Office for National Statistics

Economic & Labour Market Review

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In brief

Consumer prices and the Budget

On 24 March 2010, the Chancellor of the Exchequer in his Budget statement announced a number of changes to excise duties. ONS subsequently produced a short article for the National Statistics website which estimated the impact on the consumer prices index (CPI) and retail prices index (RPI) of these measures and those previously announced that are planned to be implemented in 2010/11. The article also included a comparison with those measures implemented in 2009/10.

It is estimated that changes to duties planned to be implemented in 2010/11 would, in total. add 0.3 percentage points to the one-month change in the CPI, if duty changes were passed on in full to consumers as soon as they came into effect. This total breaks down as follows (with date of implementation):

- tobacco +0.06 percentage points (24 March 2010)
- alcohol +0.08 percentage points (29 March 2010)
- road fuel +0.04 percentage points (1 April 2010)
- road fuel +0.04 percentage points (1 October 2010)
- air passenger duty +0.05 percentage points (1 November 2010)
- road fuel +0.03 percentage points (1 January 2011)

The measures implemented in 2009/10 added 0.25 percentage points to the one-month change in the CPI, if they had been passed on in full to consumers as soon as they came into effect.

For the RPI, it is estimated that the measures planned to be implemented in 2010/11 will add 0.40 percentage points to the one-month change. The impact on the RPI is greater than the CPI as the RPI includes vehicle excise duty (which has increased) whereas the CPI excludes this item; also the weights for tobacco, alcohol and road fuel are higher in the RPI compared to the CPI and therefore the increase in duties for these items have a larger impact on the RPI.

The measures planned to be implemented in 2010/11 will feed into the CPI and RPI over several months.

Further information

www.statistics.gov.uk/CCI/article.asp?ID=2399

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Impact of the VAT increase on the CPI

On the 1 January 2010, the standard rate of Value Added Tax (VAT) reverted to 17.5 per cent from the temporary reduction to 15 per cent. ONS estimates that the impact on the January 2010 Consumer Prices Index (CPI) from retailers and service providers passing on the VAT increase was to increase the 12-month rate by around 0.4 percentage points. This means that if VAT had remained at 15 per cent in January 2010, the CPI 12-month rate would have been around 0.4 percentage points lower than the published figure of 3.5 per cent.

The approach and methods used to measure this impact are consistent with those that were used to estimate the impact on the CPI of the temporary reduction in the standard rate of VAT in December 2008 to 15 per cent (see Pike, Lewis and Turner 2009).

Further information

Pike R, Lewis M and Tuner D (2009) 'Impact of VAT reduction on the consumer price indices', available at www.statistics.gov.uk/cci/article.asp?ID=2258

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Implementation of SIC 2007 in ONS: an update

Standard Industrial Classification (SIC) is a method of classifying businesses by their type of activity. The classification is used in the collection and presentation of data for the majority of official statistics as a convenient way of classifying industrial activities into a uniform and common structure. SIC 2007 represents the first major revision since 1992.

ONS first publicised its plans for the implementation of SIC 2007 in the August 2008 edition of *Economic and Labour Market Review*, (see Brook 2008). Since that time there have been further updates in August 2009 (see Brook and Hughes 2009) and December 2009 (see Evans, Hughes and James 2009). Work has continued in order to meet the timetable set out by Eurostat as a requirement of all member states. From the start of 2010 most of the short term surveys have adopted the new classification – data for the Vacancies Survey were published on the new basis in the Labour Market statistics bulletin in February, and the first Retail Sales Index based on SIC 2007 was released on 19 February. A new release reflecting the Monthly Business Survey was published for the first time on 31 March 2010.

There is a change to the implementation timetable for the Producer Prices Index (PPI) and Service Producer Prices Index (SPPI). These indicators were going to move to the SIC 2007 basis in June 2010. However, after consideration of the work involved, and the desire for a longer period of quality assurance, implementation will be delayed until November 2010.

All of the other previously advertised dates for the implementation of SIC 2007 remain on schedule: the Labour Market statistics bulletin will contain outputs on the new basis in June 2010, and the National Accounts (Blue Book) will move to SIC 2007 in September 2011.

Further information

Brook (2008) available at: www.statistics.gov.uk/cci/article.asp?id=2034

Brook and Hughes (2009) available at: www.statistics.gov.uk/cci/article.asp?id=2266

Evans, Hughes and James (2009) available at: www.statistics.gov.uk/cci/article.asp?ID=2341

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Labour input to defence fell between 1997 and 2007

An improved method for measuring the volume of labour inputs into UK defence, which takes into account the skill mix of the labour force, shows a 9.3 per cent fall between 1997 and 2007. This has been derived by the UK Centre for the Measurement of Government Activity (UKCeMGA) which is responsible for producing estimates of public service output and productivity.

The existing National Accounts method, which is based on the number of full time equivalent (FTE) staff working on military defence activities, reported a 7.0 per cent fall over the same period. Here, the skills of different types of staff are not taken into account. The new method, on the other hand, assumes that the salaries for military ranks and civilian grades act as a proxy for the skill level of the respective category of staff.

The biggest contributor to the decline in the volume of labour input to defence was a military category of staff – namely Corporal. This was closely followed by a civilian category of staff – namely Administrative Officers and Assistants.

Since defence is a collective service, it is measured using the output equals inputs convention. Thus any change in the measure of inputs in defence will have exactly the same effect on defence output, and therefore a very limited impact on measured productivity. Total defence output includes both 'military defence' and 'other defence'. Using the new measure of labour, which only covers military defence, total defence output is estimated to have grown by 8.2 per cent between 1997 and 2007 compared to 10.9 per cent using the National Accounts measure.

Further information

www.statistics.gov.uk/cci/article.asp?ID=2379

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Public consultation on the measurement of mortgage interest payments within the Retail Prices Index

The Retail Prices Index (RPI) is the long standing domestic measure of inflation in the United Kingdom and has been produced continuously from June 1947. The 'shopping basket' of items making up the Consumer Prices Index (CPI) and RPI are reviewed every year. Some items are taken out of the basket, some are brought in, to reflect changes in the market and to make sure the CPI and RPI are up to date and representative of consumer spending patterns.

Following public consultation, the UK Statistics Authority has implemented a recommendation from the Consumer Prices Advisory Committee (CPAC) to update the interest rate measure used in the calculation of mortgage interest payments in the RPI from the Standard Variable Rate (SVR) to an Average Effective Rate (AER). The AER is more representative of mortgage rates covering around 90 per cent of bank and building society mortgage lending. This improvement is consistent with the aim that the components of the RPI should be measured as accurately as possible in order to best represent the average change in the prices of goods and services consumed by UK households.

The AER was first used in the February 2010 RPI published on 23 March 2010.

Further information

www.ons.gov.uk/about/consultations/measurement-of-mortgage-interest-payments-within-the-retail-prices-index--2009-/index.html

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Two new chapters of Social Trends now available online

The Social Trends chapters, 'Income and wealth' and 'Expenditure' were the latest to be published online on 8 April 2010.

This year's Income and wealth chapter describes how during the past 40 years the saving ratio has been affected by contractions in the economy. The household saving ratio in the UK in 2008 was 1.7 per cent of total resources, the lowest recorded since 1970. This figure is also substantially lower than the average of 7.6 per cent recorded between 1970 and 2008.

The Expenditure chapter reports that over the last 40 years the way households in the UK allocate expenditure between different goods and services has changed. From 1998, the proportion of total household expenditure spent on services exceeded that for goods and this trend continued through to 2008. The proportion of total household expenditure spent on services between 1970 and 2008 increased from around a third, 35 per cent, of total domestic household expenditure to just over half, 52 per cent. Conversely, total household expenditure on goods decreased from two-thirds, 66 per cent, in 1970 to 46 per cent in 2008.

These two chapters are the third wave of online releases that will build up to Social Trends 40. On 23 June 2010 the remaining five chapters, together with the initial eight chapters will be published directly on the ONS website to form the 40th edition of Social Trends. This edition will also be available as a printed publication from Palgrave Macmillan, and will be the final printed edition of Social Trends. The theme for this edition of Social Trends is 'Forty years of social trends in the UK'.

Further information

www.statistics.gov.uk/socialtrends

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Measuring investment in intangible assets in the UK

A new survey conducted by Office for National Statistics in October 2009 sought to measure firms' spending on intangible assets including: R&D, software, training, branding, design and organisation or business process improvement. The survey was voluntary consisting of a sample of 2,000 firms drawn from the Business Register. There were 1,400 responses, of which 838 were usable.

The largest incidences of intangible investment were in training and software. Respectively, 35 per cent and 30 per cent of responding firms reported spending in these asset categories. The lowest incidences were in R&D and design – with 8 per cent and 10 per cent of respondent firms conducting intangible investment in these respective asset categories. It was also found that the propensity for investing in intangible assets generally increases with firm size. However, average expenditure on each of the intangible asset categories was greatest for R&D – indicating that a small number of very large firms undertake significant spending on R&D, especially in the manufacturing sector.

A break down between extramural (purchased or bought in) and intramural (own account or in house) spending among the assets shows that average intramural spending is higher in all intangible assets except reputation and branding and R&D. Average life lengths for intangible assets were found to range from 2.7 years for training and reputation and branding up to 4.6 years for R&D.

This work was presented at the COINVEST conference 'Intangible investment at macro and micro levels and their role in innovation, competitiveness and growth' in Lisbon on 18–19 March 2010.

Further information

www.coinvest.org.uk/bin/view/CoInvest/CoinvestLisbon

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UPDATES

Updates to statistics on www.statistics.gov.uk

9 March

UK Trade

January 2010 deficit widened to £3.8 billion
www.statistics.gov.uk/cci/nugget.asp?id=199

11 March

Travel and tourism

Visits to the UK up 2%
www.statistics.gov.uk/cci/nugget.asp?id=352

17 March

Public sector employment

Employment increases in Q4 2009
www.statistics.gov.uk/cci/nugget.asp?id=407

Average weekly earnings

Regular pay growth up in January 2010
www.statistics.gov.uk/cci/nugget.asp?id=10

Employment

Employment rate falls to 72.2%
www.statistics.gov.uk/cci/nugget.asp?id=12

18 March

Public sector finances

February: £6.0 billion deficit
www.statistics.gov.uk/cci/nugget.asp?id=206

23 March

Inflation

CPI inflation 3.0%, RPI inflation 3.7%
www.statistics.gov.uk/cci/nugget.asp?id=19

25 March

Retail sales

Sales rebound in February
www.statistics.gov.uk/cci/nugget.asp?id=256

25 March

Business investment

4.3% down in fourth quarter 2009
www.statistics.gov.uk/cci/nugget.asp?id=258

Institutional investment

Net investment £24.8 billion in 4 2009
www.statistics.gov.uk/cci/nugget.asp?id=396

30 March

GDP growth

Economy grows by 0.4% in Q4 2009
www.statistics.gov.uk/cci/nugget.asp?id=192

Balance of payments

UK current account deficit falls
www.statistics.gov.uk/cci/nugget.asp?id=194

Productivity measures

Fall in productivity in Q4 2009
www.statistics.gov.uk/cci/nugget.asp?id=133

7 April

Corporate profitability

11.6% in Q4 2009
www.statistics.gov.uk/cci/nugget.asp?id=196

Index of services

1.1% annual fall into January
www.statistics.gov.uk/cci/nugget.asp?id=558

8 April

Index of production

February shows 0.1 per cent annual fall
www.statistics.gov.uk/cci/nugget.asp?id=198

9 April

Producer prices

Factory gate inflation rises 5.0 per cent
www.statistics.gov.uk/cci/nugget.asp?id=248

FORTHCOMING RELEASES

Future statistical releases on www.statistics.gov.uk

8 April

Social Trends – 40 – Expenditure

Social Trends – 40 – Income and wealth

9 April

Pension Trends – Chapter 8: Pension contributions

Pension Trends – Chapter 2: Population change

13 April

UK Trade – February 2010

14 April

Aerospace and electronic cost indices – December 2009

15 April

Overseas travel and tourism – February 2010

New orders in the construction industry – Q4 2009

20 April

Consumer price indices – March 2010

21 April

Labour market statistics – April 2010

Average weekly earnings – April 2010

22 April

Retail sales – March 2010

Public sector finances – March 2010

23 April

Index of services – February 2010

Gross domestic product preliminary estimate – Q1 2010

28 April

Average earnings index – April 2010

7 May

Producer price index – April 2010

11 May

Index of production – March 2010

Economic review

April 2010

Graeme Chamberlin
Office for National Statistics

SUMMARY

Gross Domestic Product expanded by 0.4 per cent in the final quarter of 2009, but this was not sufficient to prevent an overall annual fall of 4.9 per cent in 2009. On a quarter on quarter basis GDP growth has shown a steady improvement throughout the year. Household consumption recorded modest growth in the second half of the year, driven by an increase in spending on motor cars, and fixed investment moderated from the very large falls in the first and second quarters. Government consumption has also contributed positively to growth throughout most of the year. However, the contribution of changes in stocks is still erratic, and net trade has weighed on growth as imports expand faster than exports – despite the significant depreciation in sterling in late 2008. Household and corporate sector balance sheets show continuing signs of retrenchment as net-lending increases. In the labour market, the headline measures of unemployment, employment and inactivity all deteriorated to a greater extent for men than women over the last two years. This seems to reflect that the fall in jobs was more concentrated in industries where male employment is significantly higher. Manufacturing producer prices inflation has started to pick up in line with rising oil and other commodity prices. However, services producer prices remain in deflationary territory, as difficult market conditions and strong competition places downward pressure on prices.

UK economy contracts by 4.9 per cent in 2009

According to latest published estimates, the UK economy expanded by 0.4 per cent in the final quarter of 2009 – the first quarter of positive growth since 2008 Q1. Despite this, Gross Domestic Product (GDP) in 2009 fell at its fastest annual rate in the post war period. Compared to 2008, GDP was 4.9 per cent lower (**Figure 1**). Between 1993 and 2007, GDP had grown at an average annual rate of 3 per cent, meaning that during these 15 years the level of GDP increased by over 50 per cent. Annual growth in 2008 slowed to 0.5 per cent in 2008 as the economy entered recession in the second half of that year.

Figure 2 shows the contributions to GDP growth by the main categories of expenditure in each of the four quarters of 2009.

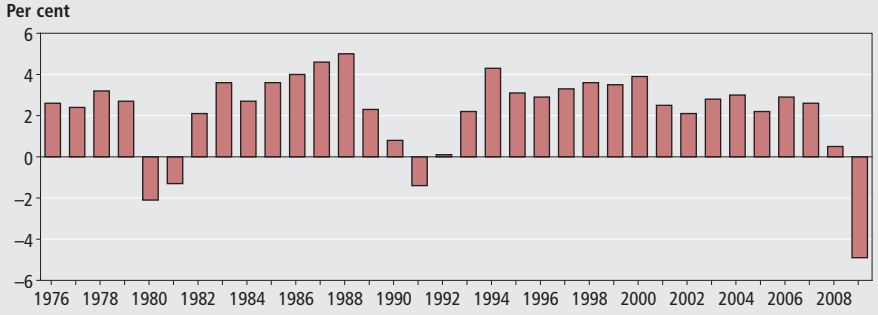
In the first quarter, total expenditure contracted sharply by 2.6 per cent. Even though it represents less than 20 per cent of GDP, the 7.3 per cent fall in Gross Fixed Capital Formation (GFCF) was the largest contribution to the quarterly drop. Household consumption fell by a relatively smaller 1.6 per cent, but as this accounts for nearly two-thirds of total expenditure, it too had a significant impact on growth.

In 2009 Q2 the rate of contraction in GDP slowed considerably to 0.7 per cent. GFCF continued to decline rapidly, dropping by a further 7.2 per cent. However, the pace of contraction of household consumption eased to 0.9 per cent, and larger positive contributions came from government consumption, net trade and the 'other' categories.

Government consumption grew by 0.9 per cent in the second quarter, without which, total expenditure growth would have been 0.2 percentage points lower. Net trade also made a positive contribution as falling exports were more than offset by a larger fall in imports. The 'other' category, consisting of the consumption of non-profit institutions and spending on valuables and changes in inventories (stocks), also contributed positively to GDP. Inventories, which are the stocks of raw materials, works in progress and finished goods that businesses hold to meet future demand, are typically a very small part of the level of total expenditure. However, they often account for a significant part of changes in total expenditure, especially over the business cycle when holdings are very sensitive to the economic outlook. In the second quarter, the rate at which firms were destocking slowed, contributing positively to growth.

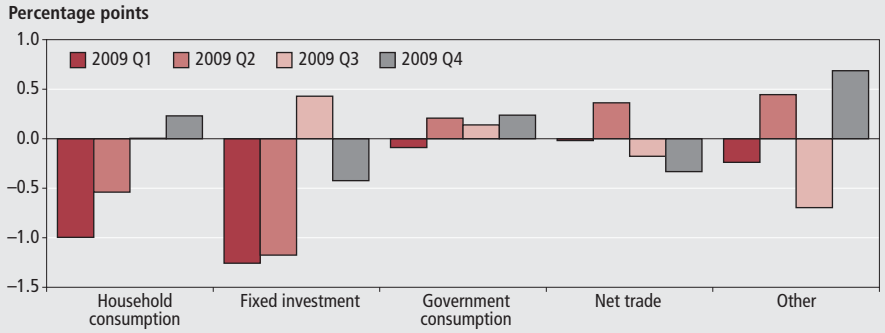
During the third quarter of the year, the speed at which total expenditure or GDP was falling slowed further to 0.3 per cent. Household consumption was flat and fixed investment rebounded by 2.8 per cent. Government consumption also continued to grow, rising by 0.6 per cent over the quarter. However, the improvements in these domestic sources of demand were offset by net trade and inventories, which both made negative contributions to quarterly expenditure growth. Exports actually grew by 0.6 per cent, but imports grew faster by 1.2 per cent, perhaps reflecting the aforementioned pick up in domestic spending. The rate at which firms

Figure 1
Annual GDP growth



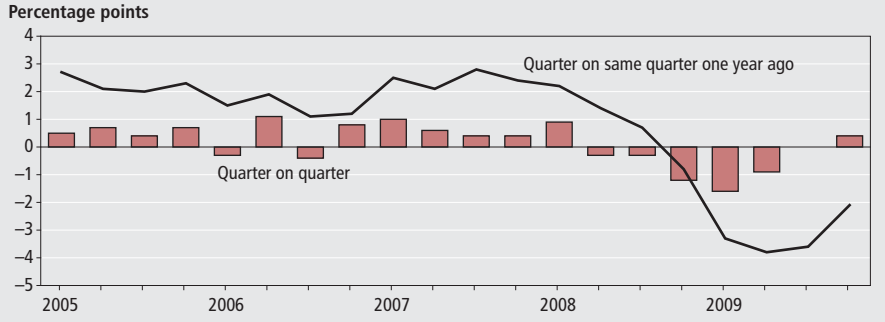
Source: Quarterly National Accounts

Figure 2
Contributions to quarterly GDP growth by main expenditure components



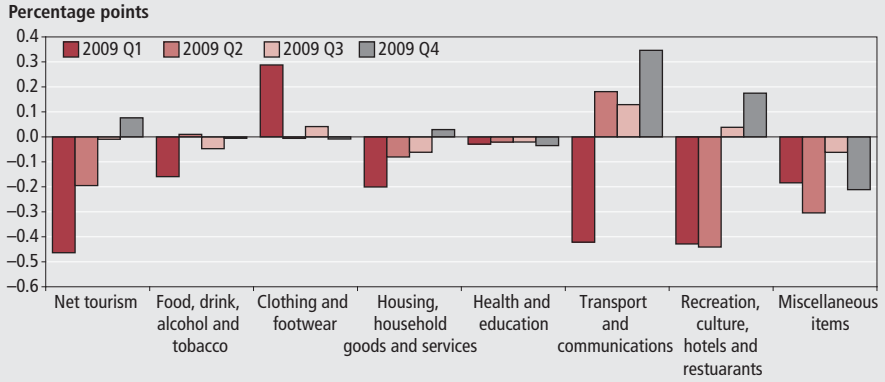
Source: Quarterly National Accounts

Figure 3
Household consumption growth



Source: Quarterly National Accounts

Figure 4
Contributions to household consumption growth



Source: Quarterly National Accounts

were destocking, having slowed in the previous quarter, also increased again.

In the final quarter of 2009 GDP growth was positive after six successive quarters of contraction. The largest positive contribution came from a moderation in the rate at which firms were destocking. Household and government consumption also recorded positive growth during the quarter, by 0.4 per cent and 1.0 per cent respectively. Fixed investment though fell by 2.7 per cent reversing the rise in the previous quarter. Net trade had a similar negative impact as imports increased by 4.7 per cent outstripping the 3.8 per cent rise in exports.

Throughout 2009 the quarter on quarter growth rate of GDP, or total expenditure, has steadily improved. Sharp falls in household consumption and GFCF in the first half of the year gave way to very modest growth in the second half of 2009. Government consumption has also generally supported growth during the course of the year. However, the evidence in Figure 2 is that net trade has weighed on growth in the third and fourth quarters as imports have rebounded faster than exports as the global economy emerges from recession. This is despite the significant depreciation in sterling in late 2008, which was hoped to benefit the UK's trade position. Neither is there evidence in the second half of 2009 of a sustained pick up in fixed investment or a slowdown in the rate at which businesses are running down inventories.

Household consumption growth shows steady improvement through 2009

Between 2008 Q1 and 2009 Q2 household consumption fell for five successive quarters. Spending was then flat in the third quarter, before growth of 0.4 per cent in the final quarter of 2009 (see **Figure 3**). However, despite this recent and modest revival, the household consumption is still 3.7 per cent lower than its pre-recession level.

Figure 4 presents a breakdown of household consumption growth by the main categories of spending in each of the four quarters of 2009.

In the first quarter, spending declined by 1.6 per cent as households appeared to cut back on more discretionary items. Significant negative contributions came from net tourist spending; transport and communications; recreation, culture, hotels and restaurants; and household goods and services.

Although the amount spent by visitors to the UK was fairly stable in 2009 Q1, there was a significant fall in spending overseas by UK households – contributing to a 35 per cent fall in net tourist spending. This might partly be due to the sharp fall in sterling in the second half of 2008 which depreciated by around 25 per cent against both the euro and the US dollar.

In the transport and communications sector the largest negative contributions came from the operation of transport equipment (spending on fuel and repair and maintenance) which declined by 4.2 per cent and air transport, which in line with net tourism, fell sharply by 8.8 per cent on the quarter.

The housing and household goods and services category accounts for around one quarter of all household expenditure. Within this the largest component are rents and imputed rents (which are the rents owner occupiers implicitly pay to themselves to live in their own houses) and these tend to be both a large and very

stable part of total spending. Spending on household goods and furniture though is more sensitive to consumer confidence, and the 3.4 per cent fall in this item accounted for all of the -0.2 percentage points contribution of the housing and household goods and services component to total consumption growth in the first quarter.

