed at producing new materials, products or devices, installing new processes, systems and services, or at improving substantially those already produced or installed

The OECD definition excludes education, training and any other related scientific, technological, industrial, administrative or supporting activities. However, innovation depends on a wider set of inputs than R&D, including skills training, design, software and organisational investment by firms. HM Treasury Economics Working Paper

No. 1 quantifies these broader knowledge economy inputs at UK level; more work is needed before these factors can be measured effectively at regional level.

Figure 9 presents statistics on Business Expenditure on Research and Development (BERD), which are consistent with internationally agreed standards. New figures for 2007 were not available at the time of writing.² Figure 9 shows business expenditure on R&D as a percentage of workplace-based GVA from 2000 and 2006. This is a measure commonly used in international comparisons as it takes account of the size of regional economies.

The figure shows that, since 2000, the East of England has been the region with by far the highest percentage of R&D expenditure in terms of GVA, with 3.5 per cent in 2006. The South East had the second highest percentage (2.0 per cent), which has, however, been declining since 2000.

R&D expenditure as a share of regional GVA in the South West and North West was 1.5 and 1.4 per cent, respectively. London, Yorkshire and The Humber and the three Devolved Administrations of Wales, Scotland and Northern Ireland had the lowest shares in 2006, at around 0.5 per cent each. London's very low share of expenditure on R&D might not necessarily suggest low levels of innovation but might be due to it having a large concentration of service industries, which may not be R&D intensive (within the OECD definition) if, for example, they rely heavily on human capital.

Competition

Vigorous competition enhances productivity by creating incentives to innovate and ensure that resources are allocated to the most efficient firms. It

also forces existing firms to organise work more effectively through imitations of organisational structures and technology. One indicator of competition is the volume of exports. Even though exports do not represent competition within a region, they still provide an indication of how international regions are in their outlook, and how able they are to face global competition.

HM Revenue & Customs (HMRC) publishes statistics on regional trade in goods to the EU and non-EU destinations by statistical value. Trade in goods by definition excludes trade in intangibles and services. The statistical value of export trade is calculated as the value of the goods plus the cost of movement to the country's border.

Table 6 presents the latest estimates that go up to 2008 Q3. The total value of UK exports to all destinations for the 12 months ending September 2008 increased by 12.9 per cent compared with the same period in 2007.

As the EU is the main export destination for UK goods, the table separates exports to EU and non-EU destinations. In terms of exports to the EU, the value of UK exports for the 12 months ending September 2008 increased by 11.8 per cent compared with the same period a year earlier. This increase was driven by increased exports to the EU in ten UK regions. The North East and Wales had the strongest increases, at 20.1 and 12.9 per cent, respectively. Scotland (-4.0 per cent) and the East Midlands (-2.0 per cent) were the only two regions that experienced declines in their exports to the EU over this 12-month period.

In terms of the latest quarter estimates (2008 Q3) compared with the previous quarter, all regions except London, Scotland and Wales experienced a decline in their

Figure 9

Business expenditure on R&D as a percentage of workplace-based GVA: by NUTS1 region



Note:

- 1 UK less Extra-region and statistical discrepancy.

Source: Regional Accounts and Business Expenditure on Research & Development, Office for National Statistics

Table 6

UK regional trade in goods – statistical value of exports: by NUTS1 region

£ million

	United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
EU¹ exports													
2006 Q4	31,086	1,398	2,566	1,694	2,152	2,171	2,793	2,164	4,708	1,641	1,307	1,694	835
2007 Q1	31,747	1,303	2,794	1,765	2,296	2,267	3,164	2,244	4,598	1,725	1,440	1,569	847
2007 Q2	31,263	1,287	2,952	1,696	2,036	2,325	2,998	2,066	4,609	1,580	1,415	1,635	850
2007 Q3	30,662	1,330	2,773	1,649	2,038	2,033	2,914	2,183	4,490	1,633	1,313	1,378	830
12 months ending September 2007	124,758	5,318	11,085	6,804	8,522	8,796	11,869	8,657	18,405	6,579	5,475	6,276	3,362
2007 Q4	32,951	1,557	2,854	1,725	2,058	2,314	3,196	2,152	4,891	1,725	1,331	1,527	855
2008 Q1 ²	34,890	1,647	3,151	1,744	2,188	2,401	3,309	2,301	4,906	1,816	1,515	1,489	874
2008 Q2 ²	36,883	1,628	3,279	1,876	2,111	2,500	3,569	2,417	5,369	1,920	1,653	1,483	971
2008 Q3 ²	34,780	1,557	3,092	1,870	1,992	2,119	3,185	2,760	5,046	1,672	1,681	1,526	865
12 months ending September 2008	139,504	6,389	12,376	7,215	8,349	9,334	13,259	9,630	20,212	7,133	6,180	6,025	3,565
Non-EU exports													
2006 Q4	23,575	848	2,421	1,313	1,791	1,579	2,022	3,939	3,531	1,113	947	1,495	505
2007 Q1	21,183	807	2,261	1,247	1,622	1,479	1,775	3,477	3,112	917	839	1,683	469
2007 Q2	23,968	1,009	2,484	1,564	1,655	1,607	2,004	3,448	4,003	992	957	1,991	521
2007 Q3	23,007	1,021	2,417	1,402	1,685	1,595	1,843	3,402	3,667	1,100	851	2,012	520
12 months ending September 2007	91,733	3,685	9,583	5,526	6,753	6,260	7,644	14,266	14,313	4,122	3,594	7,181	2,015
2007 Q4	25,138	1,261	2,462	1,762	1,784	1,801	2,001	3,595	4,125	1,155	912	1,894	578
2008 Q1 ²	23,835	1,164	2,452	1,641	1,743	1,767	2,167	3,195	3,892	1,052	869	1,833	555
2008 Q2 ²	27,759	1,335	2,862	1,712	1,940	1,990	2,509	3,661	4,993	1,182	1,074	2,066	638
2008 Q3 ²	28,231	1,357	2,936	1,707	1,914	2,142	2,268	3,577	5,173	1,373	1,312	2,102	623
12 months ending September 2008	104,963	5,117	10,712	6,822	7,381	7,700	8,945	14,028	18,183	4,762	4,167	7,895	2,394

Notes:

- 1 EU data refer to EU25 up to 2006 Q4 and EU27 from 2007 Q1.
- 2 Provisional.

Source: UK Regional Trade in Goods Statistics, HM Revenue & Customs

value of exports to the EU. The West Midlands (–15.2 per cent), the South West (–12.9 per cent) and Northern Ireland (–10.9 per cent) saw the strongest declines.

UK exports to non-EU destinations, like those to EU destinations, increased in the 12 months ending September 2008 compared with the previous 12 months. The total value of UK exports to non-EU destinations increased by 14.4 per cent, with the strongest increases in the North East (38.9 per cent), the South East (27.0 per cent), Yorkshire and The Humber (23.5 per cent) and the West Midlands (23.0 per cent). London (–1.7 per cent) was the only region that experienced a decline in its exports to non-EU destinations over this time period.

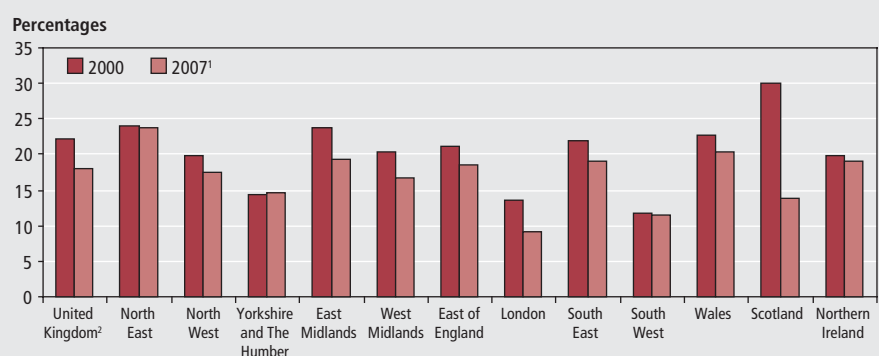
Concerning latest quarter estimates (2008 Q3) for export values to non-EU destinations, almost half the regions experienced a decline compared with the previous quarter. The East of England and Northern Ireland had the largest declines, at 9.6 and 2.4 per cent, respectively. The strongest increases in exports compared with Q2 were experienced in Wales (22.2 per cent), the South West (16.2 per cent) and the West Midlands (7.6 per cent).

Figure 10 shows the value of exports of goods as a percentage of workplace-based regional GVA in 2000 and 2007, which takes account of the differing sizes of regional economies. In 2007, exports from the North East accounted for the highest percentage of GVA (at 23.8 per cent), 5.7 percentage points above the UK average. The region where exports accounted for the

smallest percentage of GVA in 2007 was London, at 9.0 per cent.

In terms of this indicator's change over time, in all regions, except Yorkshire and The Humber, exports accounted for a smaller percentage of GVA in 2007 than in 2000. More specifically, Scotland experienced the most significant drop from 2000 to 2007, with exports in 2007

Figure 10
Value of total export goods as a percentage of workplace-based GVA: by NUTS1 region

**Notes:**

- 1 Provisional.
- 2 UK less Extra-region and statistical discrepancy.

Source: HM Revenue & Customs, Regional Trade Statistics and Office for National Statistics

accounting for 16.3 percentage points less in terms of GVA than in 2000. Most other regions also experienced a decline from 2000 to 2004, with some recovery in 2005 and 2006. In 2007, most regions saw their exports as a percentage of GVA decline.

Skills

The skills of workers influence productivity as they define the capabilities that the labour force can contribute to the production process. The concept of skills includes attributes of the workforce, such as 'softer' or interpersonal skills, which are difficult to measure or to compare in different situations or over time. Therefore, qualifications are often used as proxy indicators. By examining the qualifications of the current workforce as well as those of young people, who represent the future capabilities of the labour market, a view of how skills are changing over time and potential impact on productivity can be analysed.

The latest estimates of the highest qualifications (degree or equivalent) of the working-age population are based on 2008 Q3.³ However, as characteristics of local economies dictate which labour skills are required, comparability between regions might be difficult. An alternative approach is to compare the percentage of

the working-age population that has no recognised qualifications.

Figure 11 presents graphically the proportions of the working-age population that have no qualifications in each region. The figure compares the regional proportions against the UK average for 2008 Q3. Northern Ireland had the highest proportion of the population with no qualifications (9.4 percentage points above the UK average), whereas the South West and the South East had the lowest proportions, 3.5 and 3.3 percentage points below the UK average, respectively.

Above average proportions of working-age people without a qualification do not necessarily mean that regions have the most unqualified workforce. Due to differing regional skill requirements, people with recognised qualifications might migrate into other regions, where demand for their qualifications is high, while those without any recognised qualifications might migrate out of these other regions. Also, if employers have a strong demand for lower skills and a good supply of appropriate workers, a low skill equilibrium is created in a region.

The November 2008 REI article introduced a selection of indicators, which have been agreed by a cross-regional group representing the Regional Skills Partnerships

(RSPs). These partnerships are groups brought together by Regional Development Agencies in each region of England in response to the National Skills Strategy. RSPs aim to strengthen regional structures to make skills provision more relevant to the needs of employers and individuals, covering private, public and voluntary sectors of the economy. They also aim to give regions the flexibility to tackle their own individual challenges and priorities.

Table 7 presents the RSP core indicators, which will help to monitor the health of regional and local labour markets and progress towards national skills targets such as documented in the Leitch Report. These core indicators will be supported by local, more specific, indicators identified by individual RSPs. The choice of '19 to state pension age' for some of the indicators in Table 7 has been influenced by: the increased emphasis on education and training after the age of 16; the plan to raise the standard school leaving age to 18; and alignment with indicators specified in the Local Area Agreements.

In order to assess the future capabilities of the labour force, the percentage of pupils achieving five or more grades A* to C at GCSE level or equivalent in each English region can be used as an indicator. Recent

Table 7
Regional Skills Partnerships core indicators: by NUTS1 region

Percentages											
	Time period	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	England
Skills outcome indicators											
Percentage of employers with business or training plan, or budget for training	2007	70.6	69.2	69.6	67.9	67.5	67.3	70.0	70.6	68.4	69.1
Percentage of staff with skill gaps	2007	6.3	5.3	4.8	6.8	5.4	7.8	6.7	5.8	6.2	6.1
Skill shortage vacancies as percentage of all vacancies	2007	18.8	17.6	20.1	20.2	15.5	19.6	26.1	22.5	20.9	20.9
Percentage of KS4 pupils achieving 5+ A* to C GCSE (inc Maths and English)	2007/08 ¹	44.9	47.4	44.4	47.0	46.1	50.3	50.6	51.7	49.2	47.6
Percentage of 19-year-olds qualified to Level 2 or above	2007	73.2	72.4	69.9	71.2	72.1	74.7	74.1	77.6	76.1	73.9
Percentage of 19-year-olds qualified to Level 3 or above	2007	41.6	44.6	42.8	44.5	45.8	49.6	50.5	55.3	50.2	48.0
Percentage of 19 to state pension age with Level 2+	2007	69.3	67.7	65.8	67.2	65.4	67.0	70.3	72.6	72.5	68.9
Percentage of 19 to state pension age with Level 3+	2007	47.1	46.8	45.0	47.0	44.8	46.2	54.1	52.7	52.2	49.0
Percentage of 19 to state pension age with Level 4+	2007	25.9	27.1	25.4	27.3	26.3	27.7	39.4	32.9	31.0	30.2
Percentage of 19 to state pension age with no qualifications	2007	13.4	14.5	14.0	13.1	16.5	11.9	12.4	9.2	8.9	12.5
Percentage of working-age population who undertook job-related training in last 13 weeks	Jul07– Jun08	21.3	19.1	19.4	20.3	20.0	19.0	18.4	21.8	22.6	20.1
Percentage of 17-year-olds in education or work-based learning	end-2006	76.0	77.0	73.0	74.0	77.0	76.0	85.0	78.0	76.0	77.0

Note:

1 Revised data, includes attempts and achievements by these pupils in previous academic years.

Source: Labour Force Survey, Office for National Statistics; Department for Children, Schools and Families; Department for Universities, Skills and Innovation; National Employers Skills Survey 2007

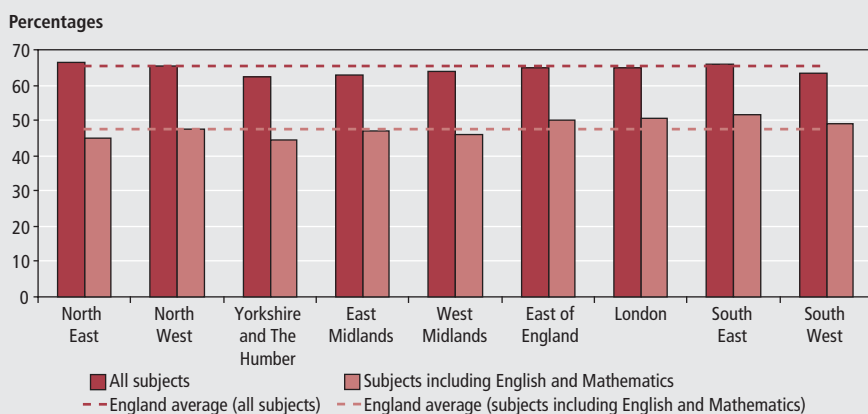
Figure 11

Working-age population with no qualifications:¹ by NUTS1 region, 2008 Q3**Note:**

Source: Labour Force Survey, Office for National Statistics

1 For summary of qualifications and equivalents see www.statistics.gov.uk/statbase/product.asp?vlnk=836.

Figure 12

Pupils achieving five or more grades A* to C at GCSE level or equivalent: by NUTS1 region, 2007/08¹**Notes:**

Source: Department for Children, Schools and Families

- 1 Revised data, includes attempts and achievements by these pupils in previous academic years.
2 The England average includes all schools, not only local authority maintained schools.

focus on literacy and numeracy has led to a new measure being published, of five or more GCSEs grade A* to C in subjects including English and Mathematics. **Figure 12** compares the percentage of pupils achieving at least five grades A* to C at GCSE level or equivalent in either any subjects or subjects including English and Mathematics.

In 2007/2008, the England average for all schools of pupils achieving five or more grades A* to C in any subjects was 65.3 per cent, while it was down to 47.6 per cent if the subjects included English and Mathematics. Across all English regions, the percentage of pupils achieving at least five grades A* to C in subjects including English and Mathematics was substantially lower compared with achieving the same in any subjects. Also, regional differences were more pronounced when subjects included English and Mathematics. In the North East and the North West, the percentage of pupils achieving five or more grades A* to C in any subjects was above the England average, while their percentages dropped below the average when subjects included English and Mathematics. The opposite holds for the South West, London and the East of England, where the proportions of pupils achieving at least five grades A* to C increased above the England average if subjects included English and Mathematics.

The labour market

Table 8 shows the seasonally adjusted employment rate, the number of people of

Table 8

Employment¹ rates for people of working age: by NUTS1 region

		Percentages, seasonally adjusted													
		United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2005	Jul-Sep	74.8	69.7	73.6	74.6	77.2	74.0	78.6	69.7	78.8	78.4	75.1	72.2	75.3	70.1
	Oct-Dec	74.4	70.1	72.8	74.2	77.2	73.4	77.6	69.4	78.7	77.7	74.6	71.9	75.3	69.0
2006	Jan-Mar	74.7	71.3	73.5	74.4	77.0	73.9	77.3	69.9	78.9	78.3	75.0	71.6	75.1	69.4
	Apr-Jun	74.6	71.6	73.2	74.2	77.0	73.9	77.0	69.7	78.9	78.6	74.9	71.3	74.7	69.9
	Jul-Sep	74.6	71.0	73.6	73.5	77.0	73.9	77.2	69.8	78.8	77.9	74.8	72.0	75.5	69.3
	Oct-Dec	74.5	70.9	72.8	73.7	76.5	73.0	77.0	70.0	78.7	78.2	74.6	71.8	76.2	69.9
2007	Jan-Mar	74.3	71.0	72.5	72.8	75.9	72.5	77.3	70.1	78.2	78.0	74.4	71.7	76.6	70.6
	Apr-Jun	74.5	71.4	72.6	73.3	76.0	72.7	77.4	69.7	78.5	78.1	74.5	72.1	77.0	70.6
	Jul-Sep	74.6	72.1	72.4	73.4	75.7	73.0	77.2	70.7	78.8	78.6	74.7	71.3	76.6	70.1
	Oct-Dec	74.8	71.6	72.8	73.7	75.8	73.3	78.1	70.4	78.9	79.3	75.0	71.6	76.6	69.9
2008	Jan-Mar	74.8	70.2	72.4	74.0	76.2	73.2	77.7	71.1	79.5	79.0	75.0	72.0	76.5	69.7
	Apr-Jun	74.7	70.2	72.2	73.4	75.7	72.5	77.7	71.5	79.4	78.8	74.8	72.6	76.5	70.1
	Jul-Sep	74.4	70.4	71.6	73.2	76.1	71.8	77.4	71.0	79.0	78.7	74.5	70.6	76.3	70.1

Note:

Source: Labour Force Survey, Office for National Statistics

1 Includes employees, self-employed, participants on government-supported training schemes and unpaid family workers.

Table 9

Unemployment rates for people aged 16 and over: by NUTS1 region

Percentages, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2005	Jul-Sep	4.8	6.6	4.4	4.6	4.4	4.7	4.0	6.7	4.0	3.6	4.7	4.7	5.5	4.3
	Oct-Dec	5.2	6.6	5.0	5.5	4.5	5.3	4.6	7.3	4.2	4.0	5.2	5.0	5.2	4.5
2006	Jan-Mar	5.2	6.5	4.9	5.4	5.0	5.3	4.9	7.6	4.5	3.6	5.3	4.8	5.3	4.3
	Apr-Jun	5.5	6.1	5.3	5.8	5.5	5.6	5.0	7.8	4.7	3.8	5.5	5.6	5.5	4.3
	Jul-Sep	5.5	6.7	5.5	6.0	5.3	6.1	4.8	7.8	4.5	3.8	5.6	5.4	5.0	4.7
	Oct-Dec	5.5	6.7	5.4	6.0	5.7	6.7	4.5	7.7	4.3	3.9	5.6	5.3	5.2	4.2
2007	Jan-Mar	5.5	6.8	5.8	6.3	5.5	6.5	4.8	7.1	4.7	4.0	5.6	5.6	4.9	4.1
	Apr-Jun	5.4	6.3	5.8	5.5	5.0	6.7	4.6	7.4	4.3	4.0	5.5	5.5	4.7	3.8
	Jul-Sep	5.3	6.1	6.0	5.4	5.7	6.4	5.1	6.1	4.5	4.0	5.4	5.3	4.8	3.8
	Oct-Dec	5.2	5.8	5.9	5.3	5.2	5.8	4.4	6.6	4.5	3.7	5.2	5.1	4.9	4.2
2008	Jan-Mar	5.2	6.5	6.0	5.0	5.5	6.2	4.5	6.9	3.9	3.7	5.3	5.4	4.6	4.6
	Apr-Jun	5.4	7.5	6.3	6.1	5.7	6.3	4.6	6.9	4.2	3.8	5.6	4.9	4.2	4.2
	Jul-Sep	5.8	8.0	6.8	6.8	5.9	6.5	4.8	7.4	4.6	4.2	6.0	6.7	4.7	4.1

Source: Labour Force Survey, Office for National Statistics

working age in employment, expressed as a proportion of the population, from the LFS.

In 2008 Q3 (July to September), the UK employment rate was 74.4 per cent, down 0.2 percentage points from a year earlier and down 0.3 percentage points from 2008 Q2 (April to June). Regional rates varied from 79.0 per cent in the South East to 70.1 per cent in Northern Ireland.

Five regions had an increase in the employment rate over the year. The East Midlands had a rise of 0.4 percentage points and the rate for London increased by 0.3 percentage points. Six regions experienced falls in the employment rate. The North East had an annual fall of 1.7

percentage points and the North West one of 0.8 percentage points.

Table 9 shows the unemployment rate (according to the internationally consistent International Labour Organisation definition) for people aged 16 and over from the LFS. The UK rate in the 2008 Q3 was 5.8 per cent, up 0.5 percentage points from a year earlier and up 0.4 percentage points on the previous quarter. Regionally, the rates ranged from 8.0 per cent in the North East to 4.1 per cent in the Northern Ireland.

Over the year, the unemployment rate decreased in two regions. In the East of England it decreased by 0.3 percentage points and in Scotland it was down 0.1 percentage points. The unemployment rate

rose in ten regions. The North East had an increase of 1.9 percentage points while Wales and Yorkshire and The Humber showed a rise of 1.4 percentage points.

Table 10 shows economic inactivity rates for people of working age from the LFS. The UK rate in 2008 Q3 was 20.9 per cent, unchanged from the previous quarter and down 0.2 percentage points on a year earlier. Across regions, rates varied from 17.2 per cent in the South East to 26.9 per cent in Northern Ireland.

Compared with a year earlier, seven regions had a decrease in the inactivity rate, and thus a corresponding increase in the working-age activity rate. London had the largest annual fall of 1.4 percentage

Table 10

Economic inactivity rates for people of working age: by NUTS1 region

Percentages, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2005	Jul-Sep	21.4	25.3	22.9	21.7	19.2	22.2	18.0	25.2	17.8	18.6	21.1	24.2	20.3	26.7
	Oct-Dec	21.4	24.9	23.3	21.4	19.0	22.3	18.6	25.0	17.7	19.0	21.2	24.3	20.5	27.6
2006	Jan-Mar	21.1	23.7	22.7	21.3	18.8	21.9	18.6	24.2	17.4	18.7	20.7	24.7	20.6	27.5
	Apr-Jun	21.0	23.6	22.6	21.2	18.4	21.5	18.8	24.3	17.1	18.3	20.6	24.3	20.9	26.9
	Jul-Sep	21.0	23.9	22.0	21.7	18.6	21.2	18.8	24.1	17.5	18.9	20.7	23.8	20.5	27.2
	Oct-Dec	21.1	23.9	22.9	21.5	18.7	21.6	19.1	24.0	17.7	18.5	20.8	24.0	19.6	27.0
2007	Jan-Mar	21.2	23.7	22.9	22.2	19.6	22.3	18.6	24.4	17.9	18.6	21.1	23.9	19.4	26.3
	Apr-Jun	21.2	23.8	22.7	22.3	20.0	21.8	18.8	24.6	17.8	18.5	21.1	23.5	19.1	26.6
	Jul-Sep	21.1	23.1	22.9	22.4	19.6	21.8	18.5	24.6	17.4	18.0	20.9	24.5	19.4	27.0
	Oct-Dec	21.0	23.9	22.5	22.0	19.9	22.1	18.2	24.4	17.2	17.6	20.8	24.5	19.4	27.0
2008	Jan-Mar	20.9	24.8	22.8	22.0	19.2	21.7	18.5	23.5	17.1	17.9	20.7	23.8	19.6	26.9
	Apr-Jun	20.9	24.0	22.7	21.7	19.5	22.4	18.5	23.1	17.1	18.0	20.6	23.5	20.0	26.8
	Jul-Sep	20.9	23.3	23.0	21.2	19.0	23.0	18.6	23.2	17.2	17.7	20.6	24.2	19.8	26.9

Source: Labour Force Survey, Office for National Statistics

Table 11

Employee jobs:¹ by NUTS1 region

Thousands, not seasonally adjusted

	United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
Sep 04	26,406	1,017	2,988	2,229	1,783	2,295	2,291	3,910	3,613	2,155	22,281	1,145	2,297	684
Sep 05 ²	26,818	1,050	2,993	2,225	1,833	2,327	2,301	3,988	3,677	2,189	22,583	1,167	2,373	695
Sep 06 ²	26,889	1,042	3,009	2,223	1,842	2,351	2,370	3,974	3,641	2,201	22,653	1,171	2,360	705
Sep 07 ²	27,128	1,029	3,016	2,323	1,893	2,332	2,359	4,061	3,708	2,220	22,848	1,172	2,389	719
Dec 07 ²	27,338	1,044	3,041	2,240	1,903	2,353	2,381	4,109	3,744	2,228	23,044	1,164	2,400	730
Mar 08 ²	27,109	1,031	2,994	2,216	1,891	2,339	2,366	4,081	3,720	2,208	22,848	1,154	2,382	725
Jun 08 ²	27,211	1,029	2,999	2,220	1,894	2,346	2,381	4,095	3,743	2,227	22,935	1,156	2,396	724
Sep 08 ²	27,115	1,029	2,994	2,207	1,882	2,325	2,386	4,073	3,731	2,234	22,862	1,151	2,388	715

Notes:

Source: Employer Surveys

1 Employee jobs figures are a measure of jobs rather than people. For example, if a person holds two jobs, each job will be counted in the employee jobs total. Employee jobs figures come from quarterly surveys of employers carried out by ONS and administrative sources.

2 Revised.

Table 12

Claimant count rates:¹ by NUTS1 region

Percentages, seasonally adjusted

	United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2003	3.0	4.5	3.2	3.3	2.8	3.5	2.1	3.6	1.7	1.9	2.9	3.3	3.7	4.1
2004	2.7	4.0	2.8	2.8	2.5	3.3	2.0	3.5	1.6	1.6	2.6	3.0	3.4	3.6
2005	2.7	3.9	2.9	2.9	2.5	3.4	2.1	3.4	1.6	1.6	2.6	3.0	3.2	3.3
2006	2.9	4.1	3.3	3.3	2.8	3.9	2.3	3.4	1.8	1.8	2.9	3.1	3.1	3.2
2007	2.7	4.0	3.1	3.0	2.6	3.7	2.1	3.0	1.6	1.6	2.6	2.8	2.8	2.8
2007 Dec	2.5	3.8	3.0	2.9	2.4	3.5	1.9	2.8	1.5	1.4	2.5	2.7	2.6	2.7
2008 Jan	2.5	3.8	3.0	2.8	2.4	3.4	1.9	2.7	1.5	1.4	2.4	2.7	2.5	2.7
Feb	2.5	3.9	3.0	2.9	2.4	3.4	1.9	2.7	1.5	1.4	2.4	2.7	2.5	2.8
Mar	2.5	3.9	3.0	2.9	2.4	3.4	1.9	2.7	1.5	1.4	2.4	2.7	2.5	2.8
Apr	2.5	3.9	3.1	2.9	2.5	3.4	1.9	2.7	1.5	1.4	2.5	2.8	2.5	2.8
May	2.6	4.0	3.1	3.0	2.5	3.5	2.0	2.7	1.5	1.5	2.5	2.8	2.6	2.9
Jun	2.6	4.1	3.2	3.1	2.6	3.6	2.0	2.7	1.6	1.5	2.6	2.9	2.7	3.0
Jul	2.7	4.2	3.3	3.2	2.7	3.7	2.1	2.8	1.6	1.6	2.7	3.0	2.7	3.1
Aug	2.8	4.4	3.4	3.3	2.8	3.8	2.2	2.9	1.7	1.7	2.8	3.2	2.9	3.2
Sep	2.9	4.6	3.5	3.5	2.9	3.9	2.3	2.9	1.8	1.8	2.9	3.3	3.0	3.4
Oct	3.1	4.8	3.7	3.7	3.1	4.2	2.4	3.0	2.0	2.0	3.0	3.5	3.1	3.6
Nov	3.3	5.1	4.0	4.0	3.4	4.5	2.7	3.2	2.2	2.2	3.3	3.8	3.3	3.9
Dec	3.6	5.4	4.3	4.4	3.7	4.8	2.9	3.4	2.4	2.4	3.5	4.2	3.5	4.1

Note:

Source: Jobcentre Plus administrative system

1 Count of claimants of Jobseeker's Allowance expressed as a percentage of the total workforce – that is, workforce jobs plus claimants.

points. Five regions had an increase in the economic inactivity rate over the year. The largest annual rise was in the West Midlands with 1.2 percentage points.