In recreation, culture, hotels and restaurants, it was household spending on catering services that made the largest negative contribution, dragging consumption growth down by around 0.3 percentage points. This category consists of pubs and restaurants where spending fell by 1.9 per cent, and also canteens where spending fell considerably by 13.6 per cent. Spending in work place canteens may have reflected a weakening labour market and rising unemployment, household belt tightening by bringing in pack lunches, or even businesses looking to cut back on providing 'in house' catering services.

These negative contributions to consumption growth were partly offset by the clothing and footwear category, where strong discounting in clothing garments supported an increase of 6.3 per cent increase in spending, boosting total household expenditure growth by 0.3 percentage points.

In the second quarter, household consumption fell by a smaller 0.9 per cent. Many of the factors at play in the first quarter continued to drive down spending in the second, although in some instances to a lesser extent. For example, net tourism expenditure fell by a further 22.7 per cent, household goods and furniture by 1.4 per cent and pubs and restaurants by 2.1 per cent. Spending on clothing garments was flat after strong growth in the first. The main innovation was in the transport and communications component, where motor vehicle spending which fell by 0.4 per cent in quarter one, picked up strongly by 5.4 per cent in quarter two as the vehicle scrappage scheme came into effect. This contributed a quarter percentage points to total consumption growth in the second quarter.

In the third quarter, total consumption growth was flat, and as Figure 4 shows, for the most part there was not a significant impact on growth in either direction among the main categories of consumption. Spending on motor cars though rose strongly, up 6.4 per cent on the previous quarter adding 0.3 percentage points to total growth.

This component of household spending continued to have an important impact on growth in the fourth quarter. Household spending on motor cars rose by 7.9 per cent, helped by both the vehicle scrappage scheme and also as consumers looked to take advantage of the lower prevailing rate of VAT before it reverted back to 17.5 per cent at the start of 2010. This contributed 0.4 percentage points to total growth, so without this influence household consumption would have been flat. It also suggests that although the sharp falls in consumption seen in the first half of the year have passed, the data does not show a broad-based pick up in spending in the second half of the year.

Motor car expenditure an important driver of household consumption growth in late 2009

Household expenditure on motor cars has been an important driver of consumption in the second half of 2009. The vehicle scrappage scheme, where owners of cars more than ten years old can receive a £2,000 discount on a new vehicle if they trade in their older one, was introduced in May of 2009 and ran until the end of March 2010. Given the timing of when this scheme was instigated and the strengthening demand for motor cars, it suggests that the policy may have had some positive impact.

Figure 5 shows the contribution of motor car spending to household consumption in recent years. As the recession took hold in 2008 Q2, spending on motor cars fell sharply, falling by 6.0 per cent in that quarter. Further falls of 5.7 per cent and 3.2 per cent in the third and fourth quarters respectively meant that by the end of the year motor vehicle expenditure was nearly 15 per cent lower than its pre-recession level.

Spending declined, not only because consumer confidence was dented by the depressed economic outlook, worsening labour market, falling house prices and high levels of borrowing, but also due to a tightening in the availability of finance as banks looked to restrict consumer credit.

In 2009 motor vehicle expenditure has rebounded strongly, especially in the final three quarters of the year. As a result, motor car expenditure by households was actually higher at the end of 2009 Q4 than before the recession started.

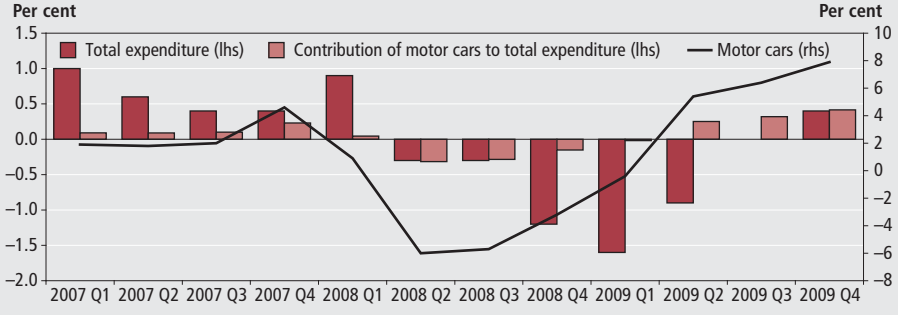
Although the vehicle scrappage scheme is a factor which may have supported expenditure, it is not the only one. The labour market has not deteriorated to the extent feared, pressures on household balance sheets have been reduced by a substantial reduction in interest rates, and the temporary reduction in the rate of VAT from December 2008 to January 2010 are all potential causes of the growth in household motor car expenditure.

Net tourist spending falls in 2009 as UK residents make less visits overseas

As Figure 4 shows, the contribution of net tourism to overall household consumption has been improving throughout the course of 2009. However, as **Figure 6** shows, this has largely been due to a stabilisation in the level of spending abroad by UK households after falling rapidly for most of the previous two years. As tourist spending in the UK by overseas residents has been fairly stable, net tourist spending has fallen sharply and is now at its lowest level since 1992 Q2 – just over ten years ago.

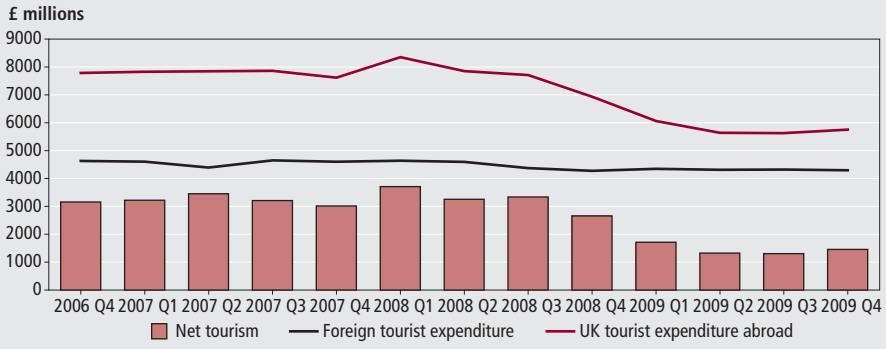
According to the Overseas travel and tourism statistical bulletin, average spending by both UK residents overseas

Figure 5
Household expenditure on motor cars



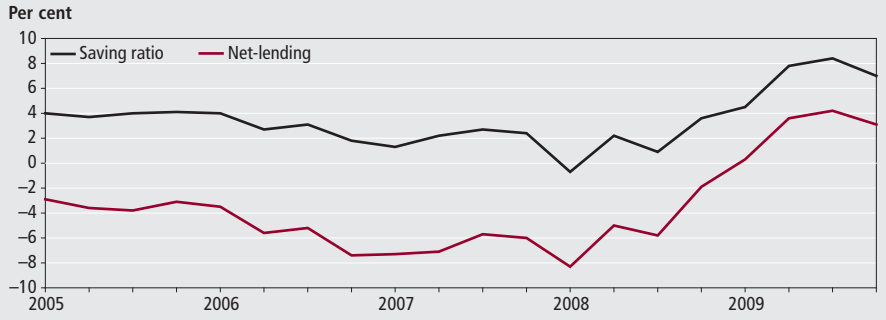
Source: Quarterly National Accounts

Figure 6
Net tourism household expenditure



Source: Travel and tourism

Figure 7
Household saving ratio and net lending



Source: Quarterly National Accounts

and foreign visitors to the UK have not shown any significant change in the last few years, so therefore the trends in Figure 6 must mainly be the result of changes in visitor numbers. In January 2010, there were (seasonally adjusted) 4.37 million visits abroad by UK residents, down by about one third from the 6.18 million recorded in January 2008. In comparison, on a seasonally adjusted basis, there were 2.56 million visits by overseas residents to the UK in January 2010, only marginally lower than the 2.73 million visits recorded in January 2008.

Further analysis of the figures shows that the largest reductions in overseas visits by UK residents have been to Europe, which accounts for over half of all visits. There have also been significant falls in visits by UK residents to North America and other destinations.

It is natural that households, looking to protect their financial positions by cutting back on more discretionary items of spending in times of recession, may opt to reduce overseas travel, perhaps deciding to holiday within the UK or not at all. An additional factor may have been the depreciation of sterling, which fell by a quarter against the euro in the final quarter of 2008 and by a similar proportion against the US dollar in the second half of that year. As a result, the purchasing power of sterling overseas is lower, and at the same time, the purchasing power of foreign currency in the UK is greater. Overseas visits are therefore relatively more expensive than before for UK resident. This might also explain why visits to the UK by overseas residents have held up despite the global recession also hitting the confidence and balance sheets of households in other parts of the world.

Strong rise in household saving and net lending during 2009

Gross savings by households are the difference between household resources and consumption. Resources available for consumption predominately consist of gross disposable income plus net equity invested in pension funds. The saving ratio is simply the ratio of gross savings to these total resources for the household sector.

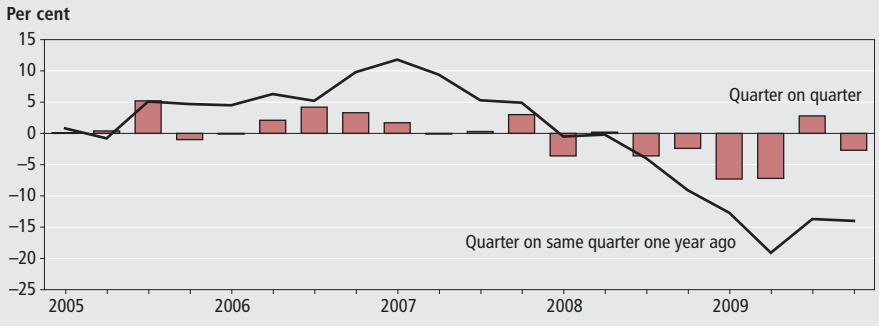
In the final quarter of 2009 the household saving ratio was 7.0 per cent (see **Figure 7**). Although this is lower than the 8.4 per cent recorded in the third quarter, the ratio of household saving to total household resources has increased significantly in the last two years, mainly due to a retrenchment in household consumption in the face of the downturn in the economy and tighter restrictions in the availability of credit. Disposable incomes have not fallen to the same extent, despite the weakening labour market, and fairly tepid growth in nominal wages. Household disposable incomes appear to have been supported by lower interest payments to other sectors of the economy following the sharp reduction in base rates and net taxes (taxes minus benefits) which tend to behave as an automatic stabiliser across the economic cycle.

The household sector has also become an increasing net lender since the start of 2009 as the sector experiences a growing surplus of saving over investment. Although this partly reflects the rise in gross savings, the main factor has been a sharp fall in the fixed investment by the sector – notably in new house purchases. For the household sector residential dwellings are the most important category of investment spending. National Accounts essentially treats owner occupied housing as an investment good as it yields a future flow of housing services to the owners - for which implied rents are charged. As a result, owner occupied households are in effect businesses providing these services to themselves. Falling house prices and rising unemployment saw the demand for new mortgage borrowing drop significantly in 2008. Furthermore, the financial crisis led to a hiatus in new lending as banks and building societies looked to rebuild balance sheets. Although house prices have risen during 2009, mortgage lending still remains far below the peak levels seen in 2007 which has fed through to a low turnover in the housing market.

Business investment falls sharply in 2009

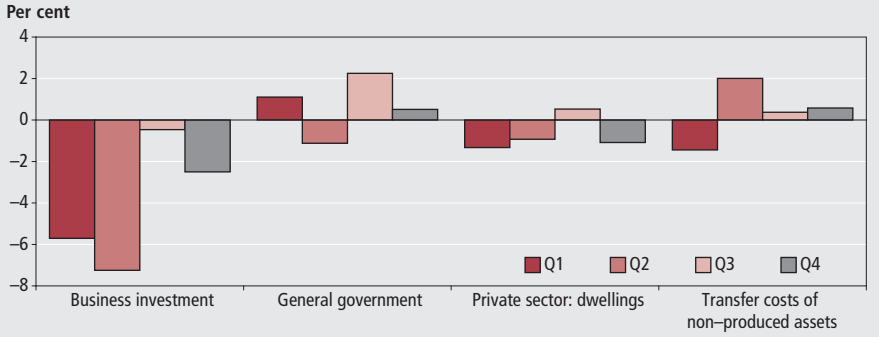
Fixed investment tends to be a strongly procyclical part of aggregate demand. As it often involves lumpy and irreversible expenditure, it is very sensitive to business confidence concerning the economic outlook and the ease in financing. In a recession both these factors will be less supportive. Businesses will be less optimistic about their need for future capacity, and less willing to add more debt to their balance sheets when profits and cash flow are depressed. Financial institutions will also be more

Figure 8
Gross fixed capital formation (GFCF) growth



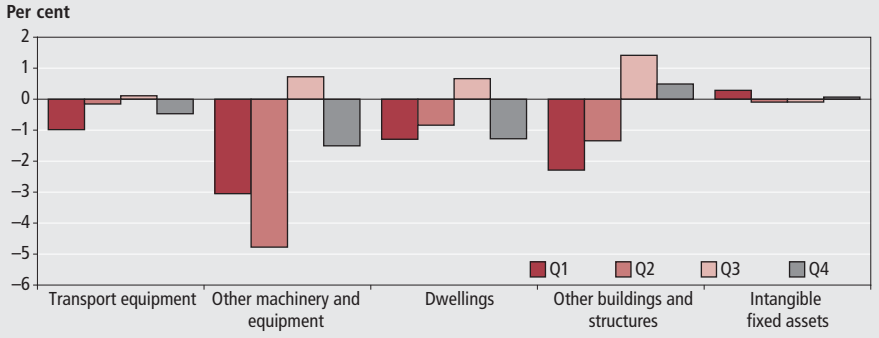
Source: Quarterly National Accounts

Figure 9a
Contributions to GFCF growth by sector, 2009



Source: Quarterly National Accounts

Figure 9b
Contributions to GFCF growth by asset, 2009



Source: Quarterly National Accounts

cautious about lending when the trading environment is weaker and insolvencies are on the rise.

Figure 8 shows a strong contraction in GFCF during the recent recession. This is particularly evident in the first two quarters of 2009 contributing largely to the contraction in GDP during these quarters (see Figure 4). In the second half of the year fixed investment spending appears to have stabilised, but after growing in quarter three it fell in quarter four.

Figure 9a presents the contributions to the growth in GFCF by each sector during 2009. Clearly, business investment has been the most important contributor to the fall in fixed investment spending during the year, contracting in every quarter and very sharply in the first half of the year. In 2009 Q4 business investment was 23.5 per cent lower than in the same quarter of 2008.

Government investment has made a positive contribution to fixed investment growth in the second half of the year, especially in the third quarter when government GFCF rose by 13.8 per cent. As part of the fiscal stimulus package of measures, the Government has looked to bring forward some public spending on infrastructure projects. However, as this category is less than a third of business investment it is insufficient to fully offset the decline in total GFCF. The other components – namely investment in new dwellings and the costs associated with the transfer of fixed assets such as land and real estate fees and commissions – had smaller influences on total GFCF growth in 2009. This may partly reflect muted activity in residential property markets during the year.

The contributions to GFCF growth by main asset type (**Figure 9b**) show a consistent picture with the sector breakdown. The largest negative contributions in the first half of 2009 were concentrated in equipment investment and also other buildings and structures which include commercial and industrial buildings – in line with the strong fall in business investment. As the rate of decline in business investment eased in the second half of the year these components also made an improved contribution to GFCF growth.

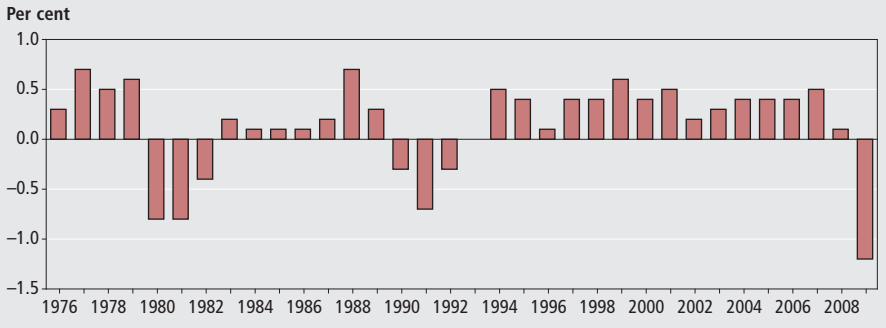
High rate of destocking in 2009 as businesses face weak demand

In a downturn businesses tend to reduce their stocks of inventories due to lower expectations of current and future demand. As a result current and near future orders are met from existing stocks rather than production, which then falls quickly, often abruptly. When the economy exits recession and businesses are confident of a sustained improvement in orders, production rises equally quickly to meet higher demand and to replenish stocks of inventories. This stocks cycle means that growth in industries where stockholding is important, such as the production industries, tends to show stronger amplitude than GDP as a whole during the economic cycle.

The latest recession appears to be no exception, with stockholding playing an important role in driving the fall in output. **Figure 10** shows the change in stocks (that is the accumulation minus the disposal of inventories) as a proportion of GDP in each year since 1976. The cyclical pattern is clearly evident as is the strong degree of destocking in 2009.

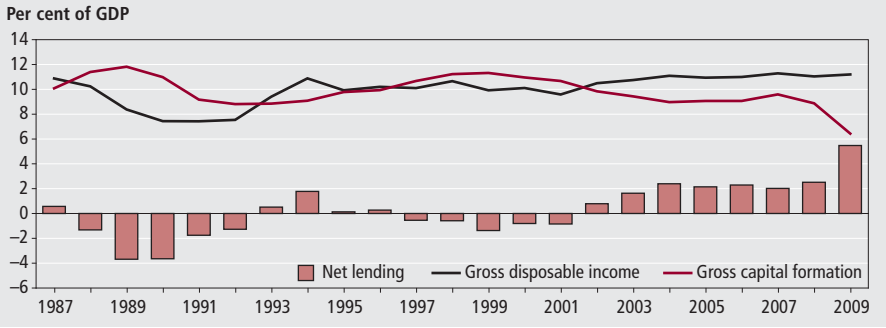
As the production sector is a smaller part of total UK output than in previous recessions, especially compared to that of the early 1980s, it might be thought that the stocks cycle would now be less important than previously. The recent recession though has been global and led

Figure 10
Changes in inventories as a proportion of GDP



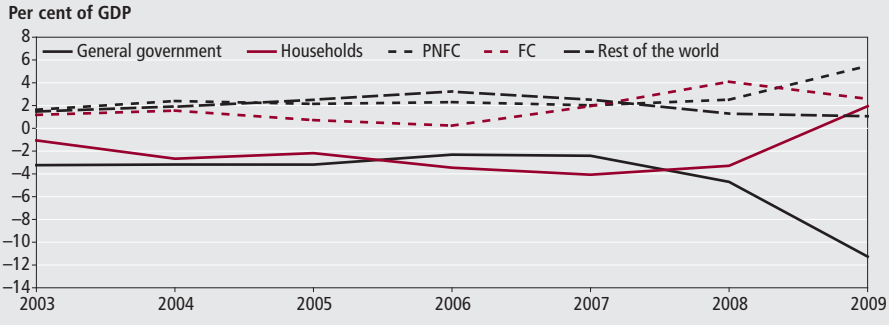
Source: Quarterly National Accounts

Figure 11
Net lending of private non financial corporations



Source: Quarterly National Accounts

Figure 12
Net lending by sector



Source: Quarterly National Accounts

to a sharp deterioration in global trade. In 2009 world trade almost fell for the first time since the end of World War II, so therefore the recession has been particularly severe for sectors of the economy, like manufacturing and other production, where output is highly traded. Furthermore, the changing structure of global trade, which is now more vertically integrated across countries than ever before, helped by the growing share of world trade accounted by multinational corporations, may have increased the importance of stockholding within the production process.

Corporate sector net lending rises sharply in 2009 as investment falls

The private non financial corporations (PNFC) sector has been a net lender since 2002, but in 2009 the extent of its net lending increased markedly to 5.5 per cent of GDP. While gross disposable incomes (reflecting operating surpluses and net property income including earnings from foreign direct investments) have remained fairly robust as a proportion of GDP during the recession, the sharp fall in gross capital formation consisting of fixed investment and the disposal of inventories has resulted in the PNFC sector generating a larger surplus of saving over investment in the latest full year (see **Figure 11**).

The rise in net lending may therefore occur automatically due to the fall in fixed investment and the disposal of inventories as firms lower their expectations of future demand and hence the amount of capacity required. However, the argument could conceivably also work the other way around – that firms have lowered investment spending in order to build up cash reserves in order to rebuild balance sheets and provide a buffer against the difficult trading conditions currently prevailing. These cash buffers may also be required in order to fund pension fund deficits and protect against volatile energy and commodity prices.

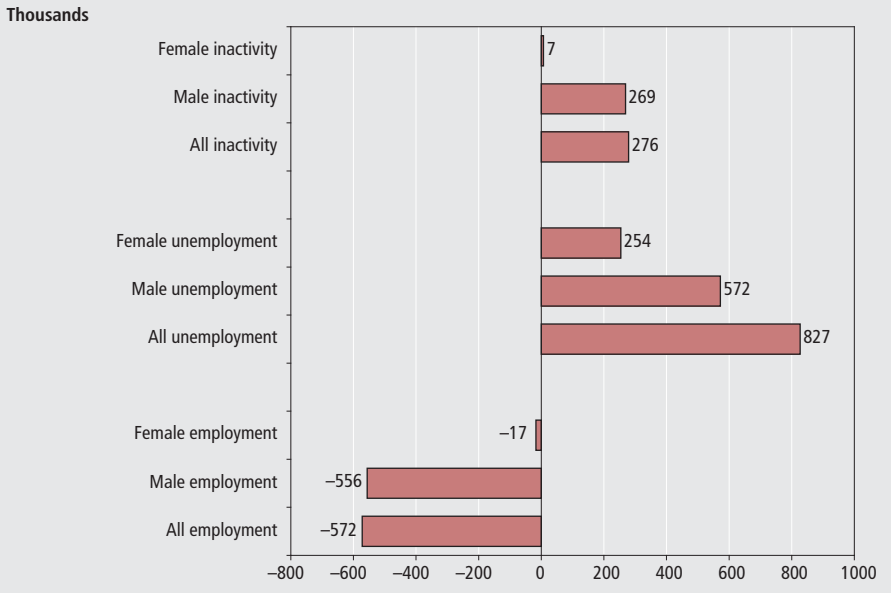
Net borrowing by government greater than net lending by households and private corporations

Both the household and PNFC sectors have become increasing net lenders in 2009 as they look to rebuild or protect balance sheets against the economic downturn. This has either been the result of or resulted in a retrenchment in consumption and investment spending. The net-lending of the other sectors of the economy as a proportion of GDP are also shown in **Figure 12**.

Net lending of financial corporations tends to reflect the income generated by the sector as investment spending by this sector is relatively small. Taken together, net lending by households, financial corporations and PNFCs was around 10 per cent of GDP in 2009. However, the growing current budget deficit has meant that the general government sector (consisting of Central Government, Local Government and public corporations) has become an increasing net borrower to the tune of over 11 per cent of GDP because of its huge negative savings (consumption greatly in excess of income funded by borrowing).

Because the domestic sectors of the UK are therefore collectively a net borrower, this means that the rest of the world sector is also a net lender – implying that the UK is funding its excess investment over saving by running a current account deficit.

Figure 13
Changes in the headline levels of employment,[2] unemployment[2] and inactivity[1]



Notes:
1 Working age population.
2 Population over 16 years of age.

Source: Labour Market Statistics

Figure 14
Changes in the headline rates of employment,[1] unemployment[2] and inactivity[1]

Notes:
1 Working age population.
2 Population over 16 years of age.

Source: Labour Market Statistics

Headline labour market outcomes worse for men than women in the recession

Falling output during the recession has passed through to the labour market, where unemployment has risen and employment has fallen. However, a look at the headline figures tends to show the deterioration in labour market outcomes have been worse for men than women in the last two years (see **Figure 13** and **Figure 14**).

Total employment of those aged 16 and over was 28.9 million in the three months to January 2010. This represents a fall of 572,000 from 29.4 million in the three months to January 2008. The employment rate, based on the working age population, fell by 2.6 percentage points from 74.8 per cent to 72.2 per cent over the same period.

Declining employment though impacted more severely on men than women. The total employment level for men fell by 556,000 to 15.4 million in the three months to January 2010 relative to the same period two years earlier. For women, the decline was much smaller, as employment levels fell by 17,000 to 13.5 million. In terms of employment rates, for men there was a 3.9 percentage point drop to 75.0 per cent while for women there was a fall of 1.1 per cent to 69.2 per cent.

Unemployment data have moved in the opposite direction to employment levels and rates. Total unemployment of those aged above 16 years was 2.449 million in the three months to January 2010, which is 827,000 higher than in the same three month period two years earlier. Male unemployment accounted for most of the increase, rising by 572,000 to 1.511 million compared to a rise of 254,000 to 938,000 for women. The unemployment rate, again based on all those over 16 years of age, increased by 2.6 percentage points to 7.8 per cent. The rise was twice as large for men, increasing by 3.4 percentage points to 9.0 per cent, while for women the increase was 1.7 percentage points to 6.5 per cent.

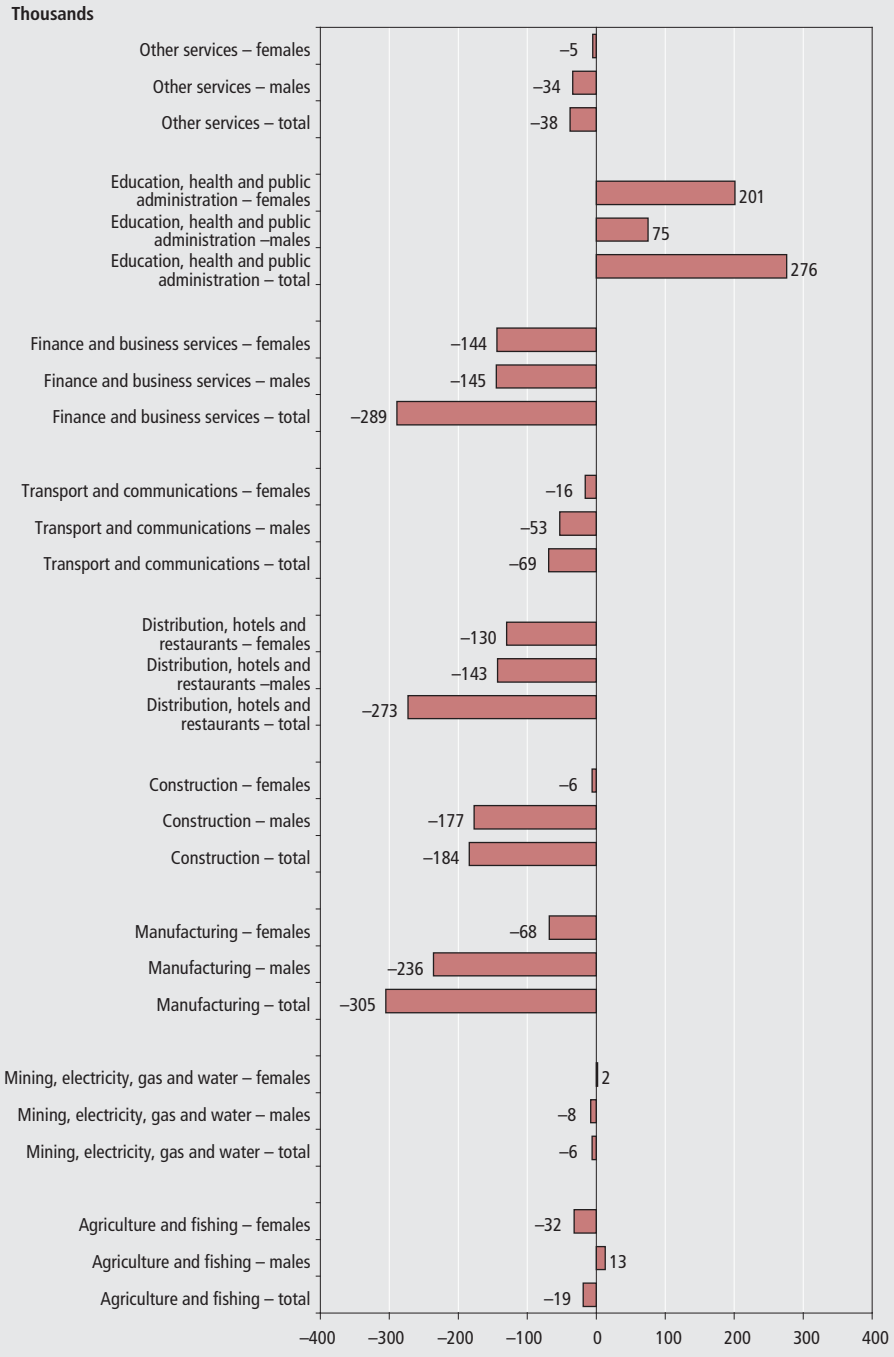
Inactivity levels and rates also showed larger rises for men than women. For the total working age population, inactivity grew by 276,000 to 8.2 million over the same two year period. However, for men the rise was greater than for women, increasing by 269,000 to 3.5 million compared to just 7,000 to 4.7 million. These figures are reflected in the movement in inactivity rates. Total working age inactivity rose by 0.6 percentage points to 21.5 per cent. For men, the inactivity rate rose by 1.2 percentage points to 17.5 per cent but actually fell by 0.1 percentage points to 25.8 per cent for women.

Therefore, the overall picture from the labour market during the last two years is for the downturn to have impacted more on the employment, unemployment and inactivity of men than for women.

Job falls concentrated in industries with higher male employment

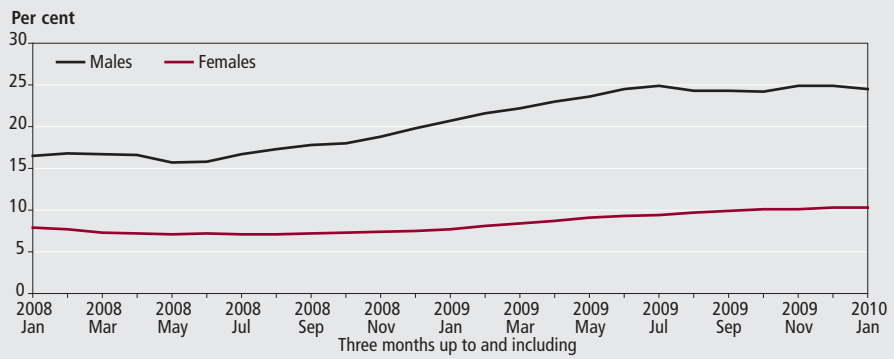
Relatively worse labour market outcomes for men appear to be explained by the recession impacting more on the sectors of the economy where male employment is traditionally higher. Workforce Jobs is a count of the

Figure 15
Changes in Workforce Jobs by industry and sex



Source: Labour Market Statistics

Figure 16
Percentage of part time workers that could not find full time jobs



Source: Labour Market Statistics

total number of jobs in the UK, collected mainly but not exclusively from employer surveys, and gives a better description of labour market changes by industry than the Labour Force Survey.

There was a total peak to trough fall of 908,000 jobs between 2008 Q2 and 2009 Q4. Of these, 708,000 were males jobs compared to 200,000 female jobs. A breakdown of changes in jobs by industry and sex over this period are shown in **Figure 15**.

Manufacturing accounted for a third of the fall in jobs, a total of 305,000 of which 236,000 were male compared to 68,000 that were female. In 2008 Q2 three-quarters of manufacturing jobs were held by males compared to just one-quarter by females, so the larger decline in male manufacturing jobs is simply indicative of the higher concentration of male jobs in the industry.

A similar result was observed in the construction sector. In 2008 Q2, on the eve of the downturn, just under 90 per cent of the jobs in the industry were held by men. Therefore it is unsurprising that of the 184,000 reduction in total jobs between then and the final quarter of 2009, 177,000 were held by men compared to just 6,000 by women.

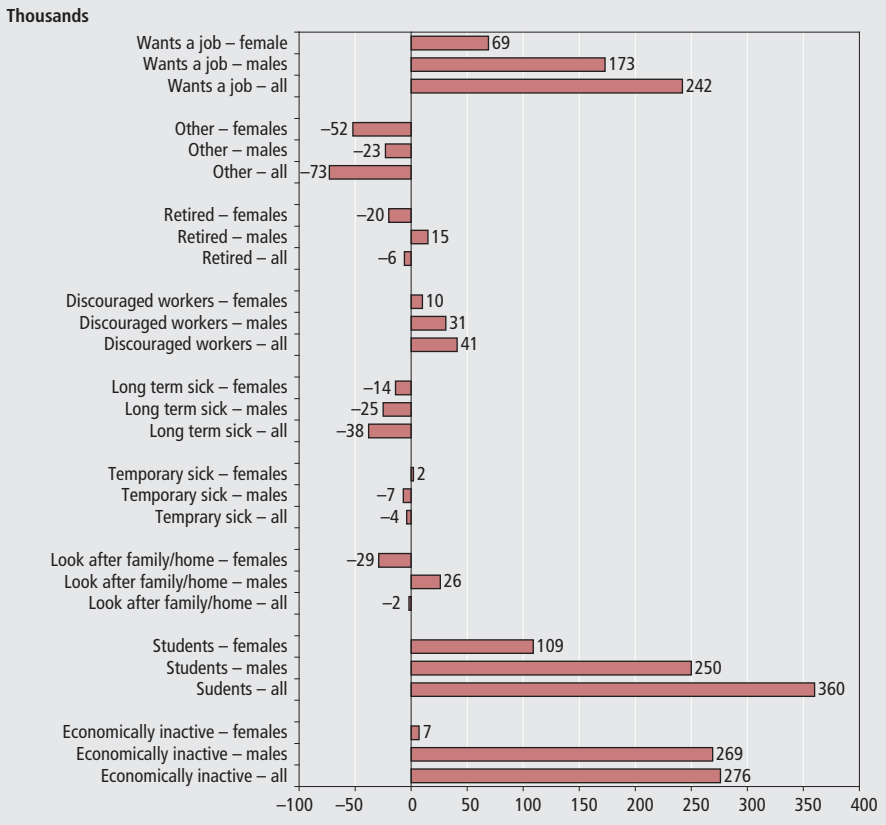
Where the employment mix between men and women is relatively equal, the fall in jobs was more similar. In the distribution, hotels and restaurants sector, total jobs fell by 273,000 of which male jobs accounted for 143,000 and female jobs 130,000. In 2008 Q2 there was an almost exact split of total jobs between men and women.

Likewise, in the business and financial services sector, the 289,000 reduction in jobs was split evenly between men and women (145,000 for men and 144,000 for women). In 2008 Q2, 56 per cent of jobs were male compared to 44 per cent female, so the fairly equal fall in jobs reflected the fairly equal split in total jobs between the sexes.

To compound the differences in changes in the number of jobs between men and women, the sector where the number of jobs actually grew was one where female jobs are usually much higher than male jobs. In the education, health and public administration sector 30 per cent were male jobs in 2008 Q2 compared to 70 per cent female. Between then and 2009 Q4 total jobs in these industries increased by 276,000 of which 75,000 were male and 201,000 were female.

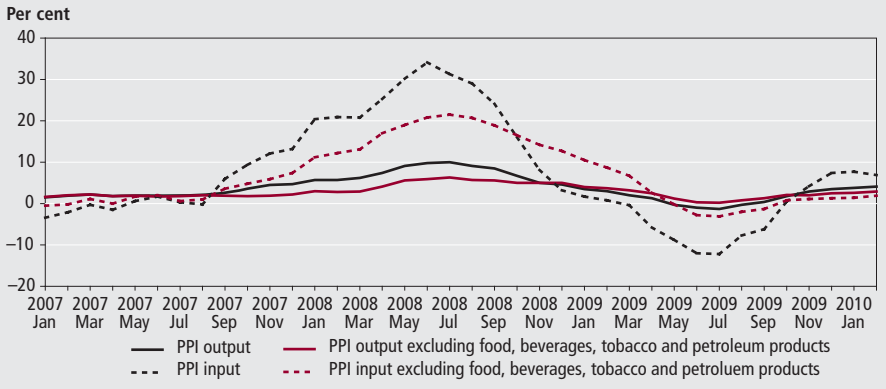
Hence, the pattern of job changes across industries tends to support the view

Figure 17
Changes in the levels of working age inactive by reason and sex



Source: Labour Market Statistics

Figure 18
PPI output and input inflation



Source: Producer Prices

that the downturn in the labour market impacted to a greater extent on men than women because the industries where job reductions were greatest had the highest concentration of male jobs.

Increases in part time workers proportionately greater for men

One argument might be that as women tend to be more concentrated in occupations where part time working arrangements are more common, this flexibility over the number of hours worked may have led to smaller reductions in employment. However, the evidence from the Labour Force Survey doesn't really support this, in fact the rise in part time working over the last two years has been proportionately greater for men.

Between the three months to January 2008 and the three months to January 2010 the number of part time workers increased by 199,000. Although the rise in female part time workers was greater than men, 114,000 compared to 85,000, as females accounted for around three quarters of all part time workers at the beginning of the period the rise in male part time working was proportionately larger.

Of more significance are changes the numbers working part time due to the inability to find a permanent job. These increased by 306,000 over the same two year period (to 1.036 million), split fairly evenly between men and women. For men, there was an increase of 159,000 to 445,000, and for women the increase was 147,000 to 591,000. But because numbers of female part time workers are greater, the proportional impact was greater for men (**Figure 16**). Overall, the percentage of part time workers unable to find a full time job rose by 3.8 percentage points to 13.7 per cent. For men the rise was by 8 percentage points to 24.5 per cent compared to a 2.4 percentage points increase to 10.3 per cent for women. This suggests that incidence of underemployment, where workers are unable to work the number of hours they would like to by being constrained to part time work, increased proportionately more for men than women in the downturn.

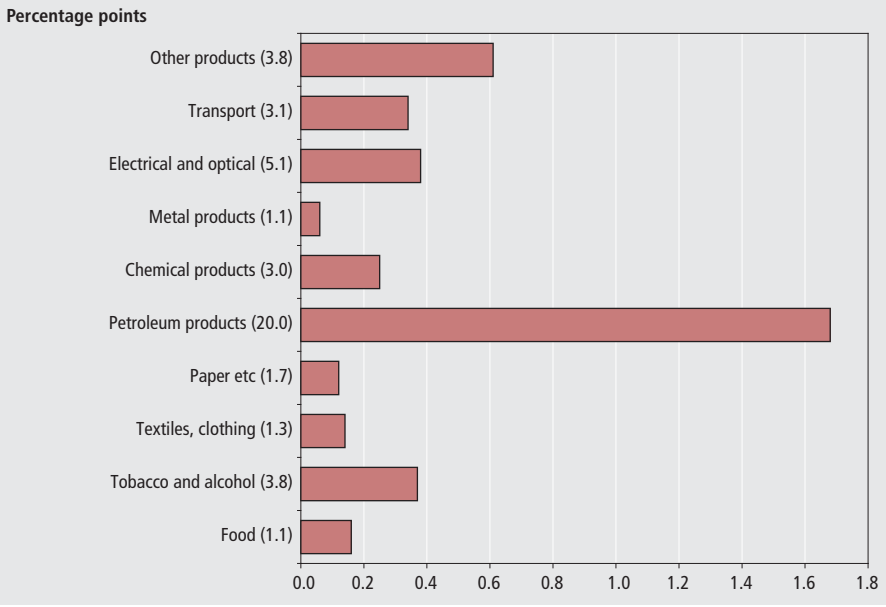
Working age inactivity levels up more for men than women

Working age inactivity has also risen more strongly for males than females during the latest recession. **Figure 17** presents a breakdown of the change in the numbers of working age inactive between the three months to January 2008 and the three months to January 2010 by stated reason and sex.

A number of key observations can be drawn from the chart. Student numbers increased by 360,000, the majority (250,000) of which were men. Female student numbers also increased but by a smaller amount (109,000). Growing enrolments in higher and further education may reflect the currently limited job market opportunities facing those seeking work, particularly younger people as employers cut back on entry-level and graduate recruitment schemes.

Changes in other stated reasons for inactivity were all rather small. The number of temporary and long term sick both exhibited a small fall, so there is little evidence of this type of inactivity hiding unemployment. Discouraged worker numbers also picked up, but still account for a very small proportion of the total inactive working age population.

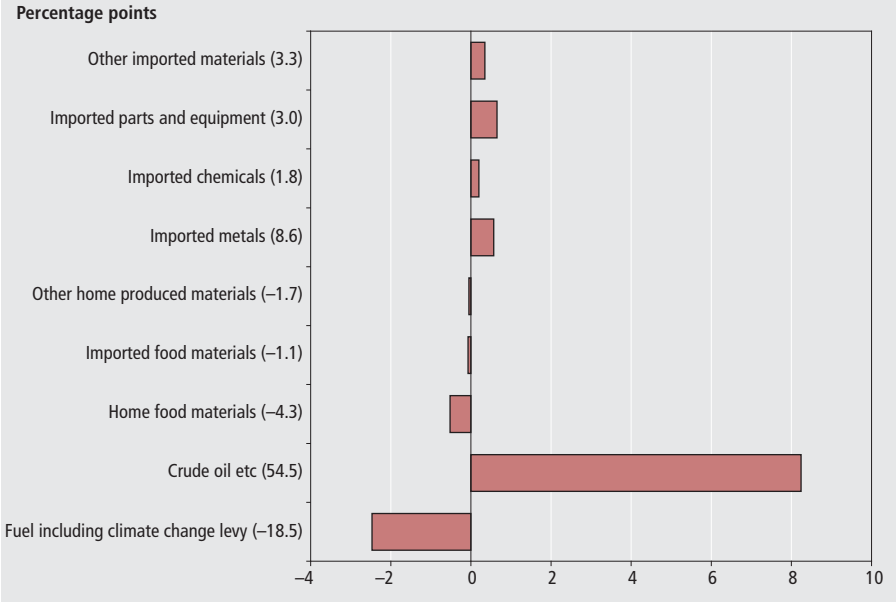
Figure 19a
Contributions to total output PPI inflation by main product groups[1]



Note: *Source: Producer Prices*

1 Figures in brackets are actual percentage changes.

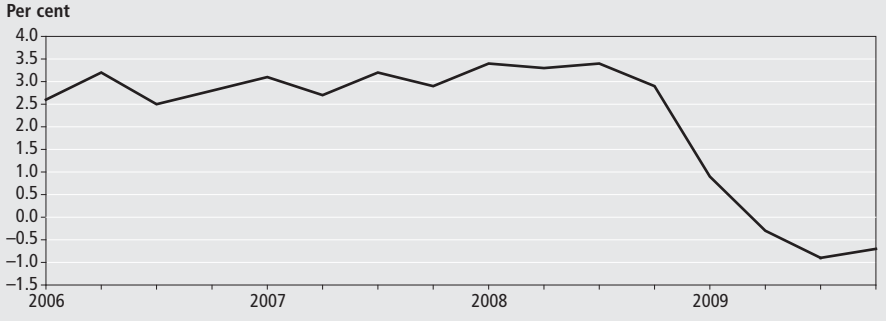
Figure 19b
Contributions to total input PPI inflation by main product groups[1]



Note: *Source: Producer Prices*

1 Figures in brackets are actual percentage changes.

Figure 20
SPPI inflation



Source: Services Producer Prices Index (experimental)

Rising oil prices drive up producer prices inflation

Output price index for home sales of manufactured products, often referred to as factory gate prices, rose by 4.1 per cent in the year to February. PPI output inflation has now been steadily rising since February 2009, although it still remains far below the recent peak rate of 10 per cent in July 2008 (see **Figure 18**). Recent fluctuations in PPI inflation rates have tended to follow changes in oil and other commodity prices.

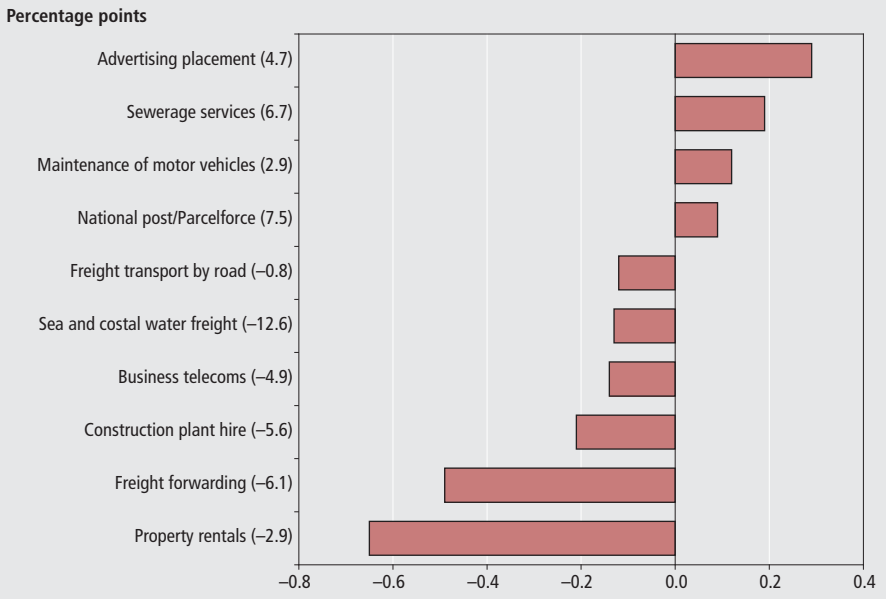
The contributions to the 12 months increase in output price inflation by main product groups are shown in **Figure 19a**. Clearly the largest positive contribution has come from petroleum products, where prices have risen by 20.0 per cent in the last year. The pass through from oil prices to petrol prices tends to be both quick and strong, with the recent increases reflecting the rise in oil prices since the beginning of 2009. However, oil prices are still yet to reach the peak levels achieved in the summer of 2008.

The strong influence of movements in oil prices on PPI inflation rates is also clearly shown in input price indices (**Figure 19b**). In the year to February manufacturing input prices increased by 6.9 per cent, accelerating from the deflation of 12.2 per cent recorded in July 2009. Contributions to input prices show that crude oil accounted for 8.24 percentage points, having risen by 54.5 per cent on the year. However, input price inflation is still a long way below the peak of 34.1 per cent recorded in June 2008 when oil prices were at a record high.