Table 11 shows the number of employee jobs, not seasonally adjusted, from the Employers Surveys. The number of UK employee jobs was 27,115,000, a decrease of 13,000 over the year since September 2007. In percentage terms, this was less than a 0.1 per cent decrease.

There were annual increases in four regions. The largest percentage rise was in

the East of England (1.1 per cent).

Table 12 shows the claimant count rate (referring to people claiming Jobseeker's Allowance benefits as a proportion of the workforce). The UK rate was 3.6 per cent in December 2008, up 0.2 percentage points from November 2008, and up 1.1 percentage points on a year earlier. This national rate masks large variations between regions and component countries of the UK. For December 2008, the North East had the highest claimant count rate in the UK, at 5.4 per cent, followed by the West

Midlands (4.8 per cent), and Yorkshire and The Humber (4.4 per cent). The lowest claimant counts were measured in the South West and South East (both 2.4 per cent). The claimant count rate was 3.5 per cent in Scotland, 4.1 per cent in Northern Ireland and 4.2 per cent in Wales.

All regions had an increase in the claimant count rate compared with a year ago. The largest increases were in the North East (1.6 percentage points), Wales and Yorkshire and The Humber (both 1.5 percentage points).

Notes

- 1 There was a change in tax rules in April 2007 that led to a number of Managed Service Companies de-registering and re-registering (see www.hmrc.gov.uk/employment-status/msc.htm for more details). This is likely to have had an upwards impact on the number of enterprise births in that year.
- 2 Details are available at www.statistics.gov.uk/statbase/tsdataset.asp?vlnk=572
- 3 For a summary of all different levels of qualifications, see 'Notes and definitions' at www.statistics.gov.uk/statbase/product.asp?vlnk=836

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Key time series

1 National accounts aggregates

Last updated: 23/01/09

Seasonally adjusted

	£ million		Indices (2003 = 100)						
	At current prices		Value indices at current prices		Chained volume indices			Implied deflators ³	
	Gross domestic product (GDP) at market prices	Gross value added (GVA) at basic prices	GDP at market prices ¹	GVA at basic prices	Gross national disposable income at market prices ²	GDP at market prices	GVA at basic prices	GDP at market prices	GVA at basic prices
	YBHA	ABML	YBEU	YBEX	YBFP	YBEZ	CGCE	YBGB	CGBV
2003	1,139,746	1,015,008	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2004	1,200,595	1,068,574	105.3	105.3	102.8	102.8	102.7	102.5	102.5
2005	1,252,505	1,115,121	109.9	109.9	104.2	104.9	104.9	104.8	104.7
2006	1,321,860	1,177,232	116.0	116.0	106.1	107.8	107.9	107.5	107.5
2007	1,402,218	1,248,905	123.0	123.0	110.7	111.1	111.1	110.7	110.7
2008						111.9	112.0		
2003 Q1	278,207	247,866	97.6	97.7	99.4	98.7	98.7	98.9	98.9
2003 Q2	283,305	252,613	99.4	99.6	99.2	99.6	99.6	99.8	99.9
2003 Q3	287,130	255,626	100.8	100.7	99.8	100.4	100.3	100.4	100.4
2003 Q4	291,104	258,903	102.2	102.0	101.6	101.3	101.3	100.8	100.7
2004 Q1	293,234	260,813	102.9	102.8	101.8	101.8	101.7	101.1	101.1
2004 Q2	299,120	266,134	105.0	104.9	102.5	102.7	102.7	102.2	102.1
2004 Q3	301,608	268,390	105.9	105.8	102.2	102.9	102.9	102.8	102.8
2004 Q4	306,633	273,237	107.6	107.7	104.5	103.6	103.6	103.9	103.9
2005 Q1	308,895	274,979	108.4	108.4	104.2	104.0	104.0	104.2	104.2
2005 Q2	313,126	278,928	109.9	109.9	105.6	104.7	104.7	105.0	104.9
2005 Q3	313,026	278,181	109.9	109.6	103.3	105.1	105.1	104.5	104.3
2005 Q4	317,458	283,033	111.4	111.5	103.9	105.6	105.7	105.5	105.5
2006 Q1	324,523	289,466	113.9	114.1	105.2	106.8	106.9	106.6	106.7
2006 Q2	326,609	290,681	114.6	114.6	106.1	107.6	107.7	106.6	106.4
2006 Q3	332,954	296,264	116.9	116.8	106.4	108.0	108.1	108.2	108.0
2006 Q4	337,774	300,821	118.5	118.5	106.9	109.0	109.0	108.8	108.7
2007 Q1	342,711	304,608	120.3	120.0	108.6	109.8	109.9	109.5	109.2
2007 Q2	348,555	310,201	122.3	122.2	109.8	110.8	110.7	110.4	110.4
2007 Q3	353,619	315,034	124.1	124.2	110.6	111.7	111.7	111.1	111.2
2007 Q4	357,333	319,062	125.4	125.7	113.6	112.3	112.2	111.7	112.0
2008 Q1	361,939	323,160	127.0	127.4	114.5	112.7	112.7	112.7	113.0
2008 Q2	362,859	323,450	127.3	127.5	113.5	112.7	112.7	113.0	113.1
2008 Q3	361,865	324,882	127.0	128.0	112.7	112.0	112.0	113.4	114.3
2008 Q4						110.3	110.3		

Percentage change, quarter on corresponding quarter of previous year

	IHYO	ABML ⁴	IHYO	ABML ⁴	YBGO ⁴	IHYR	ABMM ⁴	IHYU	ABML/ABMM ⁴
2003 Q1	5.4	5.6	5.4	5.6	3.5	2.3	2.3	3.0	3.3
2003 Q2	5.9	6.1	5.9	6.1	3.1	2.8	2.9	3.0	3.1
2003 Q3	6.1	6.1	6.1	6.1	1.7	2.9	2.9	3.1	3.1
2003 Q4	6.4	6.3	6.4	6.3	3.6	3.2	3.3	3.1	3.0
2004 Q1	5.4	5.2	5.4	5.2	2.5	3.1	3.0	2.2	2.2
2004 Q2	5.6	5.4	5.6	5.4	3.4	3.1	3.1	2.4	2.2
2004 Q3	5.0	5.0	5.0	5.0	2.4	2.5	2.6	2.4	2.4
2004 Q4	5.3	5.5	5.3	5.5	2.9	2.3	2.3	3.0	3.2
2005 Q1	5.3	5.4	5.3	5.4	2.3	2.2	2.3	3.0	3.1
2005 Q2	4.7	4.8	4.7	4.8	3.0	1.9	2.0	2.7	2.7
2005 Q3	3.8	3.6	3.8	3.6	1.1	2.1	2.2	1.6	1.4
2005 Q4	3.5	3.6	3.5	3.6	-0.6	2.0	2.0	1.5	1.5
2006 Q1	5.1	5.3	5.1	5.3	1.0	2.7	2.8	2.3	2.4
2006 Q2	4.3	4.2	4.3	4.2	0.5	2.7	2.8	1.5	1.4
2006 Q3	6.4	6.5	6.4	6.5	3.0	2.8	2.8	3.5	3.6
2006 Q4	6.4	6.3	6.4	6.3	2.9	3.2	3.1	3.1	3.0
2007 Q1	5.6	5.2	5.6	5.2	3.3	2.8	2.8	2.7	2.4
2007 Q2	6.7	6.7	6.7	6.7	3.5	3.0	2.9	3.6	3.8
2007 Q3	6.2	6.3	6.2	6.3	3.9	3.3	3.3	2.8	2.9
2007 Q4	5.8	6.1	5.8	6.1	6.3	3.0	2.9	2.7	3.0
2008 Q1	5.6	6.1	5.6	6.1	5.4	2.6	2.6	2.9	3.4
2008 Q2	4.1	4.3	4.1	4.3	3.4	1.7	1.8	2.3	2.4
2008 Q3	2.3	3.1	2.3	3.1	1.9	0.3	0.3	2.0	2.8
2008 Q4						-1.8	-1.7		

Notes:

1 "Money GDP".