Services producer prices fall as difficult market conditions prevail

Output price inflation in the services sector continues to be muted as current market conditions put downward pressure on services providers. The quarterly Services Producer Prices Index (SPPI), which is an experimental statistic and does not include full coverage of the services sector, fell by 0.7 per cent in the final quarter of 2009. This was the third consecutive quarter of deflation in the index. Unlike PPI, where commodity and oil prices in particular have been fundamental drivers of the index, SPPI inflation though appears to reflect more the current cyclical position of the economy. As **Figure 20** shows,

Figure 21
Contributions to total net SPPI inflation by main product groups[1]



Note: *Source: Services Producer Prices Index (experimental)*

1 Figures in brackets are actual percentage changes.

SPPI inflation rates have declined as the economy entered recession.

Figure 21 shows the contributions to the four quarters SPPI inflation rate in 2009 Q4. Property rentals, where prices have declined by 2.9 per cent on the same quarter in 2008, made the largest negative contribution to SPPI inflation. The large increase in commercial office floor space in the years preceding the downturn along with lower business demand have resulted in stronger competition for tenants driving down prices. Freight forwarding and construction plant hire also made notable downward contributions to the aggregate index as falling business demand increases competition among suppliers for customers.

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Independent forecasts

March 2010

UK forecasts

The tables below supplement the Economic Review by providing a forward-looking view of the UK economy. The tables shows the average and range of independent forecasts for 2009 and 2010 and are extracted from HM Treasury's Forecasts for the UK Economy.

2010

	Average	Lowest	Highest
GDP growth (per cent)	*1.3*	*0.7*	*2.2*
Inflation rate (Q4, per cent)			
CPI	*2.1*	*1.4*	*3.8*
RPI	*3.1*	*1.9*	*4.8*
Claimant count (Q4, million)	1.74	1.44	2.10
Current account (£ billion)	–23.8	–49.5	–10.0
Public Sector Net Borrowing (2009–10, £ billion)	176.1	148.0	200.4

2011

	Average	Lowest	Highest
GDP growth (per cent)	*2.1*	*0.9*	*3.4*
Inflation rate (Q4, per cent)			
CPI	*1.8*	*0.0*	*3.3*
RPI	*2.9*	*1.6*	*4.8*
Claimant count (Q4, million)	1.73	1.35	2.30
Current account (£ billion)	–22.8	–54.5	–5.0
Public Sector Net Borrowing (2010–11, £ billion)	150.6	112.0	207.2

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/data_forecasts_index.htm

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 2009), published by OECD (Organisation for Economic Co-operation and Development).

2010

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	*2.5*	*1.8*	*0.9*	*1.9*
Consumer price (percentage change from previous year)	*1.7*	*–0.9*	*0.9*	*..*
Unemployment rate (per cent of the labour force)	*9.9*	*5.6*	*10.6*	*9.0*
Current account (as a percentage of GDP)	*–3.4*	*2.8*	*–0.1*	*–0.8*
Fiscal balance (as a percentage of GDP)	*–10.7*	*–8.2*	*–6.7*	*–8.3*

2011

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	*2.8*	*2.0*	*1.7*	*2.5*
Consumer price (percentage change from previous year)	*1.3*	*–0.5*	*0.7*	*..*
Unemployment rate (per cent of the labour force)	*9.1*	*5.4*	*10.8*	*8.8*
Current account (as a percentage of GDP)	*–3.7*	*2.8*	*0.3*	*–0.8*
Fiscal balance (as a percentage of GDP)	*–9.4*	*–9.4*	*–6.2*	*–7.6*

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	2008	2009	2009 Q2	2009 Q3	2009 Q4	2009 Dec	2010 Jan	2010 Feb
GDP growth – chained volume measures (CVM)									
Gross domestic product at market prices	ABMI	0.5	–4.9	–0.7	–0.3	0.4	..	..	..
Output growth – chained volume measures (CVM)									
Gross value added (GVA) at basic prices	ABMM	0.4	–4.6	–0.5	–0.2	0.4	..	..	..
Industrial production	CKYW	–3.1	–10.2	–0.6	–0.9	0.3	0.5	–0.5	..
Manufacturing	CKYY	–2.9	–10.5	–0.1	–0.3	0.8	0.9	–0.8	..
Construction	GDQB	–0.8	–10.7	0.0	1.9	–1.0	..	..	..
Services	GDQS	1.4	–3.5	–0.7	–0.2	0.5	..	..	..
Oil and gas extraction	CKZO	–4.8	–7.7	–1.1	–6.5	1.1	–5.7	1.1	..
Electricity, gas and water supply	CKYZ	0.2	–7.9	–2.8	0.2	–2.7	3.9	1.3	..
Business services and finance	GDQN	2.4	–4.7	–1.0	–1.2	0.4	..	..	..
Household demand									
Retail sales volume growth	EAPS	2.6	1.7	0.8	1.1	0.7	0.4	..	..
Household final consumption expenditure growth (CVM)	ABJR	0.9	–3.2	–0.9	0.0	0.4	..	..	..
GB new registrations of cars (thousands)[1]	BCGT	..	..	..	..	..	..	..	..
Labour market[2,3]									
Employment: 16 and over (thousands)	MGRZ	29,443	28,979	28,925	28,917	28,905	28,860	..	..
Employment rate: working age (%)	MGSU	74.5	72.8	72.7	72.5	72.4	72.2	..	..
Workforce jobs (thousands)	DYDC	31,661	30,987	30,987	30,872	30,753	..	..	..
Total actual weekly hours of work: all workers (millions)	YBUS	940.7	913.3	917.6	909.7	907.9	908.2	..	..
Unemployment: 16 and over (thousands)	MGSC	1,776	2,395	2,431	2,461	2,457	2,449	..	..
Unemployment rate: 16 and over (%)	MGSX	5.7	7.6	7.8	7.8	7.8	7.8	..	..
Claimant count (thousands)	BCJD	905.1	1,531.8	1,533.2	1,605.2	1,622.1	1,612.1	1,617.4	1,585.1
Economically active: 16 and over (thousands)	MGSF	31,220	31,374	31,356	31,378	31,363	31,309	..	..
Economic activity rate: working age (%)	MGSO	79.1	79.0	79.0	78.9	78.7	78.5	..	..
Economically inactive: working age (thousands)	YBSN	7,872	7,967	7,951	8,006	8,077	8,157	..	..
Economic inactivity rate: working age (%)	YBTL	20.9	21.0	21.0	21.1	21.3	21.5	..	..
Vacancies (thousands)	AP2Y	636	452	435	431	465	465	480	480
Redundancies (thousands)	BEAO	163	235	268	204	168	168	..	..
Productivity and earnings annual growth									
GB average earnings (including bonuses)[3]	LNNC	..	..	2.5	1.4	1.5	1.5	0.9	..
GB average earnings (excluding bonuses)[3]	JQDY	..	..	2.4	1.7	1.4	1.4	1.4	..
Whole economy productivity (output per worker)	A4YN	..	..	–3.5	–3.1	..	..	..	..
Manufacturing productivity (output per job)	LOUV	..	..	..	..	..	3.6	..	..
Unit wage costs: whole economy	LOJE	..	..	5.1	4.1	..	..	..	..
Unit wage costs: manufacturing	LOJF	..	..	..	..	..	–0.7	..	..
Business demand									
Business investment growth (CVM)	NPEL	1.1	–19.3	–11.5	–0.8	–4.3	..	..	..
Government demand									
Government final consumption expenditure growth	NMRY	2.6	2.2	0.9	0.6	1.0	..	..	..
Prices (12-monthly percentage change – except oil prices)[1]									
Consumer prices index	D7G7	3.6	2.2	2.1	1.5	2.1	2.9	3.5	3.0
Retail prices index	CZBH	4.0	–0.5	–1.3	–1.4	0.6	2.4	3.7	3.7
Retail prices index (excluding mortgage interest payments)	CDKQ	4.3	2.0	1.4	1.3	2.8	3.8	4.6	4.2
Producer output prices (excluding FBTP)[4,5]	PLLV	4.7	1.9	1.3	0.7	2.2	2.5	2.6	2.9
Producer input prices5	RNNK	21.6	–3.5	–8.9	–8.7	4.0	7.4	7.7	6.9
Oil price: sterling (£ per barrel)	ETXR	52.10	39.34	38.44	42.05	45.53	46.41	48.25	47.82
Oil price: dollars ($ per barrel)	ETXQ	98.37	62.05	59.82	69.02	74.40	75.28	77.05	74.64

Seasonally adjusted unless otherwise stated

	Source CDID	2008	2009	2009 Q2	2009 Q3	2009 Q4	2009 Dec	2010 Jan	2010 Feb
Financial markets[1]									
Sterling ERI (January 2005=100)	BK67	90.8	80.2	80.8	82.5	80.0	80.1	80.6	80.0
Average exchange rate /US$	AUSS	1.8528	1.5651	1.5503	1.6411	1.6345	1.6239	1.6162	1.5615
Average exchange rate /Euro	THAP	1.2588	1.1233	1.1389	1.1475	1.1058	1.1127	1.1327	1.1415
3-month inter-bank rate	HSAJ	2.75	0.55	1.15	0.55	0.55	0.55	0.50	0.50
Selected retail banks: base rate	ZCMG						0.50	0.50	0.50
3-month interest rate on US Treasury bills	LUST	0.11	0.06	0.20	0.14	0.06	0.06	0.08	0.13
Trade and the balance of payments									
UK balance on trade in goods (£m)	BOKI	–93,381	–81,790	–19,847	–19,816	–21,047	–7,010	–7,987	..
Exports of services (£m)	IKBB	170,758	161,168	39,870	39,186	39,866	13,207	13,136	..
Non-EU balance on trade in goods (£m)	LGDT	–53,913	–44,744	–10,877	–10,896	–10,322	–3,428	–4,834	..
Non-EU exports of goods (excl oil & erratics)[6]	SHDJ	105.8	96.4	93.0	96.7	102.8	105.0	94.7	..
Non-EU imports of goods (excl oil & erratics)[6]	SHED	113.5	98.2	96.3	96.3	100.3	101.5	107.6	..
Non-EU import and price index (excl oil)[6]	LKWQ	115.3	126.0	126.2	122.5	123.9	124.3	124.5	..
Non-EU export and price index (excl oil)[6]	LKVX	109.8	118.6	118.4	116.8	117.9	118.3	115.3	..
Monetary conditions/government finances									
Narrow money: notes and coin (year on year percentage growth)[7]	VQUU	7.3	6.8	8.7	8.7	6.8	6.8	6.8	5.8
M4 (year on year percentage growth)	VQJW	13.2	12.4	13.6	11.5	6.6	6.6	4.9	3.9
Public sector net borrowing (£m)	–ANNX	61,152	142,672	41,191	35,237	43,035	16,009	43	12,361
Net lending to consumers (£m)	RLMH	11,249	–1,024	486	–841	–550	265	500	528

External indicators – non-ONS statistics

		2009 Aug	2009 Sep	2009 Oct	2009 Nov	2009 Dec	2010 Jan	2010 Feb	2010 Mar
Activity and expectations									
CBI output expectations balance[1]	ETCU	–5	–2	4	4	–7	4	7	5
CBI optimism balance[1]	ETBV			10			12		
CBI price expectations balance	ETDQ	5	–7	–4	–4	–2	6	10	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.

ARTICLE

Labour Force Survey unemployment and benefits durations

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SUMMARY

This analytical article uses the Labour Force Survey (LFS) to examine headline patterns of unemployment duration to introduce a comparison of unemployment benefit claim duration from both the LFS and the Jobcentre Plus Administrative system. The article shows the similarities between the two sources in terms of the direction of movement, but also the discrepancies in terms of levels of claimants. The LFS Household dataset is used to look at numbers of claimants within a household and their economic statuses. Finally, the article presents gross flows onto and from unemployment benefits using the Longitudinal LFS.

Background

The first part of this article considers how headline unemployment levels have changed in the 2008–09 recession. This is then followed by considering the extent to which unemployed people remain connected to the labour market by looking at unemployment durations. This brief analysis leads on to a comparison of the differences between the official measure of unemployment as recorded by the Labour Force Survey (LFS) (see **Technical note 1**) and the numbers of claimants of Jobseeker's Allowance (JSA), a key policy tool used to address labour market attachment. The next section uses the two sources to examine claimants of unemployment benefits by the length of claim (duration), and according to age, education, marital and housing status. The Household LFS dataset (see Technical note 1) is used to add to the individual level analysis by providing an insight into the numbers of claimants in a household. The Longitudinal LFS dataset (see Technical note 1) is used to provide analysis of changes in economic status, for people who began to, or stopped claiming unemployment benefits in a particular quarter.

In Q2 2008 the UK economy recorded a contraction of 0.1 per cent in Gross Domestic Product (GDP). The third quarter of 2009 was the sixth consecutive quarterly fall, meaning that UK GDP was 6.2 percentage points below its Q1 2008 level. The unemployment rate increased for five consecutive quarters from Q2 2008. The weakened positions of the UK goods and labour markets in 2008–09 had important implications for both the finances of individuals and society. This article presents analysis on the number of individuals by unemployment status and whether they claim unemployment related benefits.

Unemployment measures all people who meet the internationally agreed definition of unemployment (set by the International Labour Organisation). It is different from the claimant count, which measures only those people who are claiming unemployment related benefits (Jobseeker's Allowance). While many people will be recorded as unemployed on both measures, not everyone who is unemployed (under the ILO definition) is

Box 1
LFS re-weighting

The Labour Force Survey is re-weighted periodically to reflect changes in the UK population. In February 2010 data sets from Q3 2006 to Q4 2009 were re-weighted to reflect ONS's 2009 population estimates and the analysis for these periods reflects this update. However, data from periods prior to this have not been re-weighted. Throughout this article estimates produced from the LFS for periods up to Q2 2006 are weighted to 2007 population estimates.

eligible for, or chooses to claim Jobseeker's Allowance (JSA). Some unemployed people (especially women) are not eligible for JSA because they have a partner who is in work and/or because of their financial position, which helps increase unemployment, but not the claimant count. Alternatively, while most recipients of JSA would be classified as unemployed, some fall into the 'employed' or 'economically inactive' categories. This means that under some conditions it is possible for the claimant count to be higher than unemployment. ONS has published an explanation of the differences between the LFS unemployment statistics and JSA claimant count statistics in Annex 3 of the Labour Market Overview.

Two factors are fundamental to the relationship between the measures: the fact that economic activity in the LFS is based on self-classification; and the policy context, in terms of eligibility and the success of helping people who claim to actively seek work. This article concentrates on what the LFS does offer in terms of analysis. However, the LFS cannot sufficiently provide accurate estimates of the numbers of people claiming unemployment related benefits to definitively conclude that LFS analysis does not contain some bias. The reasons for this are explained later in this article.

Unemployment before and during the 2008–09 recession

In Q4 2009 the unemployment rate was 7.8 per cent, an increase of 2.5 percentage points since the contraction in UK output started in Q2 2008. However, in previous periods when GDP has fallen in consecutive quarters, the unemployment rate continued to rise following the return to positive growth. In Q4 2009, the unemployment rate was still 4.2 percentage points below the peak reached in the 1980s (11.9 per cent in Q2 1984) and 2.8 percentage points below the peak reached in the 1990s (10.6 per cent in Q1 1993). On the 30 March 2010, ONS published its estimate of GDP for Q4 2009, this showed growth of 0.4 per cent.

In Q4 1992 the unemployment rate was 10.4 per cent. This fell to around five per cent by the first few quarters of 2000 and remained around this rate until Q3 2008. Disaggregating by sex; the male unemployment rate was consistently higher than the female unemployment rate. The differences between male and female rates have narrowed over time. In Q4 1992 the male unemployment rate was 4.6 percentage points above female unemployment. By Q1 2004 the series had converged so that the male unemployment rate was within one percentage point of the female rate. This continued until 2009, when increases in unemployment that accompanied the onset of recession in Q2 2008 led the series to diverge. The female unemployment rate rose less than the male, increasing by only 1.8 percentage points between Q2 2008 and Q4 2009 compared to an increase in the male unemployment rate of 3.1 percentage points. In Q4 2009 the male unemployment rate was 2.3 percentage points greater than the female rate.

Claimant count before and during the 2008–09 recession

From 1992 to 2008 the claimant count rate (the number of people claiming as a proportion of workforce jobs and claimant count levels) followed a downward trend, falling from 9.9 per cent in December 1992 to a low of 2.4 per cent in March 2008. When analysed by sex, a similar pattern to the unemployment estimates is observed: the male claimant count rate is consistently higher than the female rate, and the disparity between men and women narrowed between March 1992 and March 2008 from a 7.3 percentage point difference to 1.9 percentage points. However, the difference had grown to 3.8 percentage points by December 2009. These changes in the claimant count were accompanied by falling unemployment for the period.

The changes in the gap between the two sexes took place while both male and female claimant count rates increased. The male rate rose from 3.3 per cent in January 2008 to a peak of 6.8 per cent in October 2009, while the female rate increased by less; from 1.4 per cent to 2.9 per cent over the same period. The number of claimants increased from 799,300 in January 2008 to a peak of 1,632,500 in October 2009 – the highest level witnessed since April 1997. Following this it fell slightly to 1,612,100 by December 2009.

Attachment to the Labour Market

A broad definition of labour market attachment is provided by the International Labour Organisation (ILO) definition of economic activity: if a person is employed, unemployed (looking for work and available), or inactive (but would like to work), they retain varying degrees of attachment to the jobs market. For those people who are unemployed or inactive, the length of time they spend in these states will influence the strength of attachment to the labour market. In this section the LFS is used to examine the duration of unemployment.

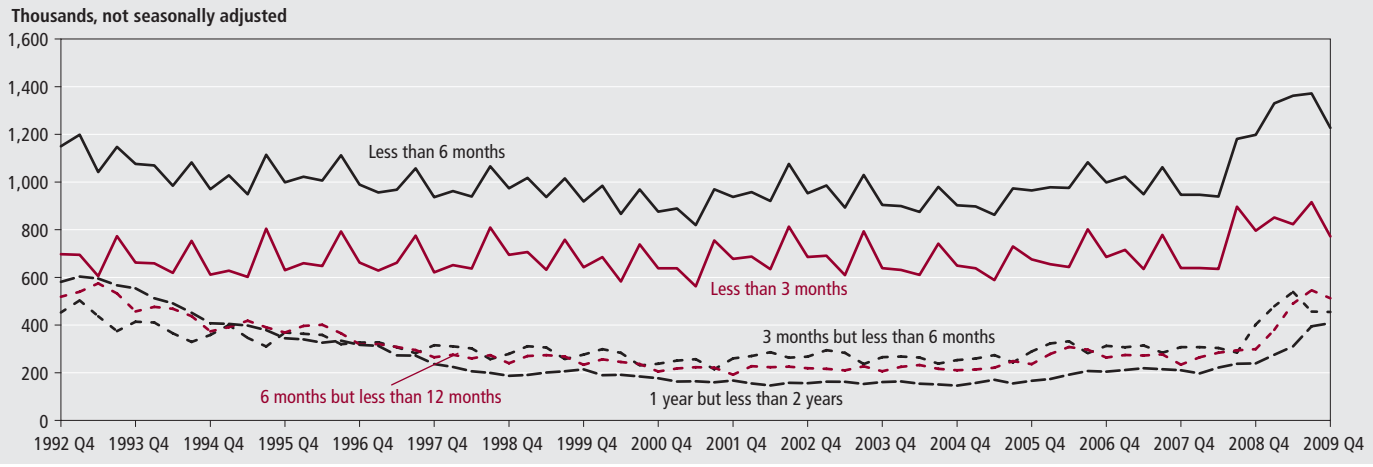
The first estimate presented in **Figure 1** coincided with the beginning of a sustained recovery in terms of economic output. So, it is interesting to compare the different paths of the short-term unemployed levels (less than 3 months) with the longer term unemployed in the context of the economic recovery following the 1990-91 recession.

Figure 1 shows a time series of unemployment levels by duration beginning in Q4 1992 and ending in Q4 2009. The 'less than 3 months' series shows considerable seasonality, with peaks occurring in Q3 of each year. From 1992 until the end of 2007 there were only short periods where this series was not between 600,000 and 800,000. This category shows that frictional unemployment, which occurs as a result of the turnover of jobs and job search, is always present in the labour market. Within each of the duration categories there will also be elements of structural unemployment, which is caused by a mismatch in the demand and supply of skills. The last six quarters showed a departure from this pattern with the 'less than 3 months' series increasing sharply in Q3 2008, and reaching a high of 915,000 in Q3 2009. In Q4 2009 the level fell to 772,000. This fall follows the seasonal pattern previously shown by the data, but is not of the same magnitude. This step change is a result of 'cyclical' or 'demand' deficient unemployment; terms which describe changes in unemployment caused by falls in demand for labour which tend to occur during weak economic growth and recessions.

Between 1992 and 2001, the numbers of people unemployed for longer than three months fell. The reduction in numbers of people who were unemployed for 'between 1 and 2 years' between 1992 and 2000 moved this group below the '3 to 6' and '6 to 12' month groups. Similarly, over the same period the '6 to 12' month category changed position in relation to the '3 to 6' month category. These changes suggest that longer-term unemployment was eroded between 1992 and 2000, before settling at lower levels for the period 2001 to 2007.

The numbers of people with longer-term unemployment durations, over six months, increased following Q3 2008. This fits with the small increase in the unemployment rate at the end of 2007, because a proportion of those who entered

Figure 1
Unemployment duration 1992 to 2009



Notes: *Source: Labour Force Survey*

1 The 'less than 6 months' series is a sum total of the 'less than 3 months' and the 3 to 6 months groups.
2 Durations of 2 years and over omitted.
3 Estimates for periods prior to Q3 2006 are weighted to 2007 population estimates. Estimates for periods from Q3 2006 onwards are weighted to 2009 population estimates.

unemployment during this period will have remained unemployed, and fed through to cause the first increases in numbers of people in the longer duration groups during 2008. This growth in levels appeared to have slowed in the last two quarters of 2009 for the '3 to 6' and '6 to 12' month duration series, but the '1 to 2 year' category recorded an increase in Q4 2009.

Some people remain unemployed beyond the two year duration, although this group is not shown in Figure 1. Following a sustained return to GDP growth in Q3 1992, the estimates for people unemployed for two to three years peaked at 305,000 in Q4 1993, while the estimates of people unemployed for more than three years peaked at 425,000 in Q1 1995. The lag in the peak of the 'more than 3 years' group shows how the initial inflow to unemployment of short durations 'ripples' through to longer durations. In this instance, it shows that people continued to declare themselves 'unemployed' and therefore looking for work for some time following the return to positive growth.

As described by Shumway (1993) there are two main approaches to analysing labour market behaviour: human capital models and job search models. These approaches are also relevant in relation to unemployment duration. The human capital models were first developed by Becker (1974), and assume that individual characteristics, such as education and past experience determine the wages and employability of a person. Job search models involve the intensity of job offers in relation to the reservation (read acceptable) wage of an individual and were formulated by Stigler (1961) and Lippman and McCall (1976).