2 This series is only updated once a quarter, in line with the full quarterly national accounts data set.

3 Based on chained volume measures and current price estimates of expenditure components of GDP.

4 Derived from these identification (CDID) codes.

Source: Office for National Statistics

2 Gross domestic product: by category of expenditure

Last updated: 23/01/09

£ million, chained volume measures, reference year 2003, seasonally adjusted

	Domestic expenditure on goods and services at market prices							Exports of goods and services	Gross final expenditure	less imports of goods and services	Statistical discrepancy (expenditure)	Gross domestic at product market prices
	Final consumption expenditure			Gross capital formation								
	Households	Non-profit institutions¹	General government	Gross fixed capital formation	Changes in inventories²	Acquisitions less disposals of valuables	Total					
	ABJR	HAYO	NMRY	NPQT	CAFU	NPJR	YBIM	IKBK	ABMG	IKBL	GIXS	ABMI
2003	714,608	27,668	232,819	186,700	3,983	-37	1,165,741	290,677	1,456,418	316,672	0	1,139,746
2004	736,857	27,198	240,672	195,782	4,371	-42	1,204,838	304,699	1,509,537	338,359	0	1,171,178
2005	751,288	27,212	244,850	200,187	4,814	-354	1,227,997	329,491	1,557,487	362,211	0	1,195,276
2006	766,378	28,289	248,776	212,146	4,575	290	1,260,454	365,818	1,626,272	397,076	0	1,229,196
2007	789,595	29,445	252,890	227,421	6,561	535	1,306,447	350,325	1,656,771	390,609	518	1,266,680
2008												1,275,674
2003 Q1	176,080	6,949	57,130	46,805	-647	-8	286,469	73,942	360,416	79,207	0	281,208
2003 Q2	178,451	6,889	57,711	46,131	190	94	289,609	71,934	361,538	77,711	0	283,851
2003 Q3	179,545	6,913	58,472	45,964	2,065	-68	292,894	71,671	364,561	78,577	0	285,990
2003 Q4	180,532	6,917	59,506	47,800	2,375	-55	296,769	73,130	369,903	81,177	0	288,697
2004 Q1	182,394	6,950	60,023	48,869	-684	112	297,664	74,062	371,726	81,742	0	289,984
2004 Q2	184,099	6,823	59,806	49,385	603	-90	300,625	75,645	376,270	83,564	0	292,706
2004 Q3	184,893	6,760	60,210	49,061	936	-96	301,763	76,739	378,502	85,230	0	293,272
2004 Q4	185,471	6,665	60,633	48,467	3,516	32	304,786	78,253	383,039	87,823	0	295,216
2005 Q1	186,342	6,867	60,787	48,845	3,151	-158	305,833	77,173	383,006	86,553	0	296,453
2005 Q2	187,191	6,806	61,208	49,264	1,895	86	306,448	80,809	387,257	88,955	0	298,302
2005 Q3	188,172	6,784	61,370	51,286	187	-201	307,597	84,033	391,629	92,100	0	299,529
2005 Q4	189,583	6,755	61,485	50,792	-419	-81	308,119	87,476	395,595	94,603	0	300,992
2006 Q1	189,581	6,945	61,989	50,715	1,593	101	310,924	96,005	406,929	102,518	0	304,412
2006 Q2	192,015	7,037	61,854	52,139	-153	229	313,121	98,339	411,460	105,003	0	306,456
2006 Q3	191,988	7,120	62,329	53,681	1,844	-28	316,934	85,722	402,656	94,804	0	307,853
2006 Q4	192,794	7,187	62,604	55,611	1,291	-12	319,475	85,752	405,227	94,751	0	310,475
2007 Q1	194,389	7,269	62,838	56,352	1,595	73	322,516	86,094	408,610	95,726	66	312,950
2007 Q2	196,449	7,295	63,202	56,054	655	329	323,984	86,823	410,807	95,261	104	315,650
2007 Q3	199,150	7,367	63,328	57,118	2,086	44	329,093	88,813	417,907	99,894	148	318,160
2007 Q4	199,607	7,514	63,522	57,897	2,225	89	330,854	88,595	419,447	99,728	200	319,920
2008 Q1	201,537	7,604	64,773	56,167	925	208	331,213	88,944	420,158	99,318	304	321,144
2008 Q2	200,918	7,731	65,216	55,674	626	415	330,580	88,634	419,214	98,400	346	321,160
2008 Q3	200,596	7,901	65,625	54,089	571	350	329,132	88,916	418,048	99,342	372	319,078
2008 Q4												314,292

Percentage change, quarter on corresponding quarter of previous year

	IHYR										
2003 Q1	2.6	1.1	2.4	5.0			2.2	4.6	2.7	4.2	2.3
2003 Q2	3.3	0.3	2.5	1.1			2.7	-1.1	1.9	-1.2	2.8
2003 Q3	3.3	0.1	3.6	-1.0			3.1	-0.8	2.3	0.3	2.9
2003 Q4	3.2	-0.2	5.5	-0.6			3.5	4.8	3.7	5.5	3.2
2004 Q1	3.6	0.0	5.1	4.4			3.9	0.2	3.1	3.2	3.1
2004 Q2	3.2	-1.0	3.6	7.1			3.8	5.2	4.1	7.5	3.1
2004 Q3	3.0	-2.2	3.0	6.7			3.0	7.1	3.8	8.5	2.5
2004 Q4	2.7	-3.6	1.9	1.4			2.7	7.0	3.6	8.2	2.3
2005 Q1	2.2	-1.2	1.3	0.0			2.7	4.2	3.0	5.9	2.2
2005 Q2	1.7	-0.2	2.3	-0.2			1.9	6.8	2.9	6.5	1.9
2005 Q3	1.8	0.4	1.9	4.5			1.9	9.5	3.5	8.1	2.1
2005 Q4	2.2	1.4	1.4	4.8			1.1	11.8	3.3	7.7	2.0
2006 Q1	1.7	1.1	2.0	3.8			1.7	24.4	6.2	18.4	2.7
2006 Q2	2.6	3.4	1.1	5.8			2.2	21.7	6.2	18.0	2.7
2006 Q3	2.0	5.0	1.6	4.7			3.0	2.0	2.8	2.9	2.8
2006 Q4	1.7	6.4	1.8	9.5			3.7	-2.0	2.4	0.2	3.2
2007 Q1	2.5	4.7	1.4	11.1			3.7	-10.3	0.4	-6.6	2.8
2007 Q2	2.3	3.7	2.2	7.5			3.5	-11.7	-0.2	-9.3	3.0
2007 Q3	3.7	3.5	1.6	6.4			3.8	3.6	3.8	5.4	3.3
2007 Q4	3.5	4.5	1.5	4.1			3.6	3.3	3.5	5.3	3.0
2008 Q1	3.7	4.6	3.1	-0.3			2.7	3.3	2.8	3.8	2.6
2008 Q2	2.3	6.0	3.2	-0.7			2.0	2.1	2.0	3.3	1.7
2008 Q3	0.7	7.2	3.6	-5.3			0.0	0.1	0.0	-0.6	0.3
2008 Q4											-1.8

Notes:

- 1 Non-profit institutions serving households (NPISH).
- 2 This series includes a quarterly alignment adjustment.

Source: Office for National Statistics

3 Labour market summary

Last updated: 21/01/09

United Kingdom (thousands), seasonally adjusted

All aged 16 and over									
	All	Total economically active	Total in employment	Unemployed	Economically inactive	Economic activity rate (%)	Employment rate (%)	Unemployment rate (%)	Economic inactivity rate (%)
	1	2	3	4	5	6	7	8	9
All persons	MGSL	MGSF	MGRZ	MGSC	MGSI	MGWG	MGSR	MGSX	YBTC
Sep–Nov 2006	48,385	30,764	29,089	1,675	17,620	63.6	60.1	5.4	36.4
Sep–Nov 2007	48,782	31,001	29,368	1,633	17,782	63.5	60.2	5.3	36.5
Dec–Feb 2008	48,879	31,108	29,494	1,614	17,770	63.6	60.3	5.2	36.4
Mar–May 2008	48,975	31,169	29,541	1,628	17,805	63.6	60.3	5.2	36.4
Jun–Aug 2008	49,073	31,211	29,419	1,792	17,862	63.6	60.0	5.7	36.4
Sep–Nov 2008	49,176	31,316	29,393	1,923	17,860	63.7	59.8	6.1	36.3
Male	MGSM	MMSG	MGSA	MGSD	MGSJ	MGWH	MGSS	MGSY	YBTD
Sep–Nov 2006	23,505	16,676	15,717	959	6,829	70.9	66.9	5.8	29.1
Sep–Nov 2007	23,733	16,826	15,894	931	6,908	70.9	67.0	5.5	29.1
Dec–Feb 2008	23,789	16,865	15,931	934	6,924	70.9	67.0	5.5	29.1
Mar–May 2008	23,844	16,902	15,953	949	6,942	70.9	66.9	5.6	29.1
Jun–Aug 2008	23,900	16,927	15,867	1,060	6,972	70.8	66.4	6.3	29.2
Sep–Nov 2008	23,957	16,986	15,839	1,147	6,971	70.9	66.1	6.8	29.1
Female	MGSN	MGSH	MGSB	MGSE	MGSK	MGWI	MGST	MGSZ	YBTE
Sep–Nov 2006	24,879	14,088	13,372	716	10,792	56.6	53.7	5.1	43.4
Sep–Nov 2007	25,049	14,175	13,474	701	10,874	56.6	53.8	4.9	43.4
Dec–Feb 2008	25,090	14,243	13,564	680	10,846	56.8	54.1	4.8	43.2
Mar–May 2008	25,131	14,267	13,588	679	10,864	56.8	54.1	4.8	43.2
Jun–Aug 2008	25,173	14,284	13,552	732	10,889	56.7	53.8	5.1	43.3
Sep–Nov 2008	25,219	14,329	13,554	775	10,889	56.8	53.7	5.4	43.2
All aged 16 to 59/64									
	All	Total economically active	Total in employment	Unemployed	Economically inactive	Economic activity rate (%)	Employment rate (%)	Unemployment rate (%)	Economic inactivity rate (%)
	10	11	12	13	14	15	16	17	18
All persons	YBTF	YBSK	YBSE	YBSH	YBSN	MGSO	MGSU	YBTI	YBTL
Sep–Nov 2006	37,431	29,553	27,905	1,648	7,878	79.0	74.6	5.6	21.0
Sep–Nov 2007	37,617	29,722	28,111	1,612	7,894	79.0	74.7	5.4	21.0
Dec–Feb 2008	37,659	29,800	28,206	1,594	7,860	79.1	74.9	5.3	20.9
Mar–May 2008	37,702	29,833	28,229	1,604	7,869	79.1	74.9	5.4	20.9
Jun–Aug 2008	37,748	29,862	28,094	1,768	7,886	79.1	74.4	5.9	20.9
Sep–Nov 2008	37,799	29,943	28,051	1,892	7,856	79.2	74.2	6.3	20.8
Male	YBTG	YBSL	YBSF	YBSI	YBSO	MGSP	MGSV	YBTJ	YBTM
Sep–Nov 2006	19,431	16,266	15,317	949	3,165	83.7	78.8	5.8	16.3
Sep–Nov 2007	19,592	16,403	15,480	923	3,189	83.7	79.0	5.6	16.3
Dec–Feb 2008	19,627	16,426	15,501	924	3,201	83.7	79.0	5.6	16.3
Mar–May 2008	19,661	16,449	15,512	938	3,211	83.7	78.9	5.7	16.3
Jun–Aug 2008	19,694	16,475	15,426	1,048	3,220	83.7	78.3	6.4	16.3
Sep–Nov 2008	19,727	16,525	15,391	1,133	3,202	83.8	78.0	6.9	16.2
Female	YBTH	YBSM	YBSG	YBSJ	YBSP	MGSQ	MGSW	YBTK	YBTN
Sep–Nov 2006	18,000	13,287	12,588	699	4,713	73.8	69.9	5.3	26.2
Sep–Nov 2007	18,024	13,319	12,630	689	4,705	73.9	70.1	5.2	26.1
Dec–Feb 2008	18,033	13,374	12,705	670	4,659	74.2	70.5	5.0	25.8
Mar–May 2008	18,041	13,384	12,717	666	4,658	74.2	70.5	5.0	25.8
Jun–Aug 2008	18,053	13,387	12,668	719	4,666	74.2	70.2	5.4	25.8
Sep–Nov 2008	18,072	13,418	12,660	759	4,654	74.2	70.1	5.7	25.8

Notes:

Relationship between columns: 1 = 2 + 5; 2 = 3 + 4; 6 = 2/1; 7 = 3/1; 8 = 4/2; 9 = 5/1; 10 = 11 + 14; 11 = 12 + 13; 15 = 11/10; 16 = 12/10; 17 = 13/11; 18 = 14/10
 The Labour Force Survey is a survey of the population of private households, student halls of residence and NHS accommodation.

Source: Labour Force Survey, Office for National Statistics
 Labour Market Statistics Helpline: 01633 456901

4 Prices

Last updated: 20/01/09

Percentage change over 12 months

Not seasonally adjusted

	Consumer prices						Producer prices			
	Consumer prices index (CPI)			Retail prices index (RPI)			Output prices		Input prices	
	All items	CPI excluding indirect taxes (CPIY) ¹	CPI at constant tax rates (CPI-CT)	All items	All items excluding mortgage interest payments (RPIX)	All items excluding mortgage interest payments and indirect taxes (RPIY) ²	All manufactured products	Excluding food, beverages, tobacco and petroleum products	Materials and fuels purchased by manufacturing industry	Excluding food, beverages, tobacco and petroleum products
	D7G7	EL25	EAD6	CZBH	CDKQ	CBZX	PLLU ³	PLLV ^{3,4}	RNNK ^{3,4}	RNNQ ^{3,4}
2005 Jan	1.6	1.7	1.5	3.2	2.1	2.0	1.4	0.9	7.6	5.4
2005 Feb	1.7	1.7	1.6	3.2	2.1	2.0	1.6	0.9	9.0	6.3
2005 Mar	1.9	2.0	1.8	3.2	2.4	2.3	1.8	1.0	9.3	5.8
2005 Apr	1.9	2.0	1.9	3.2	2.3	2.3	2.3	1.1	8.6	5.4
2005 May	1.9	2.0	1.8	2.9	2.1	2.2	1.6	1.0	6.2	4.6
2005 Jun	2.0	2.2	1.9	2.9	2.2	2.2	1.5	0.8	10.6	5.9
2005 Jul	2.3	2.5	2.3	2.9	2.4	2.5	2.0	1.0	13.3	7.6
2005 Aug	2.4	2.6	2.3	2.8	2.3	2.3	2.1	0.9	12.1	6.7
2005 Sep	2.5	2.6	2.4	2.7	2.5	2.5	2.3	0.9	9.3	4.9
2005 Oct	2.3	2.5	2.3	2.5	2.4	2.3	1.8	0.5	8.2	5.6
2005 Nov	2.1	2.3	2.1	2.4	2.3	2.3	1.5	0.5	13.6	8.8
2005 Dec	1.9	2.1	1.8	2.2	2.0	2.0	1.9	1.1	18.0	11.4
2006 Jan	1.9	2.1	1.9	2.4	2.3	2.3	2.5	1.4	15.8	10.1
2006 Feb	2.0	2.1	2.0	2.4	2.3	2.3	2.3	1.4	15.2	10.1
2006 Mar	1.8	1.9	1.7	2.4	2.1	2.2	2.2	1.5	13.1	9.2
2006 Apr	2.0	2.1	2.0	2.6	2.4	2.3	2.3	1.9	15.6	9.8
2006 May	2.2	2.3	2.2	3.0	2.9	2.8	2.9	2.0	13.7	8.4
2006 Jun	2.5	2.6	2.4	3.3	3.1	3.2	3.1	2.5	11.3	8.1
2006 Jul	2.4	2.4	2.3	3.3	3.1	3.2	2.6	2.1	10.6	7.7
2006 Aug	2.5	2.6	2.4	3.4	3.3	3.4	2.3	1.7	8.4	6.7
2006 Sep	2.4	2.6	2.3	3.6	3.2	3.3	1.6	1.7	5.4	5.5
2006 Oct	2.4	2.7	2.3	3.7	3.2	3.3	1.3	2.0	3.9	4.5
2006 Nov	2.7	3.0	2.6	3.9	3.4	3.6	1.4	1.9	2.3	2.8
2006 Dec	3.0	3.2	2.9	4.4	3.8	3.9	1.7	1.6	1.7	1.5
2007 Jan	2.7	2.9	2.6	4.2	3.5	3.7	1.5	1.6	-3.4	-0.5
2007 Feb	2.8	2.9	2.6	4.6	3.7	3.9	1.9	2.0	-2.1	-0.2
2007 Mar	3.1	3.1	2.9	4.8	3.9	4.0	2.2	2.2	-0.3	1.0
2007 Apr	2.8	2.9	2.6	4.5	3.6	3.7	1.8	1.8	-1.5	0.0
2007 May	2.5	2.6	2.3	4.3	3.3	3.4	1.9	1.9	0.6	1.9
2007 Jun	2.4	2.5	2.2	4.4	3.3	3.3	1.9	1.7	1.7	2.2
2007 Jul	1.9	2.0	1.7	3.8	2.7	2.6	2.0	1.8	0.3	0.6
2007 Aug	1.8	1.9	1.6	4.1	2.7	2.6	2.1	2.0	-0.2	1.0
2007 Sep	1.8	1.7	1.6	3.9	2.8	2.8	2.6	1.9	6.0	3.6
2007 Oct	2.1	1.9	1.8	4.2	3.1	3.0	3.6	1.8	9.4	4.6
2007 Nov	2.1	1.9	1.8	4.3	3.2	3.0	4.5	1.9	12.1	5.6
2007 Dec	2.1	2.0	1.9	4.0	3.1	3.1	4.7	2.2	13.2	6.9
2008 Jan	2.2	2.1	2.0	4.1	3.4	3.3	5.7	3.0	20.4	11.0
2008 Feb	2.5	2.5	2.3	4.1	3.7	3.6	5.7	2.8	20.9	11.9
2008 Mar	2.5	2.6	2.3	3.8	3.5	3.6	6.2	2.9	20.8	12.7
2008 Apr	3.0	3.0	2.7	4.2	4.0	3.9	7.4	4.1	25.3	16.6
2008 May	3.3	3.3	3.1	4.3	4.4	4.4	9.1	5.6	30.2	18.9
2008 Jun	3.8	3.9	3.6	4.6	4.8	4.9	9.8	5.9	34.1	21.1
2008 Jul	4.4	4.5	4.2	5.0	5.3	5.4	10.0	6.3	31.3	21.3
2008 Aug	4.7	4.9	4.5	4.8	5.2	5.4	9.1	5.7	29.0	20.8
2008 Sep	5.2	5.4	5.0	5.0	5.5	5.6	8.5	5.6	24.1	19.5
2008 Oct	4.5	4.7	4.3	4.2	4.7	4.9	6.7	5.0	16.2	17.1
2008 Nov	4.1	4.3	3.9	3.0	3.9	3.9	5.1	5.0	8.6	14.7
2008 Dec	3.1	4.6	4.1	0.9	2.8	3.9	4.7	5.0	4.3	12.7

Notes:

Source: Office for National Statistics

1 The taxes excluded are VAT, duties, insurance premium tax, air passenger duty and stamp duty on share transactions.

2 The taxes excluded are council tax, VAT, duties, vehicle excise duty, insurance premium tax and air passenger duty.

3 Derived from these identification (CDID) codes.

4 These derived series replace those previously shown.

NOTES TO TABLES

Identification (CDID) codes

The four-character identification code at the top of each alpha column of data is the ONS reference for that series of data on our time series database. Please quote the relevant code if you contact us about the data.

Conventions

Where figures have been rounded to the final digit, there may be an apparent slight discrepancy between the sum of the constituent items and the total shown. Although figures may be given in unrounded form to facilitate readers' calculation of percentage changes, rates of change, etc, this does not imply that the figures can be estimated to this degree of precision as they may be affected by sampling variability or imprecision in estimation methods.