A person's duration of unemployment will be influenced by factors beyond their control, like the economy, and also by individual characteristics which may or may not be within their control. The obvious example, consistent with human capital models is the undertaking of training or education to increase the chances of being hired by an employer. However, Shumway (1993) and Long (2009) have shown that other factors like marital status and whether a person owns or rents their home can also help explain the chances of leaving unemployment. Interestingly, Shumway's work also supports the theory that unemployment benefits increase the risk of remaining unemployed, and therefore lengthening unemployment duration. This is because unemployment benefits may cause job seekers to raise their reservation wage, rather than provide a boost to job search activity. The alternative school of thought supported by Wadsworth (1990) is that the conditionality of unemployment benefits provides a link to the labour market, and encourages job searches, thereby preventing people moving into inactivity.

Comparison of JSA claimant count to LFS unemployment related benefits

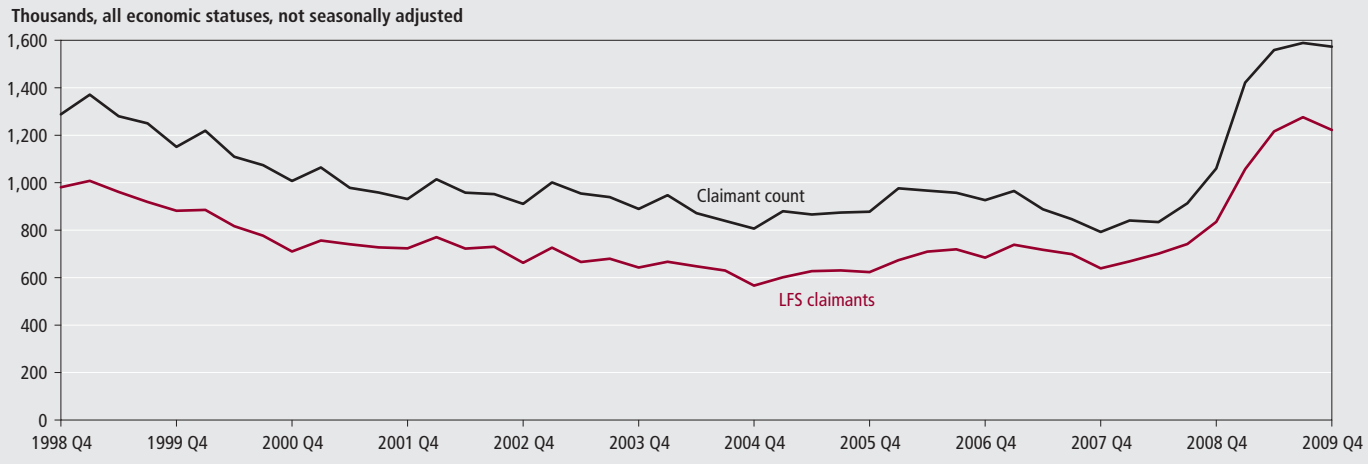
The LFS asks questions regarding the types of state benefits claimed. However, the LFS is not the official source for estimates of unemployment benefits. This is provided by the JobCentre Plus administrative system, which provides the official statistics on JSA claims, and is known as the claimant count. However, the different LFS datasets allow an examination of unemployment benefit claimant status trends, and most importantly permit analysis of claimants according to individual and household characteristics.

Before examining the LFS results a number of caveats need to be established. The LFS estimates of both types of JSA (contributory and income based) are lower than the official statistics. The difference is larger between LFS estimates of income based JSA and the administrative figures for income based JSA. While contributory JSA estimates in the LFS are closer to the results from the administrative data, the quarterly movements of the two sources are not always consistent. Part of the difference between the two sources is because of non-response to the benefits questions in the LFS. In Q4 2009, of the people who stated they were claiming benefits, around 400,000 (35 per cent) answered 'don't know' when questioned about their JSA claim type. This is twinned with survey weaknesses around proxy responses and uncertainty over the exact type of benefits claimed. ONS has analysed the differences between the administrative data source and the LFS in the past and further detail can be found in Jenkins and Laux (1999) and Barham, Laux and Roberts (2003).

Figure 2 shows the levels of JSA claimants plotted with the levels of unemployment benefit claimants recorded by the LFS (using the variable CLAIMS which was introduced in Spring 1998). The JSA claimant count measure is consistently greater than the number of claimants

Figure 2

Figure 2: JSA claimant count[1] and LFS claimants,[2] Q4 1998 to Q4 2009



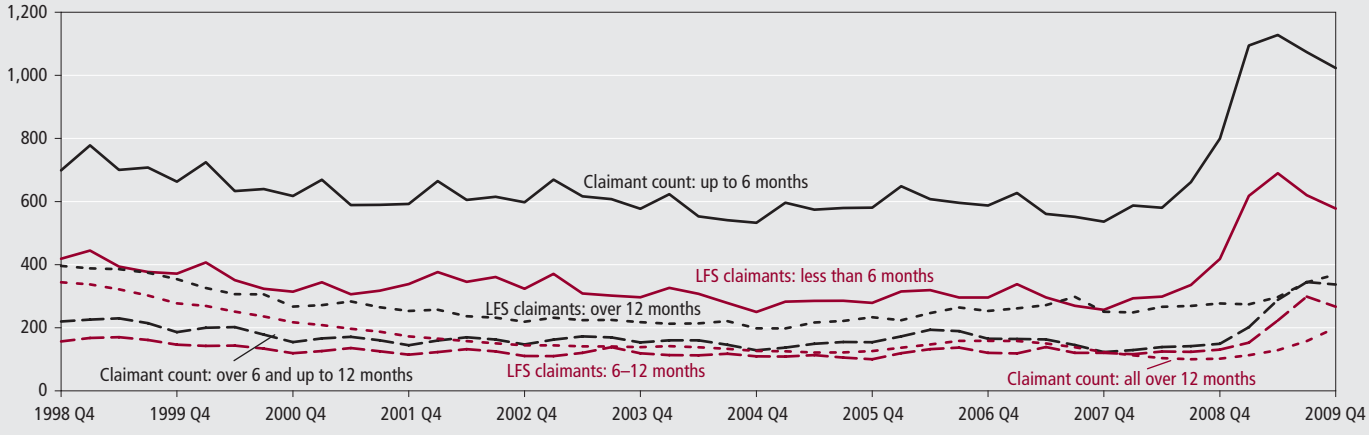
Notes:

Source: Jobcentre Plus administrative system; Labour Force Survey

1 Claimant count series presented is a quarterly three month average.
2 LFS estimates for periods prior to Q3 2006 are weighted to 2007 population estimates. Estimates for periods from Q3 2006 onwards are weighted to 2009 population estimates.

Figure 3

Unemployment benefit duration, comparison of sources,[1] Q4 1998 to Q4 2009



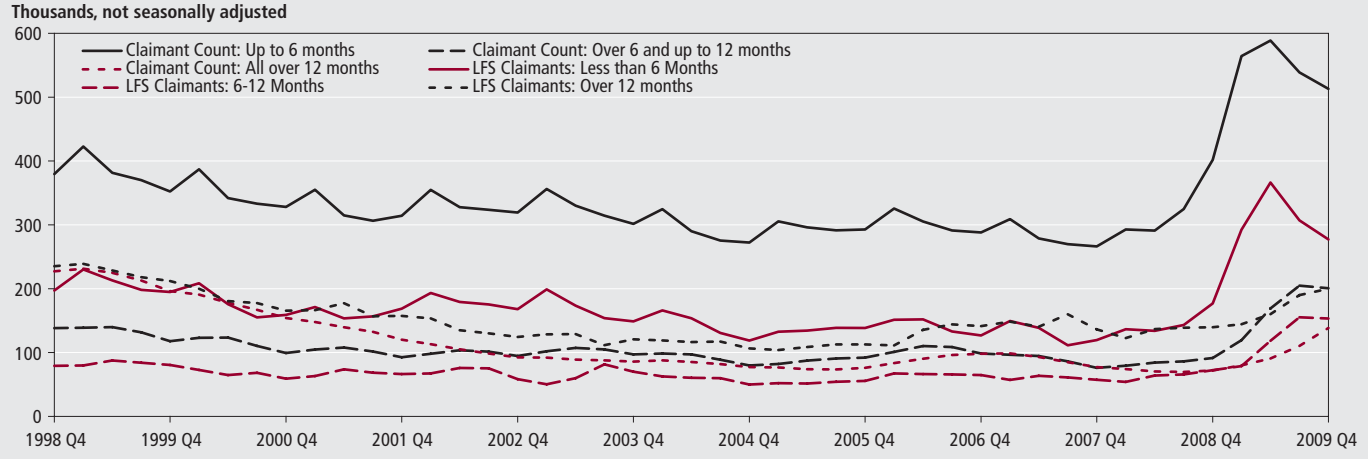
Note:

Source: Jobcentre Plus administrative system; Labour Force Survey

1 LFS estimates for periods prior to Q3 2006 are weighted to 2007 population estimates. Estimates for periods from Q3 2006 onwards are weighted to 2009 population estimates.

Figure 4

LFS[1] claimants and JSA claimants aged 25–49: by duration



Note:

Source: Jobcentre Plus administrative system; Labour Force Survey

1 LFS estimates for periods prior to Q3 2006 are weighted to 2007 population estimates. Estimates for periods from Q3 2006 onwards are weighted to 2009 population estimates.

identified in the LFS. However, during 2008 the two series converged. The gap narrowed from a difference of 307,000 in Q4 1998 to 133,000 in Q2 2008. Since Q2 2008 this trend has reversed, widening to 351,000 in Q4 2009. Some of this difference is attributable to uncertainty over the type of benefits claimed by LFS respondents.

Claimant duration in the LFS and administrative data (JSA)

The LFS asks the length of time that a person has been claiming benefits. This can be used to generate an estimate of the number of people claiming unemployment benefits for the same duration categories used in the claimant count.

Figure 2 showed that between Q4 1998 and Q4 2004 there was a downward trend in the year on year changes in the number of claimants according to the LFS. **Figure 3** shows that of the LFS estimates, the 'less than 6 months' category has shown the largest increase on the year to Q2 2009. These changes are consistent with the official claimant figures produced by the Jobcentre Plus administrative system and the operation of the labour market as people become ineligible or stop claiming (for example, because they find work of more than 16 hours a week).

Figure 3 also provides a comparison of benefit claimant duration for three duration groups taken from the LFS and the Jobcentre Plus administrative system. The LFS estimates are for all people aged 18 and over, regardless of their economic status. It can be seen that the LFS underestimates the number of unemployment related benefit claimants in the group 'less than 6 months' compared to the JSA claimant count. This is emphasised by the fact that since 2003 the total claimant estimates from the LFS (see Figure 2) are of a similar magnitude to the official 'less than 6 months' levels taken from the Jobcentre Plus administrative system. Having said this, both 'less than 6 month' series follow a similar path over the period presented, with similar peaks and troughs. Figure 3 also shows that the LFS underestimate for the 'between 6 and 12 months' group is not as large as the underestimates for shorter claimant durations. Where the estimates are of a similar order of magnitude, assuming that neither the JSA system nor the LFS has a particular bias in terms of the people who claim or declare that they claim, the LFS may be able to provide further analysis of the characteristics of the groups with longer claimant durations.

The LFS estimate of the number of claimants with durations of over 12 months is higher than that of the official claimant count. This difference is likely to be caused by factors relating to the methods used to produce estimates from the two sources.

The claimant count official statistics are a snapshot of JSA on a particular day. If people are late in informing the Jobcentre they wish to continue to claim unemployment benefits they are recorded as an outflow from the claimant count. Therefore, when they inform the Jobcentre they wish to continue to claim JSA, their duration of claim appears shorter than is really the case.

When people respond to the LFS they may not accurately report the type of benefit they receive. For example, an individual who claims JSA and then moves to a New Deal benefit may still state that they are claiming unemployment benefits. However, some New Deal arrangements do not count as unemployment benefits. Furthermore, people may not always accurately report their unemployment durations in both sources, because they do not include short durations of unemployment. Or alternatively, people may misreport their duration because they think of their time out of work, rather than their time unemployed (when they must be looking and available for work). There is also a time constraint attached to some unemployment benefits, particularly for people with an unbroken claim period. So it is possible that some of the people claiming for longer durations are actually receiving another type of benefit.

Unemployment benefit claims: by age

The first individual characteristic considered for analysis is age. Here the 18–24 and 25–49 age groups are given most consideration; this is because people in these groups are most likely to be eligible for unemployment benefits. Younger people, aged 16 and 17 are only eligible if they meet specific criteria, meanwhile those in the 'over 50' age group who are above the state pension age will normally be in receipt of pension credits rather than unemployment related benefit.

Figure 4 compares people aged 25–49 who are identified in the LFS as claiming unemployment related benefits (LFS claimants), with people of the same age group from the Jobcentre Plus computerised administrative system (the Claimant Count). The LFS Claimants and JSA Claimant Count move in similar directions over time for each duration group during the period shown. When single month estimates from the claimant count are used, rather than three month averages (as shown in Figure 4) the similar seasonal patterns are more noticeable.

Both the LFS and JSA claimant levels, for the 'less than 6 months' groups, were lower in Q4 2007 than in Q4 1998 (falling by 78,000 and 113,000 respectively). Having said this, the difference in the two measures for the 'less than six months' category, ranged from 136,000 to 193,000 between Q4 1998 and Q4 2007. Sharp increases in both series following Q2 2008 (both peaked in Q2 2009) widened the gap to 236,000 by Q4 2009.

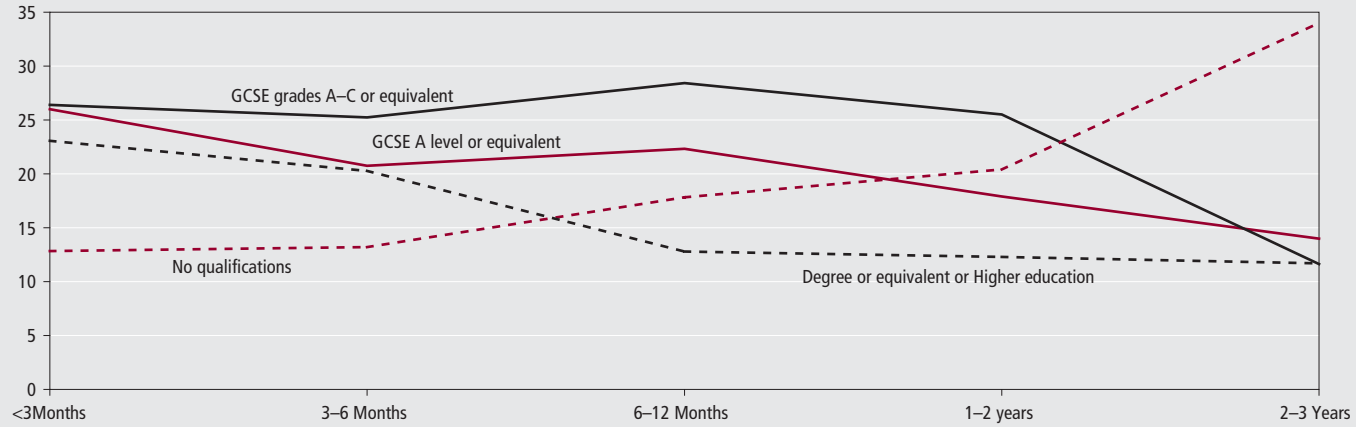
The number of claimants in the '6 to 12 months' groups for both sources were relatively stable over the period presented, and lower than in the 'less than 6 months' groups. However, the relationship between the '6 to 12 months' and 'over 12 months' groups was different, depending on the source. In the LFS, the 'over 12 months' unemployment benefit group was higher than the '6 to 12 month' group. However, the relationship between the two longer duration groups in the JSA system was not as straightforward. Before 2003, the 'Claimant Count: Over 12 months' was higher than the 'Claimant Count: 6–12 months group'. Post 2003, the 'over 12 months' group levels were below the '6 to 12 months' group levels, meaning that there were fewer long-term claimants in relation to shorter durations in this age group (a success from a policy perspective). However, different conclusions might be drawn in relation to the success of preventing long-term benefit dependence if the LFS is used, which emphasises the importance of understanding the LFS' weaknesses in relation to estimating unemployment benefits.

Analysis of claimants aged 18–24 (not presented) reveals similar patterns to those aged 25–49. Most claimants are in the 'less than 6 months' groups, but the levels of both sources did not change by much between Q4 1998 and Q4 2007. The LFS claimant level fell by 59,000, while the Claimant Count fell by 20,000. Following the onset of recession in Q2 2008, both series increased sharply and the difference between the two increased to 169,000 in Q4 2009 (the difference between the two sources had been between 66,000 and 116,000 for the past ten years). In Q4 2009, the LFS recorded 204,000 claimants who were aged 18–24 and had been claiming less than 6 months, while the Claimant Count recorded 373,000.

Figure 5

Proportions of LFS[1] claimants: by duration of claim and highest qualification, October–December 2009

Per cent, not seasonally adjusted



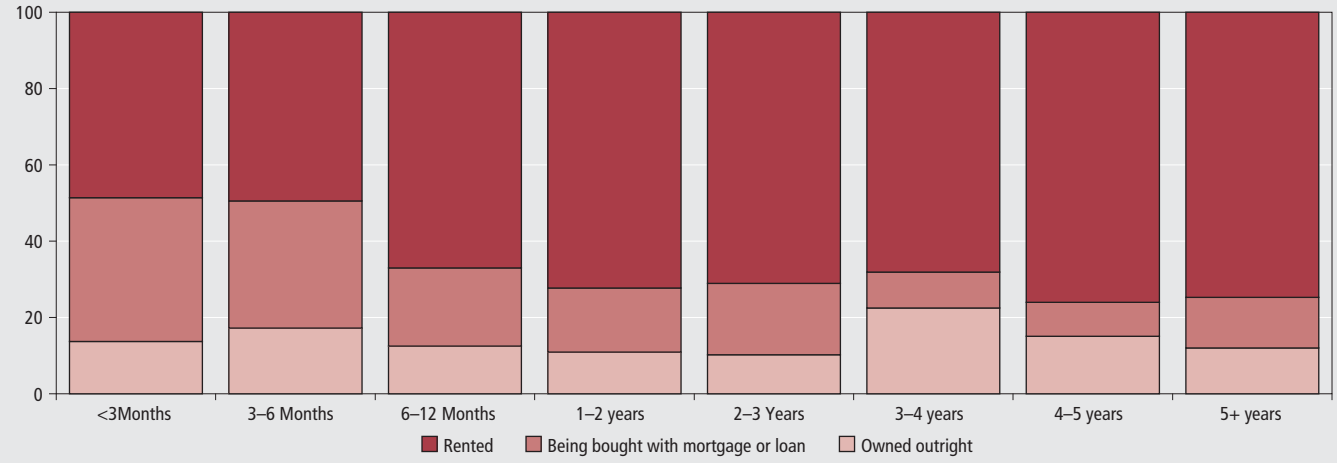
Note: *Source: Labour Force Survey*

1 LFS estimates for periods prior to Q3 2006 are weighted to 2007 population estimates. Estimates for periods from Q3 2006 onwards are weighted to 2009 population estimates.

Figure 6

Proportions of LFS[1] claimants: by duration of claim and housing tenure, October–December 2009

Per cent, not seasonally adjusted



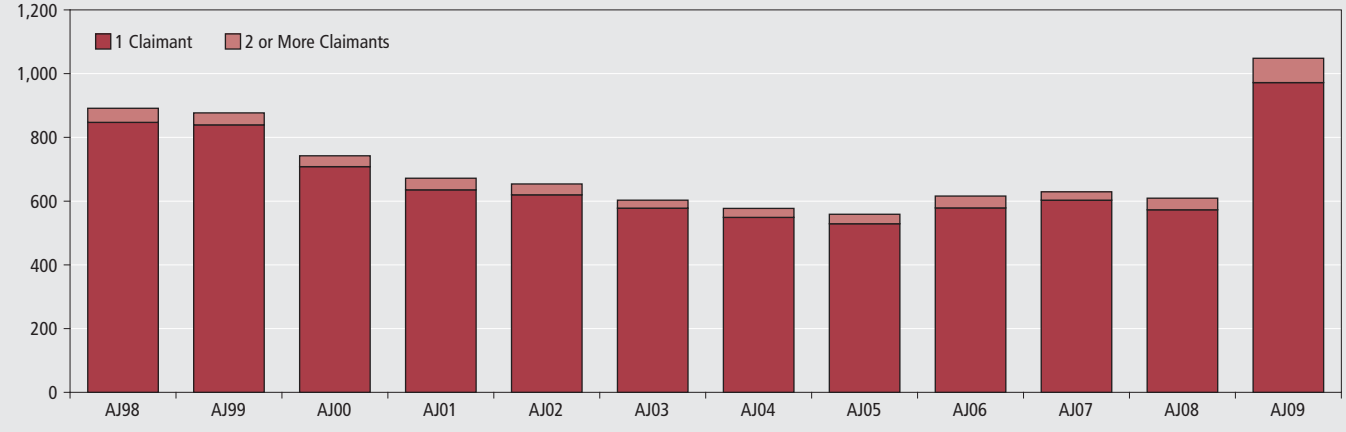
Note: *Source: Labour Force Survey*

1 LFS estimates for periods prior to Q3 2006 are weighted to 2007 population estimates. Estimates for periods from Q3 2006 onwards are weighted to 2009 population estimates.

Figure 7

Levels of more than one claimant in a household, Q2 1998 to Q2 2009

Thousands, not seasonally adjusted



Source: Household Labour Force Survey

The number of claimants in the '6 to 12 months' group for both sources were similar, and relatively stable from Q4 1998 to Q4 2007 at around 30,000–50,000 for the Claimant Count and 30,000–60,000 for the LFS. By contrast, the claimant count for durations over 12 months was different from the equivalent series from the LFS: the claimant count fell from 32,000 in Q4 1998 to stabilise below 12,000; the LFS series did fall from 50,000 in Q4 1998 to fluctuate between 30,000 and 40,000 up until Q3 2005, after which it increased steadily to 85,000 in Q4 2009.

Relative to younger age groups, longer durations of unemployment benefit claims are more prevalent in both the LFS and Claimant Count for those aged 50 and over. For durations of over 12 months, the LFS estimates were higher than the Claimant Count figures in most periods. The largest difference, 59,000 occurred in Q4 2009. Both sources recorded similar levels of claimants for benefit claim durations of six to twelve months between Q4 1998 and Q4 2009, with the Claimant Count generally being greater over the period.

Overall, both sources were consistent in terms of their direction of movement and showed increases in longer durations as the 2008–09 recession unfolded. The two sources also confirm that durations of benefit claims appear to vary according to age. For younger people shorter durations might be expected because of more flexible job search patterns, as well as opportunities to undertake training and government policies targeted at them. At the other end of the age distribution, unemployment benefit claim duration for those aged 50 and over appears to be concentrated in longer claim periods.