The following standard symbols are used:

- .. not available
- nil or negligible
- P provisional
- break in series
- R revised
- r series revised from indicated entry onwards

CONCEPTS AND DEFINITIONS

Labour Force Survey 'monthly' estimates

Labour Force Survey (LFS) results are three-monthly averages, so consecutive months' results overlap. Comparing estimates for overlapping three-month periods can produce more volatile results, which can be difficult to interpret.

Labour market summary**Economically active**

People aged 16 and over who are either in employment or unemployed.

Economically inactive

People who are neither in employment nor unemployed. This includes those who want a job but have not been seeking work in the last four weeks, those who want a job and are seeking work but not available to start work, and those who do not want a job.

Employment and jobs

There are two ways of looking at employment: the number of people with jobs, or the number of jobs. The two concepts are not the same as one person can have more than one job. The number of people with jobs is measured by the Labour Force Survey (LFS) and includes people aged 16 or over who do paid work (as an employee or self-employed), those who have a job that they are temporarily away from, those on government-supported training and employment programmes, and those doing unpaid family work. The number of jobs is measured by workforce jobs and is the sum of employee jobs (as measured by surveys of employers), self-employment jobs from the LFS, people in HM Forces, and government-supported trainees. Vacant jobs are not included.

Unemployment

The number of unemployed people in the UK is measured through the Labour Force Survey following the internationally agreed definition recommended by the ILO (International Labour Organisation) – an agency of the United Nations.

Unemployed people:

- are without a job, want a job, have actively sought work in the last four weeks and are available to start work in the next two weeks, or
- are out of work, have found a job and are waiting to start it in the next two weeks

Other key indicators**Claimant count**

The number of people claiming Jobseeker's Allowance benefits.

Earnings

A measure of the money people receive in return for work done, gross of tax. It includes salaries and, unless otherwise stated, bonuses but not unearned income, benefits in kind or arrears of pay.

Productivity

Whole economy output per worker is the ratio of Gross Value Added (GVA) at basic prices and Labour Force Survey (LFS) total employment. Manufacturing output per filled job is the ratio of manufacturing output (from the Index of Production) and productivity jobs for manufacturing (constrained to LFS jobs at the whole economy level).

Redundancies

The number of people, whether working or not working, who reported that they had been made redundant or taken voluntary redundancy in the month of the reference week or in the two calendar months prior to this.

Unit wage costs

A measure of the cost of wages and salaries per unit of output.

Vacancies

The statistics are based on ONS's Vacancy Survey of businesses. The survey is designed to provide comprehensive estimates of the stock of vacancies across the economy, excluding those in agriculture, forestry and fishing. Vacancies are defined as positions for which employers are actively seeking recruits from outside their business or organisation. More information on labour market concepts, sources and methods is available in the *Guide to Labour Market Statistics* at www.statistics.gov.uk/about/data/guides/LabourMarket/default.asp

Directory of online tables

The tables listed below are available as Excel spreadsheets via weblinks accessible from the main *Economic & Labour Market Review* (ELMR) page of the National Statistics website. Tables in sections 1, 3, 4 and 5 replace equivalent ones formerly published in *Economic Trends*, although there are one or two new tables here; others have been expanded to include, as appropriate, both unadjusted/seasonally adjusted, and current price/chained volume measure variants. Tables in sections 2 and 6 were formerly in *Labour Market Trends*. The opportunity has also been taken to extend the range of dates shown in many cases, as the online tables are not constrained by page size.

In the online tables, the four-character identification codes at the top of each data column correspond to the ONS reference for that series on our time series database. The latest data sets for the Labour Market Statistics First Release tables are still available on this database via the 'Time Series Data' link on the National Statistics main web page. These data sets can also be accessed from links at the bottom of each section's table listings via the 'Data tables' link in the individual ELMR edition pages on the website. The old *Economic Trends* tables are no longer being updated with effect from January 2009.

Weblink: www.statistics.gov.uk/elmr/02_09/data_page.asp

Title	Frequency of update
UK economic accounts	
1.01 National accounts aggregates	M
1.02 Gross domestic product and gross national income	M
1.03 Gross domestic product, by category of expenditure	M
1.04 Gross domestic product, by category of income	M
1.05 Gross domestic product and shares of income and expenditure	M
1.06 Income, product and spending per head	Q
1.07 Households' disposable income and consumption	M
1.08 Household final consumption expenditure	M
1.09 Gross fixed capital formation	M
1.10 Gross value added, by category of output	M
1.11 Gross value added, by category of output: service industries	M
1.12 Summary capital accounts and net lending/net borrowing	Q
1.13 Private non-financial corporations: allocation of primary income account ¹	Q
1.14 Private non-financial corporations: secondary distribution of income account and capital account ¹	Q
1.15 Balance of payments: current account	M
1.16 Trade in goods (on a balance of payments basis)	M
1.17 Measures of variability of selected economic series	Q
1.18 Index of services	M

Selected labour market statistics

2.01 Summary of Labour Force Survey data	M
2.02 Employment by age	M
2.03 Full-time, part-time and temporary workers	M
2.04 Public and private sector employment	Q
2.05 Workforce jobs	Q
2.06 Workforce jobs by industry	Q
2.07 Actual weekly hours of work	M
2.08 Usual weekly hours of work	M
2.09 Unemployment by age and duration	M
2.10 Claimant count levels and rates	M
2.11 Claimant count by age and duration	M
2.12 Economic activity by age	M
2.13 Economic inactivity by age	M
2.14 Economic inactivity: reasons	M
2.15 Educational status, economic activity and inactivity of young people	M
2.16 Average earnings – including bonuses	M
2.17 Average earnings – excluding bonuses	M
2.18 Productivity and unit wage costs	M
2.19 Regional labour market summary	M

Weblink: www.statistics.gov.uk/elmr/02_09/data_page.asp

2.20	International comparisons	M
2.21	Labour disputes	M
2.22	Vacancies	M
2.23	Vacancies by industry	M
2.24	Redundancies: levels and rates	M
2.25	Redundancies: by industry	Q
2.26	Sampling variability for headline labour market statistics	M

Prices

3.01	Producer and consumer prices	M
3.02	Harmonised Indices of Consumer Prices: EU comparisons	M

Selected output and demand indicators

4.01	Output of the production industries	M
4.02	Engineering and construction: output and orders	M
4.03	Motor vehicle and steel production ¹	M
4.04	Indicators of fixed investment in dwellings	M
4.05	Number of property transactions	M
4.06	Change in inventories ¹	Q
4.07	Inventory ratios ¹	Q
4.08	Retail sales, new registrations of cars and credit business	M
4.09	Inland energy consumption: primary fuel input basis ¹	M

Selected financial statistics

5.01	Sterling exchange rates and UK reserves	M
5.02	Monetary aggregates	M
5.03	Counterparts to changes in money stock M4 ¹	M
5.04	Public sector receipts and expenditure	Q
5.05	Public sector key fiscal indicators	M
5.06	Consumer credit and other household sector borrowing	M
5.07	Analysis of bank lending to UK residents	M
5.08	Interest rates and yields	M
5.09	A selection of asset prices	M

Further labour market statistics

6.01	Working-age households	A
6.02	Local labour market indicators by unitary and local authority	Q
6.03	Employment by occupation	Q
6.04	Employee jobs by industry	M
6.05	Employee jobs by industry division, class or group	Q
6.06	Employee jobs by region and industry	Q
6.07	Key productivity measures by industry	M
6.08	Total workforce hours worked per week	Q
6.09	Total workforce hours worked per week by region and industry group	Q
6.10	Job-related training received by employees	Q
6.11	Unemployment rates by previous occupation	Q
6.12	Average Earnings Index by industry: excluding and including bonuses	M

Weblink: www.statistics.gov.uk/elmr/02_09/data_page.asp

6.13	Average Earnings Index: effect of bonus payments by main industrial sector	M
6.14	Median earnings and hours by main industrial sector	A
6.15	Median earnings and hours by industry section	A
6.16	Index of wages per head: international comparisons	M
6.17	Regional Jobseeker's Allowance claimant count rates	M
6.18	Claimant count area statistics: counties, unitary and local authorities	M
6.19	Claimant count area statistics: UK parliamentary constituencies	M
6.20	Claimant count area statistics: constituencies of the Scottish Parliament	M
6.21	Jobseeker's Allowance claimant count flows	M
6.22	Number of previous Jobseeker's Allowance claims	Q
6.23	Interval between Jobseeker's Allowance claims	Q
6.24	Average duration of Jobseeker's Allowance claims by age	Q
6.25	Vacancies by size of enterprise	M
6.26	Redundancies: re-employment rates	Q
6.27	Redundancies by Government Office Region	Q
6.28	Redundancy rates by industry	Q
6.29	Labour disputes: summary	M
6.30	Labour disputes: stoppages in progress	M

Notes:

1 These tables, though still accessible, are no longer being updated.

A Annually

Q Quarterly

M Monthly

More information

Time series are available from www.statistics.gov.uk/statbase/tsdintro.asp

Subnational labour market data are available from www.statistics.gov.uk/statbase/product.asp?vlnk=14160 and www.nomisweb.co.uk

Labour Force Survey tables are available from www.statistics.gov.uk/statbase/product.asp?vlnk=14365

Annual Survey of Hours and Earnings data are available from www.statistics.gov.uk/statbase/product.asp?vlnk=13101

Contact points

Recorded announcement of latest RPI

☎ 01633 456961
✉ rpi@ons.gsi.gov.uk

Labour Market Statistics Helpline

☎ 01633 456901
✉ labour.market@ons.gsi.gov.uk

Earnings Customer Helpline

☎ 01633 819024
✉ earnings@ons.gsi.gov.uk

National Statistics Customer Contact Centre

☎ 0845 601 3034
✉ info@statistics.gsi.gov.uk

Skills and Education Network

☎ 024 7682 3439
✉ senet@isc.gov.uk

Department for Children, Schools and Families Public Enquiry Unit

☎ 0870 000 2288

For statistical information on

Average Earnings Index (monthly)