LFS benefit claims by individual characteristics

The added benefit of using the LFS to examine people claiming unemployment benefits is that it provides the opportunity to analyse individual characteristics such as education, marital status and housing tenure. These particular characteristics have been found to be significant when examining unemployment duration (Long, 2009). This section comments on their relationship in relation to unemployment benefit claim status.

Education

The qualifications held by an individual can be viewed as either: an investment in human capital (see Becker 1974) in order to earn greater financial rewards; or a signal of suitability for employment, with higher qualifications generally being valued more highly by employers. Given this, it is expected that those people claiming unemployment benefits who have higher qualifications are less likely to remain unemployed (and therefore claiming) for longer durations. This is shown in **Figure 5** where the proportion of people claiming unemployment benefits who have degree or higher level qualifications falls from 23.1 per cent for durations of up to three months, to a low of 11.7 per cent for claim spells between two and three years.

The proportion of people claiming unemployment benefits who have no qualification is relatively low for shorter durations, but rises sharply to 34.0 per cent for durations between two and three years.

The proportion of people claiming for less than three months (as recorded by the LFS) whose highest qualifications were GCSE grades A*–C was 26.4 per cent in Q4 2009. The impact of the high unemployment benefit numbers in late 2008 for 'less than 3 months' can be seen in Figure 5 for the GCSE grade group, because by Q4 2009 the higher proportions had fed through to the '6 to 12' months (28.4 per cent) and '1 to 2' years (25.5 per cent) groups. The proportion of claimants with A-Level or equivalent qualifications was lower for longer durations of claims (14.0 per cent for durations of 2 to 3 years), than the less than 3 months group (26.0 per cent).

Housing tenure

In Long (2009), it was shown that the type of accommodation in which people live can affect the conditional probability of exiting unemployment. This is likely to be controlling for a number of factors that may be unobservable, for example attitudes to work, and employers' perceptions of the areas in which people live. However, the type of housing people occupy will also influence the financial incentives to find new work when they become unemployed. **Figure 6** shows that the proportion of people who are in the process of buying their houses through a mortgage and are claiming unemployment benefits decreases as duration increases. By contrast the proportion of people claiming unemployment benefits who live in rented accommodation or own their houses outright increases at longer durations.

Marital Status

Presenting the numbers of LFS claimants by marital status reveals that the majority of those who claim unemployment related benefits are not 'Married, Cohabiting or in a Civil Partnership'. In Q4 2009 66.0 per cent of claimants were in this category. In Q2 2008, the first quarter of recession, this proportion was 1.9 percentage points higher. The difference between the proportion of claimants who are married and those who are not married will be influenced by the rules of the benefit regime. For example, people who are married, cohabiting or in Civil Partnerships can claim a couples' JSA rate. However, being married, cohabiting or in a Civil Partnership may be related to other characteristics and behaviours that reduce the likelihood of claiming unemployment benefits.

Unemployment benefit claims by household

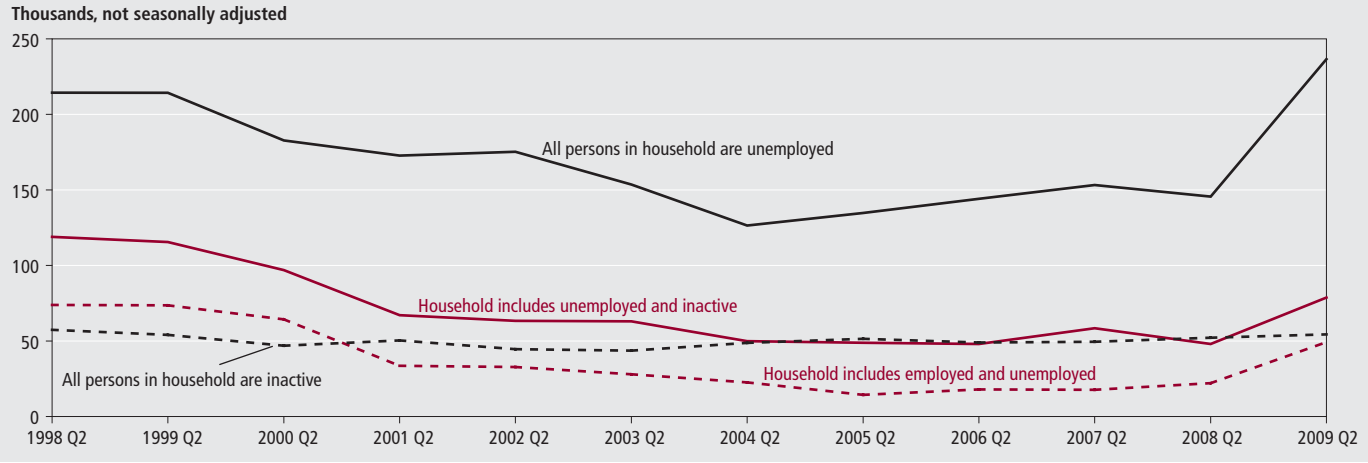
The LFS household dataset (see Technical Note 1) can be used to investigate the numbers of claimants in a household. In this section the number of households with one or more claimants is shown.

In Q2 1998 there were just over 890,000 households in the UK with one or more claimants. As can be seen in **Figure 7**, according to the LFS the numbers of households with two or more claimants were in the minority. For mean tested benefits, the household is often assessed. This means that in the case of income-based JSA it is possible that only one person is able to claim for the household. Between Q2 1998 and Q2 2005 the number of households with people claiming unemployment related benefits fell in relation to the previous year. In Q2 2005, there were close to 560,000 households with resident claimants. In Q2 2008 there were 609,000 households with claimants. This increased to reach 1.05 million by Q2 2009. This analysis by household reinforces the messages from the analysis of the official claimant count (the JSA claimant count) and the person level LFS estimates.

Economic status of household

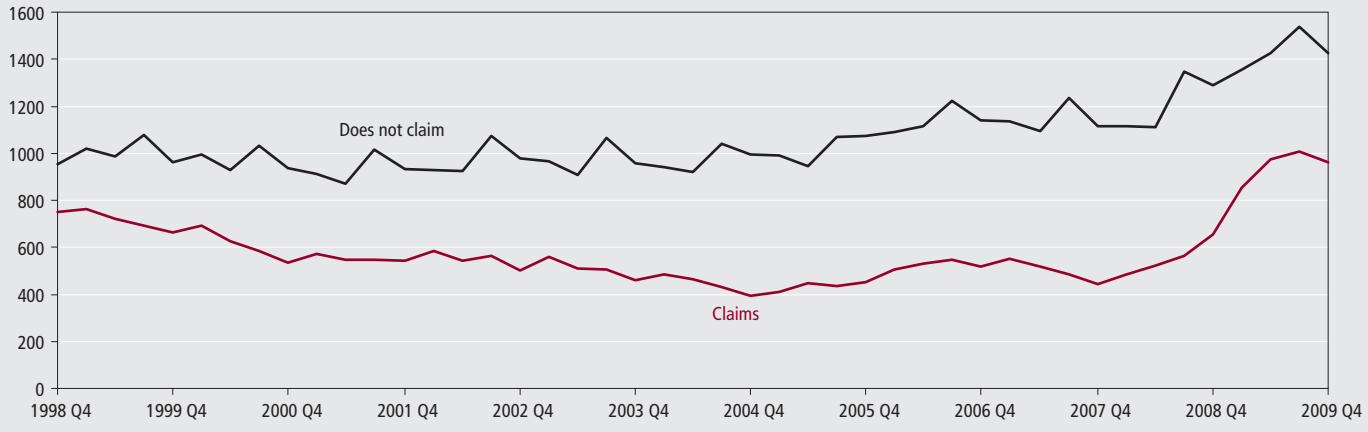
By further analysing the estimates produced in the previous section the relationship between partners in a household, their economic status and unemployment benefit claims can be examined. In **Figure 8** four different economic mixes are presented: households that contain people who are employed and unemployed; households where all persons are unemployed; households which contain unemployed and inactive people only and households where all persons are inactive. There are other

Figure 8
One or more claimants in household: by selected economic mix, Q2 1998 to Q2 2009



Source: Household Labour Force Survey

Figure 9
Levels of unemployment: by claimant status, Q4 1998 to Q4 2009[1]



Note: *Source: Labour Force Survey*

1 LFS estimates for periods prior to Q3 2006 are weighted to 2007 population estimates. Estimates for periods from Q3 2006 onwards are weighted to 2009 population estimates.

possible permutations of economic statuses which are not shown in Figure 8 because their levels do not contribute as much to the total number of households with one or more claimants.

In each of the quarters presented, the largest group with one or more claimants was those households where all persons were unemployed. The series reached a low for the period between 1998 and 2009 in Q2 2004, when there were 126,000 households with one or more claimants. Following this low, the number of households with one or more claimants, where all persons were unemployed, increased by almost 20,000 in the four years to Q2 2008. However, between Q2 2008 and Q2 2009 the series increased by a further 90,000.

The two series: households with unemployed and inactive people, and households with employed and unemployed both showed steady declines for most of the period, before increasing in the year to Q2 2009. However, the number of households with one or more claimants where all persons were inactive was relatively constant at around 50,000 households.

Changes in economic and benefit status

Evidence from the LFS and the Jobcentre Plus administrative system has shown that the numbers of people with longer unemployment durations and longer claims durations have begun to increase in the past year. The longitudinal LFS (see Technical Note 1) provides a further insight into movements from one economic status to another. It does this by recording the economic status of a person in one quarter and then recording their economic status in the following quarter.

It is possible for people to claim unemployment benefit whether they are employed, unemployed or inactive. However, by identifying which economic status people were in allows an insight into pressures on the individual and the State. This is because as employment and other income falls the need to claim unemployment benefit may rise. Furthermore, the eligibility rules for unemployment benefits can provide an incentive to either start looking for work, to look for work more thoroughly, or to consider job offers that would not have been considered earlier in the unemployment spell. From the point of view of the State, an increase in people with only benefits as a source of income means not only an increase in government expenditure, but also the need to consider welfare implications in terms of the distribution of wealth within the economy.

Claimant levels by economic status

This section examines the number of people who claimed/did not claim unemployment related benefits between 1998 and 2009. This was done using the quarterly LFS, meaning the numbers are stock estimates. Estimates are provided for people who are both unemployed and benefit claimants, as identified by the LFS. Estimates for people in other economic statuses are also considered.

In **Figure 9** it can be seen that the number of unemployed JSA claimants decreased from 750,000 to around 440,000 between 1998 and 2004. A sustained increase in unemployed people claiming unemployment benefits began in Q4 2007, when it stood at 444,000. By Q3 2009 the level had reached 1 million.

For the period presented, more unemployed people did not claim benefits than those that did. In Q4 1998, 950,000 unemployed people did not claim, and 750,000 people did claim. In Q4 2008 there were 860,000 unemployed people who stated they had claimed, and 1.3 million who stated they did not claim unemployment benefits. However, since the onset of the recession it can be seen that the gap between claiming and not claiming has reduced for unemployed people. In Q4 2009, the gap was 470,000. This is because the 'Does not claim' series increased by 316,000 (to reach 1.5 million in Q3 2009).

Between Q1 2004 and Q3 2008, there were on average 52,000 people who reported claiming unemployment related benefits, and also stated they were in employment. Following Q3 2008 the number of employed claimants increased to 85,000 in Q4 2009. This can be explained by the fact that it is possible to be employed below a 16-hour threshold and still claim JSA. The number of people who were in employment and not claiming benefits steadily increased from 28.3 million to 29.4 million between Q1 2004 and Q3 2008, before falling back to 29 million by Q4 2009. This is influenced by the fall in employment levels that occurred over this period.

The inactivity series was broadly flat for people who stated they claimed unemployment related benefits. Between Q1 2004 and Q1 2009 the series has fluctuated between 121,000 and 186,000. In Q3 2008, there were 128,000 people who said they had claimed unemployment related benefits, but according to ILO definitions were inactive. This had increased to 184,000 in Q3 2009, but decreased to 177,000 in Q4 2009.

Overall, the changes in claimant levels by economic status show that during the 2008–09 recession the majority of the claimant increase came from people that were both ILO unemployed and claiming unemployment benefit. The importance of this finding is that the ILO definition of unemployment indicates a degree of labour market attachment, whereas some reasons for becoming inactive denote detachment from the labour market, for example 'not seeking, long-term sick or disabled'.

However, the rules on eligibility for claiming unemployment benefits mean that inactive people should not be on unemployment benefits. Possible explanations for these estimates include: people are correctly receiving benefits but are confused when reporting in the LFS which benefits they are receiving, or people are receiving unemployment benefits when they should not. Over the period Q1 2004 to Q4 2009 the number of people who were inactive and not claiming unemployment benefits has fluctuated between 10.9 million and 11.4 million.

From stock estimates it is not possible to definitively identify the new economic or claimant statuses causing changes in the levels of inactive claimants. However, the changes in economic status flows can be seen by using the longitudinal datasets in the next section.

Unemployed benefit claims by change in economic status

This section looks at changes in economic status and benefit claims using the two quarter longitudinal LFS. As stated previously, some flows data is already published on a monthly basis as part of the regular Labour Market Overview. The Labour Market Overview explains that the gross flows data are experimental statistics, and as such should be treated with caution. More comprehensive discussions of the reasons for treating them with caution can be found in Brook and Barham (2006) and Jenkins and Chandler (2010). These articles explain how the datasets are produced whilst adjusting for non-response bias and acknowledging that response error bias exists.

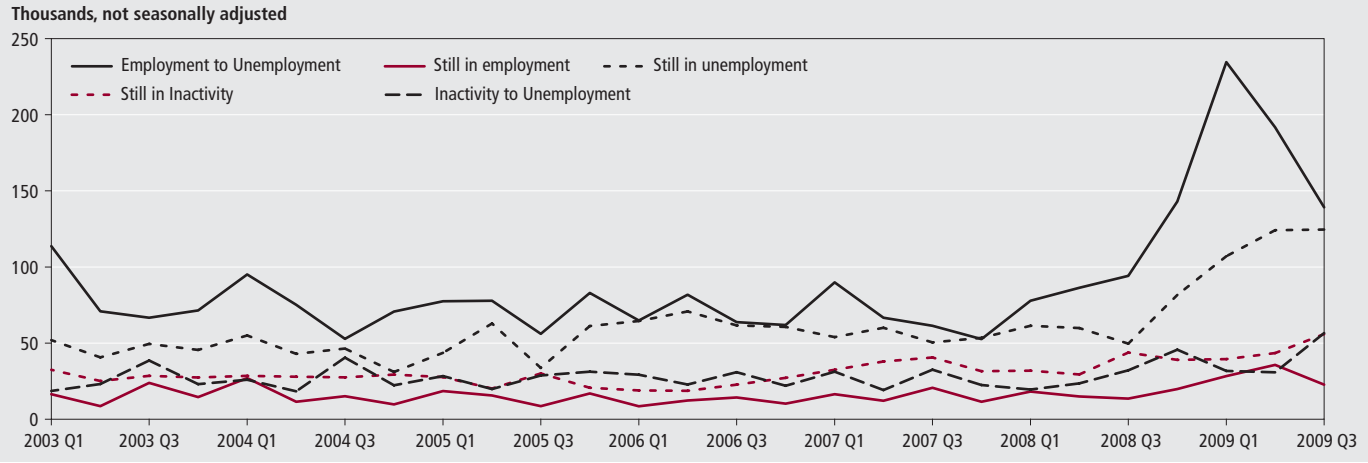
There are nine possible movements relating to changes in economic status. For example, a person can 'flow' from employment to unemployment between two quarters and this would count as one of the movements or flows. **Figure 10** shows levels of people by selected changes in economic status and whether they started to claim unemployment benefits. The period presented is between Q1 2003 and Q3 2009 (longitudinal files are not readily available before 2003 and at the time of publication the Q4 2009 file was not available). The figure shows that the largest change in economic status was from employment to unemployment for people who claimed in a particular quarter and were not claiming unemployment benefits in the previous quarter. The increase in this group after Q3 2008 is related to the similar increase seen in Figure 9, which showed the increase in claimant levels as a proportion of unemployment over the same period.

After Q2 2008 the flows into unemployment and people who remained in unemployment contributed the most to inflows onto unemployment benefits. Although other changes in economic status did not contribute to the same extent, and the numbers are relatively small, there are important implications in changes for these groups. For example, increases in the group 'still in employment' would be consistent with an increase in part-time working below 16 hours. This could mean that although people have remained in employment, their gross income has been reduced to the point where they had needed to claim unemployment benefits.

Figure 11 shows people who stopped claiming unemployment benefits and changes in their economic status. As would be expected, the main change in economic status coinciding with an outflow from unemployment benefits is a move from unemployment to employment. Outflows also increased from people who remained in unemployment after Q2 2008. As discussed earlier in this article, some of these people may have stopped claiming because of the length of their claim spell. Another reason for outflows from benefits in the 'still unemployed' group could include a partner finding employment. However, when the inflows for this group, post Q2 2008, are compared with the outflows from Figure 11, it can be seen that the levels of people beginning to claim unemployment benefits were still higher. The outflows from benefits for people remaining in inactivity between two quarters peaked in Q4 2007, one quarter after a peak in the inflows onto unemployment benefits. However, it then reverted back down to around 30,000 after Q2 2008.

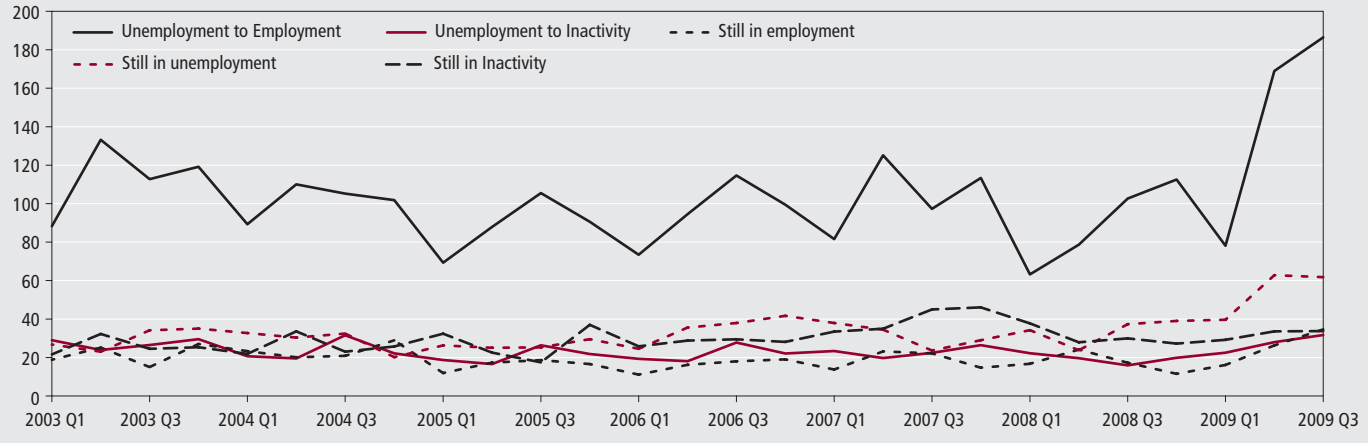
The increase in outflows of people

Figure 10
Changes in economic status for inflows to unemployment benefits



Source: Longitudinal Labour Force Survey (2 quarter)

Figure 11
Changes in economic status for outflows to unemployment benefits



Source: Longitudinal Labour Force Survey (2 quarter)

moving from unemployment to employment shows that even in a recession people are able to find work. So it is worth noting the large increase in Q2 2009 is noticeably greater than any of the increases in the previous six years.

Conclusion

Differences exist between the two sources (LFS and JSA Claimant Count) because of respondents causing classification errors. These errors impact not only on the headline LFS estimates of unemployment benefit claimants, but also on the estimates of claimants by duration. In order to analyse unemployment as a status the LFS can be used, both for examining characteristics of those unemployed and the duration that they are in that status. However, it is important to recognise the limitations of the LFS. The levels of both unemployment and claimant count are strongly related, as shown by the fact that in Figure 1 short-term unemployment less than 6 months, followed a similar path to the claimant count duration of the same period (see Figure 3). However individual circumstances, for example savings, can determine that someone is unemployed, but does not claim unemployment benefits.

During the 2008–09 recession both unemployment and the claimant count increased. This article has demonstrated that the majority of the increase in the claimant count (as estimated by the LFS) mainly came from people who were unemployed (shown in Figures 9 and 10). This is important because of its implications for labour market attachment. If people declare themselves as unemployed rather than inactive, they are stating they are 'ready and available' to work and have 'actively looked' for work.

As stated in the articles cited and shown again here, the LFS estimates of levels of unemployment benefits are noticeably different from those provided by the official JSA system. Furthermore, when analysed by duration, the relationship between the two sources changes (for shorter durations the LFS estimates are lower, and for durations of over 12 months the LFS estimates are higher). Having said this, the two sources do follow similar paths over time.

The LFS has shown it can provide constructive insights into benefit analysis by looking at characteristics that are not necessarily provided in headline statistics from the JSA system. When analysing benefit claims by duration in this article the LFS has shown that: there are a higher proportion of non-married people in the groups who have claimed longer; similarly renting and social housing are more prevalent in the longer benefit duration groups; and finally people with lower human capital (education) contribute more to the levels of the longer benefit durations. This descriptive analysis is consistent

with both economic theory and empirical evidence.

The LFS also provides the opportunity to look at changes in the number of benefit claimants by household. This analysis showed that between Q2 2008 and Q2 2009 the number of households with 'one or more' claimants increased by 72 per cent. The increase in claimants by household has been driven by all potential workers in the household reporting their economic status as 'unemployed' (meaning they have been made redundant or moved from economic inactivity to economic activity). This emphasises the link between individual and household economic statuses in relation to unemployment benefits.

The origins (in terms of economic status) of new unemployment benefit claimants was analysed using the Longitudinal LFS, and showed that during the 2008–09 recession the sharpest increase of inflows onto unemployment benefit came from people who had moved from employment to unemployment. However, the numbers of people who were 'still in unemployment' also rose steadily. This highlights that although unemployment and claiming unemployment benefits are related, the point at which a person enters one of the two groups may differ. This may be because of eligibility, and/or personal financial circumstances. The analysis of outflows from benefits claims showed that even in a recession people stop claiming because they find employment. In fact, this was the main driver for outflows.

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TECHNICAL NOTE 1

Labour Force Survey datasets

Quarterly Labour Force Survey (LFS)

The Quarterly Labour Force Survey is a key source of information on the labour supply of individuals. The LFS is a quarterly survey of some 53,000 households per quarter. Each household is surveyed over five quarters, with the final (fifth) interview one year after the first. It is designed to provide robust national labour market and macro-economic information, but its sample size is insufficient to provide reliable data at local level.

The data is weighted to allow the sample to provide estimates relating to the total population and to minimise non-response bias. The weights are based on the age and sex structures of the sample and of the population.

Further information on the design of the Quarterly LFS can be found in Volume 1 'Labour Force Survey User Guide: Background and Methodology'.

www.statistics.gov.uk/statbase/Product.asp?vlnk=1537

Household and Family LFS Data

Although the LFS has traditionally been used to provide information on individuals in the labour market, the survey also collects information on the household and family unit. This means data are available for households and families as well as for individuals. The LFS is a unique source of detailed information about the ways that households and families behave in relation to the labour market. As the LFS was designed and developed as a survey focussing on individuals, ONS has decided to produce separate LFS datasets suitable for analyses at household and family level.

This has involved making adjustments to the datasets to correct inconsistencies and discontinuities that in the past affected the recording of household and family structure. Examples of these adjustments include adding new derived variables for use in analysing economic activity at household and family level, and deriving household level weighting factors.

Further information on the Household and Family dataset can be found in Volume 8 'Household and Family Data' of the Labour Force Survey User guide.

www.statistics.gov.uk/statbase/Product.asp?vlnk=1537

Longitudinal LFS Data

Although the Labour Force Survey (LFS) is a cross-sectional survey, a longitudinal dataset can be created over a limited time interval because respondents in the LFS sample are interviewed for five consecutive quarters.

A two-quarter longitudinal dataset is produced at each LFS quarter which combines survey variables for each respondent at two consecutive quarters. Since 20 per cent of the LFS sample is replaced with a new sample at each quarter, the sample size of the two-quarter longitudinal dataset is about 80 per cent of a cross-sectional LFS dataset. The datasets include a flow variable which gives a count of the number of respondents who are employed, unemployed or inactive at both quarters or who experience one of six possible changes of state.

A five-quarter longitudinal dataset is also produced at each LFS quarter which includes survey responses at five consecutive quarters. However, due to the rotation of the LFS sample and attrition over five quarters, the sample size of a five-quarter dataset is less than 20 per cent of a cross-sectional LFS dataset.

Further information on the longitudinal dataset can be found in the 'LFS Two Quarter and Five Quarter Longitudinal dataset User Guide' which is available on the data archive website

www.data-archive.ac.uk/doc/6201/mrdoc/pdf/longitudinal.pdf

ARTICLE

Disability, education and training

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SUMMARY

This article uses data from the 2008 Quarterly Labour Force Survey (QLFS) to examine differences in human capital between disabled and non-disabled individuals of working age. The initial focus of the paper is on how the level of educational attainment differs between the two groups. It goes on to consider differences in the accumulation of human capital, both through post-compulsory education and through job-related education and training.

Introduction

There is both academic and government interest in identifying and explaining the differences in labour market outcomes between disabled and non-disabled individuals. This is unsurprising, since some of the differences are stark. For example, the employment rate among disabled people is typically less than 50 per cent compared to nearly 80 per cent among the non-disabled group (see, for example, Smith and Twomey, 2002). In investigating the reasons for this disadvantage, studies have consistently identified the importance of a gap in educational attainment between the two groups, with disabled people being less likely to hold academic qualifications (see, for example, Jones et al., 2006). Policymakers are also aware of this issue, with one of the elements in *Improving the Life Chances of Disabled People* by the Prime Minister's Strategy Unit (2005) being to enhance the employability of disabled people through improvements in training and lifelong learning.

This article uses recent data from four quarters of the 2008 Quarterly Labour Force Survey (QLFS) to examine differences in the stock of human capital (as measured by highest educational qualification) between disabled and non-disabled individuals. However, human capital is a dynamic concept; an individual's knowledge and skills can be enhanced through education and training or through less formal mechanisms such as work experience and learning by doing. As such, this article goes on to consider differences in the accumulation of human capital between the disability groups.

Description of the data

The Labour Force Survey is a quarterly survey of 52,000-53,000 households (approximately 120,000 individuals). The statistics presented in this paper represent average values of the 4 quarters in 2008 to eliminate seasonal variation. It should be acknowledged that some of the figures will be affected by the economic recession experienced at this time; however, figures relating to the stock of human capital are likely to be less sensitive than some other labour market indicators since they reflect an accumulation of education over a lifetime. The data are weighted in each quarter to be representative of the total population. Throughout the analysis the sample is constrained to those of working age, that is, males aged between 16 and 64 and females aged between 16 and 59.

Although there are several alternative definitions of disability (see Tibble, 2004 for a review), the Disability Discrimination Act (DDA) definition of disability available in the LFS is used throughout this analysis. The DDA definition refers to a disabled person as someone who has a 'physical or mental impairment that has a substantial and long-term adverse effect on his or her ability to carry out normal day-to-day activities'. The rest of the population form the non-disabled group[1]. On the basis of this definition, just under 16 per cent of the working age population (or nearly 6 million people) are disabled and, consistent

with previous evidence, the prevalence of disability increases with age from about 7 per cent amongst the youngest group (aged 16-24) to 32 per cent among the oldest group (aged 55-64). About 70 per cent of people with a DDA disability report having a disability that affects the type or amount of work they can do, making them disabled according to both DDA and work-limiting definitions.

Highest qualifications

The LFS collects a comprehensive range of indicators on educational attainment. The initial focus of this paper is on highest educational attainment represented by the broad groupings, from the lowest level of no qualifications, to the highest level of qualifications at degree level. The proportion of disabled and non-disabled people of working age in each of these groups is presented in **Table 1**. There is a dramatic difference in the stock of human capital between disabled and non-disabled people, measured at a single point in time. Nearly 12 per cent of disabled individuals have a degree or equivalent level of education, compared with just over 22 per cent of the non-disabled group. Disabled people are, instead, far more likely to have no qualifications, with nearly one quarter having no qualifications compared to less than 10 per cent of the non-disabled group. It is, however, worth noting the gap in educational attainment between disabled and non-disabled individuals in employment is much narrower[2]. For both groups those in employment have, on average, a higher level of educational attainment, but this is particularly the case for disabled individuals. Less than 10 per cent of disabled workers have no qualifications compared to 38 per cent of the non-employed group, illustrating that it is a subgroup of more qualified disabled people that are in employment.

The reasons for this gap in educational attainment are more difficult to distinguish. For disabled individuals who have been disabled from birth, the disability itself may affect formal schooling in childhood and, thus, the accumulation of education. However, other individuals will experience age onset disability and, as such, their disability will not have directly affected their accumulation of education in their early years. It may, however, be the case that education and disability are jointly determined, or that, having a low level of education increases the risk of age onset disability. Indeed, Jenkins and Rigg (2004) use data from the British Household Panel Study and find that those with low educational qualifications are more at risk of becoming disabled. As such, those who become disabled later in life are likely to be a non-random group of those with particularly low levels of human capital, contributing to the pattern evident in Table 1. Consistent with this, Loprest and Maag (2007) use US data on the age of disability onset and find very little difference in the educational attainment among disabled individuals aged over 45 depending on whether their disability was early (before age 22) or late (after age 22) onset.

Although no information is available about the timing of disability onset in the 2008 LFS, **Table 2** considers highest academic qualifications by age and disability. The gap in educational attainment by disability status is evident even among the youngest age group (16-24), where the percentage of disabled people having a degree is about half that of the non-disabled group. This is matched by more than twice the percentage of disabled individuals having no qualifications compared to their non-disabled counterparts. Although highest educational attainment varies across the age groups due to cohort effects, the comparisons by disability status are broadly similar across the age distribution, suggesting low educational attainment is an issue for the entire disabled group.

The situation may, however, be more acute for individuals with certain types of disabilities and **Figure 1** presents highest qualifications by the type of main health problem reported[3]. There is considerable variation within the disabled group, with those having health problems relating to mental health faring particularly badly. Just over 37 per cent of this group report having no qualifications and only 8 per cent have the highest (degree level) qualifications. This is not surprising since this group includes those with learning difficulties (see **Box 1** for definitions) although, even after excluding this group, individuals with other mental health problems are less well qualified than those with the physical disabilities. This is likely to contribute to the particularly acute labour market difficulties identified among this group (see Jones *et al*., 2006) and, consistent with this, the employment rate for this group falls to about 20 per cent. Of those with physical disabilities, individuals with health problems relating to 'limbs' are the least well qualified, with 27 per cent reporting having no qualifications.

The severity of disability is also likely to be an important determinant of educational attainment. Unfortunately, the LFS does not contain a direct measure of the severity of the disability but a proxy is created by calculating the total number of health problems reported by each disabled individual. Using this measure Berthoud (2003) demonstrates that employment is strongly negatively related to the severity of the disability. **Figure 2** presents the highest qualification by number of health problems. The proportion holding qualifications at degree level decreases continuously as the number of health problems rises from 1 to 5 or more, while the proportion with no qualifications increases continuously.

Table 1
Highest qualification by disability status, 2008[1]

	DDA Disabled						Non-disabled					
	All		Employment		Non-employment		All		Employment		Non-employment	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Degree or equivalent	704,697	*11.83*	510,534	*17.95*	194,163	*6.24*	7,024,882	*22.28*	6,228,933	*24.81*	795,949	*12.40*
Higher education	463,244	*7.78*	306,283	*10.77*	156,961	*5.05*	2,689,894	*8.53*	2,368,896	*9.43*	320,998	*5.00*
GCE 'A level' or equivalent	1,168,893	*19.63*	690,272	*24.27*	478,621	*15.39*	7,552,579	*23.95*	6,088,999	*24.25*	1,463,581	*22.80*
GCSE grades A-C or equivalent	1,252,727	*21.03*	650,676	*22.87*	602,051	*19.35*	7,243,777	*22.97*	5,549,056	*22.10*	1,694,721	*26.40*
Other qualifications	897,474	*15.07*	404,346	*14.21*	493,128	*15.85*	3,921,222	*12.44*	3,018,080	*12.02*	903,143	*14.07*
No qualifications	1,468,946	*24.66*	282,922	*9.95*	1,186,024	*38.13*	3,097,950	*9.82*	1,858,008	*7.40*	1,239,942	*19.33*
Total	5,955,981	*100.00*	2,845,033	*100.00*	3,110,948	*100.00*	31,530,304	*100.00*	25,111,972	*100.00*	6,418,332	*100.00*

Note: *Source: Average of the 4 Quarters of the Labour Force Survey 2008*

1 Data are weighted and sample is constrained to the working age population. Employment and non-employment are defined using ILO definitions. Individuals who are non-employed include both the ILO unemployed and those classed as economically inactive.

Table 2
Highest qualification by age and disability status, 2008[1]

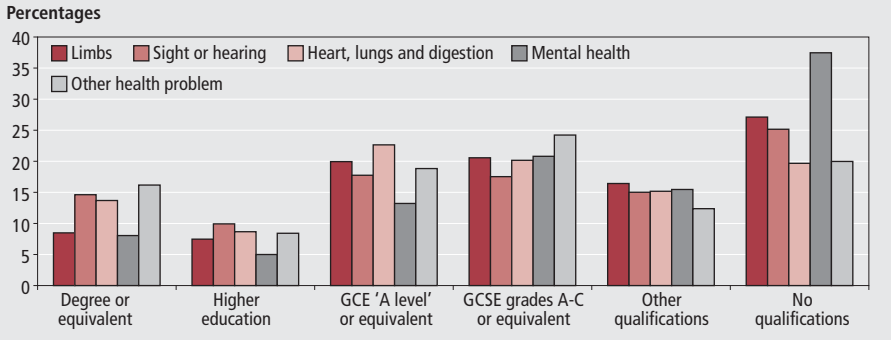
Percentages

	DDA Disabled Age					Non-disabled Age				
	16-24	25-34	35-44	45-54	55-64	16-24	25-34	35-44	45-54	55-64
Degree or equivalent	5.01	16.61	13.44	12.07	10.40	10.29	32.49	24.85	21.75	19.98
Higher education	3.49	6.65	7.95	8.37	8.76	3.58	7.73	10.27	11.09	11.10
GCE 'A level' or equivalent	23.89	18.71	17.43	17.67	22.40	33.89	20.61	19.60	22.52	23.89
GCSE grades A-C or equivalent	30.52	26.37	26.23	20.07	13.25	31.76	18.68	24.15	21.38	15.35
Other qualifications	14.57	13.67	15.12	15.36	15.45	9.74	13.66	13.32	12.24	13.50
No qualifications	22.52	17.99	19.84	26.47	29.75	10.74	6.84	7.81	11.02	16.19

Note: *Source: Average of the 4 Quarters of the Labour Force Survey 2008*

1 Data are weighted and sample is constrained to the working age population.

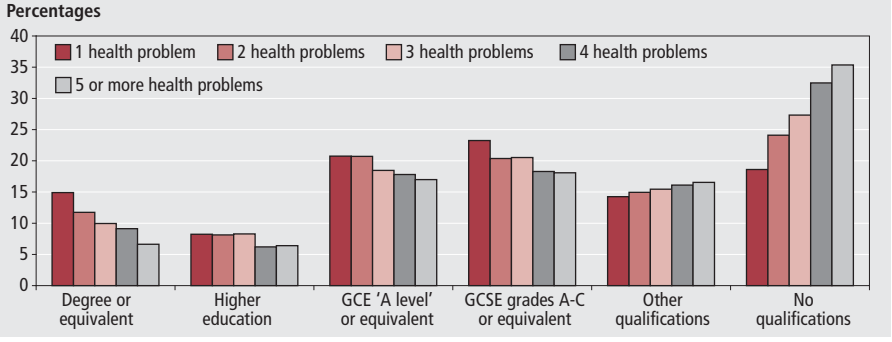
Figure 1
Highest qualification by the type of health problem[1]



Note: *Source: Average of the 4 Quarters of the Labour Force Survey 2008*

1 Data are weighted and sample is constrained to the DDA disabled population of working age.

Figure 2
Highest qualification by the number of health problems[1]



Note: *Source: Average of the 4 Quarters of the Labour Force Survey 2008*

1 Data are weighted and sample is constrained to the DDA disabled population of working age.

For example, while 19 per cent of disabled individuals with a single health problem have no qualifications the corresponding figure for the more severely disabled (those with 5 or more health problems) is over 35 per cent.

Participation in education and training

The LFS also contains several questions that measure the acquisition of human capital. The results in **Table 3** focus on education and training immediately post-compulsory schooling (and therefore relate to individuals aged between 16 and 24). The first row presents the proportion of young disabled and non-disabled individuals that are currently undertaking formal full-time education. About 30 per cent of young disabled individuals are in full-time education (which includes school, further or higher education) compared to 40 per cent of the non-disabled group; this clearly contributes to the gap in qualifications identified in Table 2[4]. Indeed, Burchardt (2005) finds that despite young disabled individuals having similar aspirations at age 16 there is a gap in educational participation immediately post compulsory schooling. Participation in post-compulsory education is typically the outcome of a decision in which the present value of future benefits (for example, the additional labour market reward) are weighed against more immediate costs (both in terms of additional expenditure and the cost of forgone activities). The lower participation rate among disabled individuals may reflect a greater financial and psychological direct cost of education, due, for example, to their disability status affecting the ability to study and/or to access education. The benefit of education would also be lower for people with disabilities if they anticipate a shorter career (and thus period over which to earn at return on their investment) due to their

Box 1
Defining disability

Individuals with a long-term health problem are asked: 'Which of these is your main health problem/disability?' There are 17 possible responses which are coded in the LFS variable 'HEALTH'.

For the purpose of this analysis the responses are regrouped to create the following aggregate groups of health problems as follows:

- **Group 1.** 'Limbs' contain health problems connected with arms, legs, hands, feet, back or neck
- **Group 2.** 'Sight or hearing' contain difficulties with sight or hearing
- **Group 3.** 'Heart, lungs and digestion' contain problems connected with chest or breathing problems; heart, blood pressure or blood circulation problems; stomach, liver, kidney or digestive problems and diabetes
- **Group 4.** 'Mental health problems' contain problems related to depression, bad nerves or anxiety; severe or specific learning problems and mental illness, phobias, panics or other nervous disorders
- **Group 5.** 'Other' contains speech impediments; severe disfigurement, skin conditions, allergies; epilepsy; progressive illnesses not included elsewhere and other health problems or disabilities

Table 3
Participation in education and training amongst those aged between 16 and 24[1]

Percentages

	DDA disabled	Non-disabled
In full-time education	*29.90*	*39.65*
NEET	*39.02*	*15.33*
Job related education and training in the last 13 weeks among the employed.	*35.87*	*33.80*
Job related education and training in the last 13 weeks among the non-employed	*20.67*	*34.04*
Job related education and training in the last 13 weeks among the unemployed	*20.42*	*21.56*
Job related education and training in the last 13 weeks among the economically inactive	*20.73*	*38.60*

Note: *Source: Average of the 4 Quarters of the Labour Force Survey 2008*

1 Data are weighted percentages and sample is constrained to the 16-24 age group. Employment and non-employment are defined using ILO definitions. Individuals who are non-employed include both the ILO unemployed and those classed as economically inactive.

disability, or if they anticipate employer discrimination[5]. In contrast, as Famulari (1992) notes for the case of epilepsy, disability may, by reducing the opportunity cost of education (for example, in terms of forgone earnings), increase the incentive to participate in education.

In the second row of Table 3, the percentage classified as NEET (not in employment, education or training) is reported by disability status. It should, however, be noted that the definition of NEET used in this paper is constructed by the author (see **Box 2** for details) and does not represent an ONS or LFS agreed definition. Using this definition, about 39 per cent of young disabled individuals are classified as NEET compared to about 15 per cent of the non-disabled group. This means nearly 4 in every 10 young disabled individuals are neither developing their skills in employment through learning by doing nor through more formal education. The concentration of disabled young people in the NEET group is particularly concerning, since a period away from work or training may cause existing human capital to depreciate and, at this stage of life, will affect the development of work habits. This may reduce the probability of escaping the NEET group. Of course, some disabled individuals may be too sick to work or undertake education and nearly 12 per cent of the young disabled population report not to want or be seeking work because of their health problem. However, even after excluding this group, the rate of NEET amongst people with disabilities remains at over 30 per cent.

Interestingly, for those in employment, the proportion who have undertaken job related education or training in the last 13 weeks is slightly higher among disabled individuals than the non-disabled, in both cases more than a third of workers received training[6]. For those out of work, the gap re-emerges with 21 per cent of disabled individuals, compared to more than a third of the non-disabled group, reporting undertaking job related education or training during the last 13 weeks[7]. This difference is driven by lower rates of job related education and training among those classed as economically inactive rather than among the unemployed.

Human capital can also be acquired, often less formally in later life, through education and training. **Table 4** presents the results of several alternative measures of participation in education and training amongst those aged between 25 and retirement age. Although the rates of human capital accumulation amongst this group are lower the differences between disability groups are still evident, about 6 per cent of people with disabilities are currently studying towards a qualification compared to 10 per cent of the non-disabled group. However, and consistent with the analysis of the 16-24 age group, rates of job related training are very similar between disabled and non-disabled individuals who are in employment, for both groups about a quarter have undertaken some job related education or training in the last 13 weeks. This is surprising given that there are several reasons to believe disabled employees may get less job-related training. Firstly, as Fumagalli (2008) notes, disabled employees have a higher probability of exiting employment and, therefore, less incentive for individuals and firms to fund training, since they have a shorter period over which to earn a return on their investment. Secondly, there is a positive association between training and formal educational qualifications (see, for example, Green, 1993), in that it is the most qualified who are more likely to receive job related training, and disabled individuals are less likely to be among this group[8]. Finally, if there is any form of (or even employee anticipation of) employer discrimination against people with disabilities this may reduce training among disabled employees either because access to employer sponsored training is affected or the anticipated return to any investment is reduced. For those not in employment, rates of training are lower and the disparities re-emerge by disability status. Again these are driven by low rates of training among inactive disabled individuals.

A similar pattern emerges if the accumulation of knowledge and skills is considered (Table 4, rows 6-10). Just less than one quarter of disabled individuals have undertaken lessons or courses, open or distance learning, attended seminars or workshops or undertaken guided on the job training in the past 12 months which has improved their knowledge or skills compared to 37 per cent for the non-disabled group. The figure amongst those in employment is nearly 40 per cent for both groups, but it is considerably lower for inactive individuals and, particularly, inactive disabled individuals, among whom the rate falls to less than 10 per cent.

Further detail is available in the LFS on the nature of job-related education or training and **Table 5** examines differences in the type and duration of training

Box 2
Not in employment, education or training

The NEET group, those not in employment, education or training, are defined here to include individuals aged between 16 and 24 who are:

- Unemployed by the International Labour Organisation (ILO) definition, excluding those who are also in full-time education; or
- Economically inactive, excluding those who are also in full-time education.

Those in full-time education include those still at school, those on a sandwich course and those full-time in college or university.

Table 4
Participation in education and training amongst those aged between 25 and retirement[1]

Percentages

	DDA Disabled	Non-disabled
Currently studying towards a qualification	*6.36*	*9.82*
Job-related education or training in the last 13 weeks among the employed	*24.90*	*25.99*
Job-related education or training in the last 13 weeks among the non-employed	*3.40*	*10.18*
Job-related education or training in the last 13 weeks among the unemployed	*13.09*	*12.63*
Job-related education or training in the last 13 weeks among the economically inactive	*2.63*	*9.51*
Improved knowledge or skills over last 12 months by undertaking lessons, courses, seminars, workshops or guided on the job training[2].	*24.30*	*36.69*
Improved knowledge or skills over last 12 months by undertaking lessons, courses, seminars, workshops or guided on the job training among the employed.	*39.66*	*39.87*
Improved knowledge or skills over last 12 months by undertaking lessons, courses, seminars, workshops or guided on the job training among the non-employed.	*9.87*	*18.20*
Improved knowledge or skills over last 12 months by undertaking lessons, courses, seminars, workshops or guided on the job training among the unemployed.	*20.82*	*23.22*
Improved knowledge or skills over last 12 months by undertaking lessons, courses, seminars, workshops or guided on the job training among the economically inactive.	*9.00*	*16.80*

Notes: *Source: Average of the 4 Quarters of the Labour Force Survey 2008*

1 Data are weighted percentages and sample is constrained to the working age population aged 25 to 64. Employment and non-employment are defined using ILO definitions. Individuals who are non-employed include both the ILO unemployed and those economically inactive.
2 Individuals are asked (other than the qualifications we discussed earlier) during the last 12 months have you participated in any of the following activities with the intention of improving your knowledge or skills in any area, including hobbies? A positive answer is recorded if they answer positively to any of the following responses:
a. Lessons or courses, either practical or theoretical, including classroom instruction or lessons?
b. Courses conducted through open and distance education?
c. Seminars or workshops?
d. Guided on the job training?