☎ 01633 819024

Claimant count

☎ 01633 456901

Consumer Prices Index

☎ 01633 456900
✉ cpi@ons.gsi.gov.uk

Earnings

Annual Survey of Hours and Earnings
☎ 01633 456120

Basic wage rates and hours for manual workers with a collective agreement

☎ 01633 819008

Low-paid workers

☎ 01633 819024
✉ lowpay@ons.gsi.gov.uk

Labour Force Survey

☎ 01633 456901
✉ labour.market@ons.gsi.gov.uk

Economic activity and inactivity

☎ 01633 456901

Employment

Labour Force Survey
☎ 01633 456901
✉ labour.market@ons.gsi.gov.uk

Employee jobs by industry

☎ 01633 456776

Total workforce hours worked per week

☎ 01633 456720
✉ productivity@ons.gsi.gov.uk

Workforce jobs series – short-term estimates

☎ 01633 456776
✉ workforce.jobs@ons.gsi.gov.uk

Labour costs

☎ 01633 819024

Labour disputes

☎ 01633 456721

Labour Force Survey

☎ 01633 456901
✉ labour.market@ons.gsi.gov.uk

Labour Force Survey Data Service

☎ 01633 455732
✉ lfs.dataservice@ons.gsi.gov.uk

New Deal

☎ 0114 209 8228

Productivity and unit wage costs

☎ 01633 456720

Public sector employment

General enquiries
☎ 01633 455889

Source and methodology enquiries

☎ 01633 812865

Qualifications (Department for Children, Schools and Families)

☎ 0870 000 2288

Redundancy statistics

☎ 01633 456901

Retail Prices Index

☎ 01633 456900
✉ rpi@ons.gsi.gov.uk

Skills (Department for Innovation, Universities & Skills)

☎ 0870 001 0336

Skill needs surveys and research into skill shortages

☎ 0870 001 0336

Small firms (BERR)

Enterprise Directorate
☎ 0114 279 4439

Subregional estimates

☎ 01633 812038

Annual employment statistics

✉ annual.employment.figures@ons.gsi.gov.uk

Annual Population Survey, local area statistics

☎ 01633 455070

Trade unions (BERR) Employment relations

☎ 020 7215 5934

Training

Adult learning – work-based training (DWP)
☎ 0114 209 8236

Employer-provided training (Department for Innovation, Universities & Skills)

☎ 0870 001 0336

Travel-to-Work Areas Composition and review

☎ 01329 813054

Unemployment

☎ 01633 456901

Vacancies

Vacancy Survey: total stocks of vacancies
☎ 01633 455070

ONS economic and labour market publications

ANNUAL

Financial Statistics Explanatory Handbook

2008 edition. Palgrave Macmillan, ISBN 978-0-230-52583-2. Price £47.50.

www.statistics.gov.uk/StatBase/Product.asp?vlnk=4861

Foreign Direct Investment (MA4)

2006 edition

www.statistics.gov.uk/StatBase/Product.asp?vlnk=9614

Input-Output analyses for the United Kingdom

2006 edition

www.statistics.gov.uk/StatBase/Product.asp?vlnk=7640

Research and development in UK businesses (MA14)

2006 edition

www.statistics.gov.uk/StatBase/Product.asp?vlnk=165

Share Ownership

2006 edition

www.statistics.gov.uk/StatBase/Product.asp?vlnk=930

United Kingdom Balance of Payments (Pink Book)

2008 edition. Palgrave Macmillan, ISBN 978-0-230-54565-6. Price £49.50.

www.statistics.gov.uk/StatBase/Product.asp?vlnk=1140

United Kingdom National Accounts (Blue Book)

2008 edition. Palgrave Macmillan, ISBN 978-0-230-54566-3. Price £49.50.

www.statistics.gov.uk/StatBase/Product.asp?vlnk=1143

First releases

- Annual survey of hours and earnings
- Foreign direct investment
- Gross domestic expenditure on research and development
- Low pay estimates
- Regional gross value added
- Share ownership
- UK Business enterprise research and development
- Work and worklessness among households

QUARTERLY

Consumer Trends

2008 quarter 3

www.statistics.gov.uk/StatBase/Product.asp?vlnk=242

United Kingdom Economic Accounts

2008 quarter 3. Palgrave Macmillan, ISBN 978-0-230-57713-8. Price £37.50.

www.statistics.gov.uk/StatBase/Product.asp?vlnk=1904

UK trade in goods analysed in terms of industry (MQ10)

2008 quarter 3

www.statistics.gov.uk/StatBase/Product.asp?vlnk=731

First releases

- Balance of payments
- Business investment
- GDP preliminary estimate
- Government deficit and debt under the Maastricht Treaty (six-monthly)
- International comparisons of productivity (six-monthly)
- Internet connectivity
- Investment by insurance companies, pension funds and trusts
- Productivity
- Profitability of UK companies
- Public sector employment
- Quarterly National Accounts
- UK output, income and expenditure

MONTHLY

Financial Statistics

January 2009. Palgrave Macmillan, ISBN 978-0-230-57711-4. Price £50.00.

www.statistics.gov.uk/StatBase/Product.asp?vlnk=376

Focus on Consumer Price Indices

December 2008

www.statistics.gov.uk/StatBase/Product.asp?vlnk=867

Monthly review of external trade statistics (MM24)

November 2008

www.statistics.gov.uk/StatBase/Product.asp?vlnk=613

Producer Price Indices (MM22)

December 2008

www.statistics.gov.uk/StatBase/Product.asp?vlnk=2208

First releases

- Consumer price indices
- Index of production
- Index of services
- Labour market statistics
- Labour market statistics: regional
- Producer prices
- Public sector finances
- Retail sales
- UK trade

OTHER

The ONS Productivity Handbook: a statistical overview and guide

Palgrave Macmillan, ISBN 978-0-230-57301-7. Price £55.

www.statistics.gov.uk/about/data/guides/productivity/default.asp

Labour Market Review

2006 edition. Palgrave Macmillan, ISBN 1-4039-9735-7. Price £40.

www.statistics.gov.uk/StatBase/Product.asp?vlnk=14315

National Accounts Concepts, Sources and Methods

www.statistics.gov.uk/StatBase/Product.asp?vlnk=1144

Sector classification guide (MA23)

www.statistics.gov.uk/StatBase/Product.asp?vlnk=7163

Recent articles

AUGUST 2008

Modelling the gender pay gap in the UK: 1998 to 2006
Andrew Barnard

Inventories: a cross-country comparison of behaviour and methodology
Barry Williams

Regional gross disposable household income
Eddie Holmes

SIC 2007: implementation in ONS
John C Hughes

Measuring the quality of the producer price index – an update
Joanna Woods

Regional economic indicators, August 2008, with a focus on household income
Birgit Wosnitza and Martin Walker

SEPTEMBER 2008

Measuring UK inflation
Rob Pike, Catherine Marks and Darren Morgan

Command GDP: the purchasing power of UK output
Graeme Chamberlin

The impact of the 2006 National Minimum Wage rise on employment
Ian Mulheirn

The preliminary R&D satellite account for the UK: a sensitivity analysis
Peter Evans, Michael Hatcher and Damian Whittard

Job separations in the UK
Katherine Kent

Methods explained: perpetual inventory method
Sumit Dey-Chowdhury

OCTOBER 2008

Measuring the UK economy 2008: the National Statistician's perspective
Karen Dunnell

The effect of bonuses on earnings growth in 2008
Harry Duff

Overview of UK National Accounts and Balance of Payments: Blue Book and Pink Book 2008
Ross Meader and Geoff Tily

Annual Population Survey household data sets
Kathryn Ashton and Katherine Kent

Supply-side estimates of UK investment
Graeme Chamberlin

Services producer price index (experimental) – second quarter 2008
Ian Richardson

NOVEMBER 2008

Sickness absence from work in the UK
Debra Leaker

Analysis of international trade and productivity, using the EUKLEMS database
Peter Goodridge

Producer price index rebasing to 2005=100
Rob Luckwell

Labour Force Survey: interim reweighting 2008
Nick Palmer and Mark Chandler

Experimental estimates of rural-urban productivity
Sumit Dey-Chowdhury and Pippa Gibson

Regional economic indicators, November 2008, with a focus on skills
Birgit Wosnitza, Peggy Causer and Jonathan Knight

DECEMBER 2008

The distribution of household income 1977 to 2006/07
Francis Jones, Daniel Annan and Saef Shah

Making sense of Labour Force Survey response rates
William Barnes, Geoff Bright and Colin Hewat

How similar are ONS's annual and monthly business inquiries?
Joe Robjohns and Damian Whittard

Introducing the new business demography statistics
Karen Grierson and Andrew Allen

The impact of Labour Force Survey and Annual Population Survey reweighting
Marilyn Thomas and Sally-Ann Aubrey-Smith

Rebasing the services producer price index
Terry Bradley

Methods explained: cost-benefit analysis
Barry Williams

JANUARY 2009

National Statistician's article: measuring regional economic performance
Karen Dunnell

The redistribution of household income 1977 to 2006/07
Francis Jones, Daniel Annan and Saef Shah

Measuring defence
Mavis Anagboso and Alison Spence

Volume of capital services: estimates for 1950 to 2007
Gavin Wallis and Alex Turvey

Quality-adjusted labour input: estimates for 1997 to 2007
Peter Goodridge

Characteristics of those paid below the National Minimum Wage
Stephen Hicks, Sarah Conn and Jenny Johnson

Services producer price index (experimental) – third quarter 2008
Ian Richardson

Future articles

List is provisional and subject to change.

MARCH 2009

Patterns of pay: results of ASHE 1997 to 2008

Incorporating equality consideration into measures of public sector output

Revisions to workforce jobs

Multi-factor productivity: estimates for 1997 to 2007

Labour force projections, 2008 to 2022

Economic review of the Retail Sales Index