Table 5
Job related training in the last 4 weeks amongst workers aged between 25 and retirement[1]

Percentages

	DDA disabled	Non-disabled
Any job related training in the last 4 weeks	*12.29*	*12.51*
Of those undertaking job related training in the last 4 weeks		
On the job	*37.83*	*37.34*
Off the job	*43.60*	*45.76*
Both on and off the job	*18.57*	*16.90*
Of those undertaking job related training in the last 4 weeks		
Less than 1 week	*54.11*	*50.54*
Between 1 week and 1 year	*14.53*	*15.18*
Between 1 and 2 years	*5.36*	*6.19*
Between 2 and 3 years	*3.89*	*4.36*
More than 3 years	*3.92*	*5.14*
Ongoing/ no definite limit	*18.20*	*18.60*
Of those undertaking job related training in the last 4 weeks		
Training will lead towards a qualification or credit towards a qualification	*35.78*	*38.33*

Notes: *Source: Average of the 4 Quarters of the Labour Force Survey 2008*

1 Data are weighted and the sample is constrained to individuals aged 25 to 64 who are in employment. The duration of training is asked in two quarters and thus the results are average values over these two periods. Obtaining a qualification from training is based on information in a single quarter.

undertaken during the last 4 weeks for those in employment, by disability status. Consistent with the results based on the 13 week measure, disabled workers have a similar incidence of training in the last 4 weeks (12 per cent) compared to the non-disabled group. Further examination of the type and duration of training also suggests the differences between disabled and non-disabled workers are relatively limited. About 37 per cent of disabled and non-disabled workers who have received training in the last 4 weeks only received on the job training. Slightly more non-disabled workers report having only off the job training, but this is matched with a slightly lower percentage reporting having both types of training. At least on the basis of this information, there is no evidence to suggest disabled workers get different forms of (or inferior) training. Over half of the individuals who have received training in the last 4 weeks have relatively short durations (less than 1 week); however, slightly more disabled workers have training of this duration (54 per cent) compared to non-disabled workers (51 per cent). Over a third of those who have received job related training in the last 4 weeks report that it will lead towards a qualification. People with disabilities are slightly less likely to gain a qualification from training at 36 per cent compared to 38 per cent for the non-disabled. For disabled individuals in employment, job-related training is not a mechanism through which the difference in human capital is widened across the lifecycle.

Conclusion

This article documents important differences in educational attainment between disabled and non-disabled individuals of working age. A person who is disabled according to the DDA definition is 2.5 times more likely to have no educational qualifications than someone who is not disabled. However, variation exists in educational attainment among people with disabilities on the basis of the type and severity of their disability. The situation is most severe for those with mental health problems; members of this group are more than 3.5 times likely as to have no qualifications than non-disabled individuals.

Differences in human capital accumulation are evident between disabled and non-disabled groups and are pronounced from a young age. For example, nearly 4 in 10 young (16-24) disabled individuals are NEET and, therefore, not enhancing their human capital through further education and training or employment. However, consistent with previous evidence that shows differences in labour market outcomes amongst disabled people in work are less pronounced, it is interesting to note that, amongst this group, the gap in educational attainment also narrows. Indeed, there is no evidence to suggest disabled workers get any less job-related education and training, or that is of inferior quality. The rates of education and training fall dramatically for those classed as economically inactive, consistent with them being less likely to search for work. However, in all cases inactive disabled people are accumulating less human capital than the corresponding non-disabled group. This is likely to be both a cause and consequence of them being further away from entering the labour market.

Notes

1. The non-disabled group will contain some individuals with a long-term health problem. However, their health problem is not disabling, in that, it does not affect day to day activity. Sensitivity analysis suggests that, non-disabled individuals with a long-term health problem are less likely to hold educational qualifications than the non-disabled group. However, their qualifications are more similar to the non-disabled group than disabled individuals.
2. Employment and non-employment are defined using ILO definitions (and the LFS variable 'ILODEFR'). Individuals who are non-employed include both the ILO unemployed and those economically inactive.
3. Figure 1 refers only to disabled individuals and they, by definition, report at least one long-term health problem.
4. It may be that more disabled individuals are unable to attend full-time because of their health problem. However, while slightly more disabled young people study part time, the gap in participation remains at over 8 percentage points when any educational course is considered.
5. There is no consistent evidence that the return to education (in the form of higher labour market earnings) is lower for the disabled (see for example, Jones et al. 2006).
6. For those in employment the incidence of job related education and training in the last 13 weeks is measured by LFS variable 'ED13WK', which refers to education or training connected with the respondents own job or a job they might be able to do in the future.
7. For those out of work the incidence of job related education and training in the last 13 weeks is measured by LFS variable 'FUTUR13', which refers to education or training connected with a job the respondent might be able to do in the future.
8. Similar arguments can be made in terms of occupation. Individuals employed in higher level (more skilled) occupations typically receive more training and disabled workers are less likely to be concentrated among this group.

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ARTICLE

CPI and RPI: the 2010 basket of goods and services

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SUMMARY

The 'shopping basket' of items making up the Consumer Prices Index (CPI) and Retail Prices Index (RPI) are reviewed each year as part of the process of continual improvement. Some items are taken out of the basket and some are brought in to make sure the CPI and RPI are up to date and representative of consumer spending patterns. This article describes the review process and explains how and why the various items in the CPI and RPI baskets are chosen. It also discusses the main changes from the 2009 price collection.

The contents of the CPI and RPI baskets for 2010 are summarised in Annexes A and B of the full article, which can be downloaded from the Office for National Statistics website at: www.statistics.gov.uk/CCI/article.asp?ID=2372.

This article also describes two other changes. These relate to the interest rate used in compiling the mortgage interest payments component of the RPI and the collection of clothing prices in CPI and RPI.

The shopping basket

The most useful way to think about both the CPI and RPI indices is to imagine a 'shopping basket' containing those goods and services on which people typically spend their money. As the prices of the various items in the basket change over time, so does the total cost of the basket. Movements in the CPI and RPI indices represent the changing cost of this representative shopping basket.

In principle, the cost of the basket should be calculated with reference to all consumer goods and services purchased by households, and the prices measured in every shop or outlet that supplies them. In practice, both the CPI and RPI are calculated by collecting a sample of prices for a selection of representative goods and services in a range of UK retail locations. Currently, around 180,000 separate price quotations are used every month in compiling the indices, covering over 650 representative consumer goods and services for which prices are collected in around 150 areas throughout the UK.

Within each year, the RPI and CPI are described as fixed quantity (Laspeyres-type) price indices: they represent the changing cost of a basket of goods and services of fixed composition, quantity and quality. In practice, this is achieved by:

- holding constant through each year the sample of representative goods and services for which prices are collected each month, and
- applying a fixed set of weights to price changes for each of the items such that their influence on the overall index reflects their importance in the typical household budget

In this way, changes in the RPI and CPI indices from month to month reflect only changes in prices, and not ongoing variations in consumer purchasing patterns.

However, the contents of the RPI and CPI baskets of goods and services and their associated expenditure weights are updated annually. This is important in helping to avoid potential biases in consumer price indices that might otherwise develop over time – for example, due to the development of entirely new goods and services, or the tendency for consumers to move away from buying goods and services which have risen relatively rapidly in price. For example, if the price of tea rose dramatically during one year, consumers might switch their spending towards coffee, making it necessary to adjust the expenditure weights accordingly in the following year.

These procedures also help to ensure that the indices reflect longer-term trends in consumer spending patterns. For example, the proportion of household expenditure devoted to household services has risen overall over the last 20 years. This is reflected both in an increasing weight for this component in the CPI and RPI, and the addition of new items in the basket to improve measurement of price changes in this area: examples include internet subscriptions, playgroup and nanny fees.

For the RPI, changes to the items and

weights are introduced in the February index each year, but prices are collected for both old and new items in January. This means that the figures for each year can be 'chain linked' together to form a long-run price index spanning many years. This procedure ensures that the annual changes to the basket and weights have no impact on estimated changes in prices as measured by the indices. The same basic approach is adopted in the CPI although, for technical reasons, it is necessary to chain link the published index twice each year rather than only once as in the RPI[1].

ONS (2009a) provides a helpful introduction to the concepts and procedures underpinning the compilation of the CPI and RPI indices. These are described in much greater detail in ONS (2007).

Representative items

There are some individual goods and services where typical household expenditure is sufficiently large that they merit inclusion in the basket in their own right: examples include petrol, telephone charges, and electricity and gas supply. However, it would be both impractical and unnecessary to measure price changes of every item bought by every household in compiling the CPI and RPI.

More commonly, it is necessary to select a sample of specific goods and services that can give a reliable measure of price movements for a broader range of similar items. For example, price changes for garden spades might be considered representative of price changes for other garden tools. These are called 'representative items'. The selection of these representative items is judgmental; the significant difficulties involved in defining an adequate sampling frame (that is, a list of all the individual goods and services bought by households) restrict the use of traditional random sampling methods when choosing the representative items.

For each product grouping, a number of items are selected whose price movements, taken together, provide a good estimate of the overall change in prices for the group as a whole. For example, there are around 20 representative items in the CPI 'furniture and furnishings' class, from bedroom wardrobes to kitchen units, for which prices are collected each month to give an overall estimate of price changes for all furniture products. The same approach is adopted in the RPI, although the product classification systems used in each case differ[2].

The prices collected for each product group are then combined to produce the overall CPI and RPI indices, with weights proportional to total expenditure on the entire product group. So the weight given to 'furniture and furnishings' in the CPI shopping basket, or 'furniture' in the RPI basket, will reflect average household spending on all furniture products as opposed to expenditure only on those items that have been chosen to represent the group. Similarly, the weight of garden spades would be derived from all spending on garden tools.

As described previously, these weights are also updated annually so that the indices reflect current spending patterns. In line with usual practice, CPI class weights were updated with effect from the January 2010 index, and RPI section weights were revised with effect from the February 2010 index, at which point the weights for the more detailed (unpublished) item indices were also revised. A brief comparison of high level RPI weights since 1987 is shown later in this article, including the new weights for 2010. A more detailed article on changes to the published CPI and RPI weights will be published on the National Statistics website in April 2010.

Note also that there are some specific differences in the commodity coverage of the CPI and RPI indices. For example, the RPI basket includes a number of items chosen to represent owner-occupier housing costs, including mortgage interest payments and depreciation costs, all of which are excluded from the CPI. These differences are described in greater detail in Roe and Fenwick (2004). Beyond these specific areas, the contents of the CPI and RPI baskets are very similar, although the precise weights attached to the individual items in each index differ[3].

Selecting the representative items

A number of factors need to be taken into account when choosing representative items. Of course, the items must be easy to find by price collectors, so ensuring that estimates of price change are based on an adequate number of price quotes collected throughout the UK. Since the CPI and RPI are based on the cost of a fixed in-year basket of goods and services, ideally they should also be available for purchase throughout the year. However, availability of some food and clothing items is clearly seasonal, and so these goods require a slightly different treatment in the indices.

The number of items chosen to represent each product group within the CPI and RPI depends both on the weight (expenditure) of the group and also the variability of price changes between the various items that could be selected to represent the group (reflecting, for example, the diversity of products available). Intuitively, it makes sense to choose more items in product groups where spending is high; this helps to minimise sampling variability in the estimate of price change for high-weighted groups, and therefore in the overall price index. However, if price movements of all possible items in the group are very similar, it is sufficient to collect prices for only a few[4]. By contrast, if price movements of all the possible items are very different, prices will be needed for many representative items to get a reliable overall estimate of price change for the group.

Following from this, analysis of the balance in the allocation of items to broad commodity groupings, as presented for the 12 divisions of the CPI in **Table 1**, acts as a useful anchor for the annual review of the basket. The significant allocation of items to the food division relative to its index weight, for example, is partly explained by the relatively high variation in observed price changes between the individual goods in this area. Conversely, a smaller proportion of items relative to index weight is allocated to the restaurants and hotels division, reflecting greater similarity in observed price changes. In some cases, such as transport and housing, apparent low allocations of items are explained by the presence of some dominant individual items (such as car purchase or housing rents); abstracting from these, the case for adding further items to improve coverage of these divisions' remaining index weights is much weaker – instead, it is far more important to ensure that the sampling of prices for these heavily weighted items is as comprehensive as possible.

The analysis also helps to highlight those areas of the index which might benefit most from improved coverage, such as recreation and culture. The current allocation of items to the division is broadly comparable to its index weight but variation in price changes appears relatively high, possibly reflecting the diversity of goods and services covered by this division. As discussed later in the article, this type of analysis has motivated some of the changes to the basket introduced in 2010. Conversely, it also helps to highlight areas where there is scope to remove items from the basket without any significant loss of precision in the indices. It is important that growth in the overall size of the basket is limited each year so that

Table 1
Allocation of items to CPI divisions in 2010

		CPI weight (per cent)	Observed variation in price changes[1]	Representative items[2] (per cent of total)
1	Food & non-alcoholic beverages	*10.8*	High	*22*
2	Alcohol & tobacco	*4.0*	Low	*4*
3	Clothing & footwear	*5.6*	Medium	*11*
4	Housing & household services	*12.9*	High	*5*
5	Furniture & household goods	*6.4*	Medium	*11*
6	Health	*2.2*	Low	*3*
7	Transport	*16.4*	High	*6*
8	Communication	*2.5*	High	*1*
9	Recreation & culture	*15.0*	High	*17*
10	Education	*1.9*	High	*1*
11	Restaurants & hotels	*12.6*	Low	*8*
12	Miscellaneous goods & services	*9.7*	High	*11*

Notes: *Source: Office for National Statistics*

1 Based on an analysis of variation in price changes between the individual items chosen to represent each division in the period 2004-2008.
2 These figures should be treated as providing only a broad indication of the allocation of items to the 12 CPI divisions. For example, the sample of prices underpinning an existing item might easily be stratified in some way to form two or more distinct items; conversely, items could be merged to form a single item representing a wider, more heterogeneous, spending category. A specific example of this is the item 'University tuition fees'. This is classified as one item but the index takes into account prices for several hundred courses, including undergraduate, postgraduate, part-time and so on.

production costs and processing times may be contained.

Such analysis of course cannot tell us which items should be priced, and so choosing a particular set of items to represent each area remains a matter of judgement. CPI and RPI commodity groupings are regularly reviewed with the aim that all significant items or distinct markets where consumers' expenditure exceeds around £400 million annually are explicitly represented in the basket, except where those items are judged to be adequately represented by other items in the basket[5]. Conversely, where spending on items falls below the £100 million mark, there should be good reason for their continuing inclusion in the basket. For example, while spending on acoustic guitars and power drills is relatively low, both are included in the basket to represent wider markets (musical instruments and electrical tools respectively) that would otherwise not be covered explicitly. Trends in expenditure, as well as the latest available figures, help to inform the decisions in all cases.

This focus on relative expenditures in determining the contents of the basket partly reflects the wealth of data that is available describing household spending patterns. One major source of information comes from the diaries and questionnaires filled in by people taking part in the ONS Living Costs and Food Survey, previously known as the Expenditure and Food Survey, a continuous survey of around 6000 households each year. This is supplemented by detailed analyses of trends presented by market research companies, trade journals and in press reports. Changes in the retail environment are also reported to ONS by the price collectors, and together these various sources of information help to ensure that the goods and services that the average household spends its money on are appropriately represented in the CPI and RPI baskets.

It is very important to note that the contents of the basket and, in particular, changes from one year to the next should not be accorded significance beyond their purpose as representative items used in estimating retail price changes. Changes to the basket will reflect evolving consumer tastes, but only over a long run of years. In any particular year, changes to the basket will reflect a range of considerations such as practical experience in collecting prices, the desire to improve coverage in high spending areas, or analysis that suggests that estimated price changes could be improved at the margin by varying the number or type of representative items collected.

Indeed, within each product grouping there is usually a point at which the exact number, choice of items and the precise weights attached to them becomes a matter of relatively fine judgement. At this detailed level, it is unlikely that such choices would have any significant impact on the CPI and RPI indices. For example, a selection of specific household appliances has been chosen to represent spending on small electrical goods, including irons and kettles. However, other representations would clearly be possible and equally valid.

Finally, it should also be noted that the vast majority of the 650 or so representative items remain unchanged in 2010.

Changes to the basket in 2010

Changes to the basket of goods and services this year were introduced with the February 2010 consumer price indices published on 23 March; that is, monthly changes in prices from February 2010 to January 2011 inclusive are estimated with reference to the updated basket. The basket will be updated again at the same time next year.

New additions to the basket in 2010 and those items removed are set out in **Table 2** and **Table 3**, together with a brief summary of the motivation for these changes. As the tables make clear, these motivations are diverse. As in previous years, changes to the basket in 2010 certainly should not be viewed as a simple indicator of those products or services whose popularity has either grown or fallen significantly over the past year. Note that all of the changes to the basket this year affect both the CPI and RPI indices.

The following list gives a brief summary and explanation of the themes behind the changes to the basket for 2010:

- A number of new items are introduced to represent specific markets where consumer spending is significant, and existing items in the basket may not adequately represent price changes for such goods. For example, home services maintenance policies are being introduced to represent the type of insurance policies linked to individual services, for example gas supply and central heating, where suppliers offer call-out and service cover. Cereal bars are also included for the first time to represent a type of snack not previously covered in the basket and reflecting the shelf-space devoted to this item
- In addition, two high-technology goods are being introduced that can be seen as representing evolving trends: Blu-ray disc players are introduced to cover the growing market for the new style DVD format and follow the introduction of Blu-ray discs last year; and computer games with accessories are an addition reflecting the introduction and growth of accessorized games in the market
- As well as introducing items to represent distinct sectors or markets, a number of items have been introduced to diversify the range of products collected for already established groupings, usually where spending is

Table 2
Additions to the basket in 2010

CPI Class	RPI Section	New Item	Notes
01.1.1 Bread and Cereals	2101 Bread	Garlic Bread	Replaces pitta bread reflecting the relative spending on the two types of speciality bread.
01.1.1 Bread and Cereals	2102 Cereals	Cereal Bars	New item. Introduced to represent a type of snack which is attracting gradually increasing expenditure and not previously covered in the basket.
01.1.3 Fish	2112 Processed Fish	Frozen fish in breadcrumbs/ batter	New item. Introduced to improve coverage of fish which has been identified as an under-represented area of the basket in terms of the number of items in relation to price variability.
01.1.4 Milk, Cheese and Eggs	2118 Milk Products	Powdered Baby Formula	Replaces baby food as more representative of this area of the market and reflecting the relative spending on the two items.
01.2.2 Mineral Waters, Soft Drinks and Juices	2120 Soft Drinks	Fruit drink, bottle	Replaces the fruit drink, carton as the bottle takes increasing market share.
01.2.2 Mineral Waters, Soft Drinks and Juices	2120 Soft Drinks	Still mineral water, small bottle	New item. The basket already includes a larger bottle of mineral water. The new item has been added to represent water in the 'on the go' drinks market and reflects increased spending on bottled water overall over a period of years.
06.1.1 Pharmaceutical Products	5202 Chemists' Goods	Allergy tablets	New item. Introduced to improve coverage in the area of minor ailment remedies and reflects increased expenditure on allergy tablets.
09.1.1 Reception and Reproduction of Sound and Pictures	6301 Audio-visual Equipment	Blu-ray disc players	New item. Introduced to capture price changes in this new expanding technology.
09.3.1 Games, Toys and Hobbies	6303 Toys, Photographic and Sports Goods	Computer games with accessory	New item reflecting the relatively new market in computer games involving accessories.
12.1.2/3 Appliances and Products for Personal Care	4303 Electrical Appliances	Electrical hair straighteners/ tongs	New item. Introduced as they represent a greater share of the electrical haircare market than the hairdryer they replace.
12.1.2/3 Appliances and Products for Personal Care	5202 Chemists' Goods	Lip gloss	Replaces lipstick. Lip gloss has increased expenditure over recent years and enters the basket to represent part of the make-up market.
12.1.2/3 Appliances and Products for Personal Care	5202 Chemists' Goods	Liquid soap	Replaces individual bars of toilet soap as more representative of this area of the market and reflecting the relative spend on the two items.
12.5.2 House Contents Insurance	4402 Fees and Subscriptions	Household services maintenance policy	New item. Introduced to represent the sort of maintenance policy which can be taken out to cover, for example, central heating systems.

Source: Office for National Statistics

Table 3
Items removed from the basket in 2010[1]

CPI Class	RPI Section	Dropped Item	Notes
01.1.1 Bread and Cereals	2101 Bread	Pitta bread	Replaced by garlic bread as more representative of the speciality bread market.
01.1.9 Food Products (nec)	2129 Other Foods	Baby food	Replaced by powdered baby formula reflecting greater spending on the milk product.
01.2.2 Mineral Waters, Soft Drinks and Juices	2120 Soft Drinks	Fruit drink carton	Replaced by fruit drink, bottle which has taken an increasing market share.
01.2.2 Mineral Waters, Soft Drinks and Juices	2120 Soft Drinks	Fizzy canned drink	Replaced by still mineral water, small bottle to better reflect the mix of drinks in the 'on the go' drinks market.
03.2.0 Footwear Including Repairs	5105 Footwear	Men's training shoe-casual footwear	Removed. This section of the basket is over-represented in terms of the number of items and the price of men's training shoes as casual wear can be represented by other footwear items purchased from shoe shops.
04.3.2 Services for Maintenance & Repair	4105 Repairs and Maintenance Charges	Gas call out charge	Removed to enable the introduction of the household services maintenance policy item.
04.3.2 Services for Maintenance & Repair	4105 Repairs and Maintenance Charges	Gas service charge	Removed. There are two items covering gas service charges. One represents local prices for the service and this remains within the basket. The second has been removed and replaced by a household services maintenance policy item in the insurance part of the basket.
06.2.1/3 Medical Services and Paramedical Services	5203 Personal Services	Eyesight test charge	Removed. In a part of the basket which is over-represented and there has been a decrease in expenditure as eyesight tests are free in some areas.
09.1.2 Photographic, Cinematographic and Optical Equipment	6303 Toys, Photographic and Sports Goods	Disposable camera	Removed due to decreasing expenditure as digital compact cameras and mobile phone photography become increasingly popular.
09.4.1 Recreational and Sporting Services	6402 Entertainment and Other Recreation	Squash court hire	Removed. This section of the basket is over-represented in terms of the number of items and squash court hire is not as representative as some others.
12.1.2/3 Appliances and Products for Personal Care	5202 Chemists' Goods	Lipstick	Replaced by lip gloss reflecting a trend towards gloss.
12.1.2/3 Appliances and Products for Personal Care	5202 Chemists' Goods	Individual bar of toilet soap	Replaced by liquid soap reflecting the market share of the two items.
12.1.2/3 Appliances and Products for Personal Care	4303 Electrical Appliances	Hairdryer	Replaced by electrical hair straighteners/tongs.

Note:

Source: Office for National Statistics

1 'Low weighted' denotes an item with a CPI weight of less than 0.5 parts per thousand in 2009.

significant. For example, small bottles of mineral water are introduced to improve and widen coverage of the 'on the go' drinks market. Similarly antihistamine allergy tablets supplement items such as indigestion tablets and cold/flu drink powders as representatives of the market for minor ailment remedies

- Analysis of the broad balance of the existing sample of representative items across the CPI highlighted a need to improve coverage of price changes for a number of CPI classes. These areas include:
  - Fish (1.1.3), with a new item covering frozen fish in breadcrumbs or batter introduced to supplement

the existing fresh and frozen headings, and
  - Pharmaceutical products (6.1.1), where the already mentioned allergy tablets broaden the range of minor ailment remedies
- In other cases, the new items are direct replacements for similar products that leave the basket in 2010. For example, garlic bread replaces pitta bread, powdered baby formula replaces baby food, a bottled fruit drink replaces a carton of fruit drink and liquid soap replaces a bar of soap. In each case, the new product represents a greater or increasing proportion of the market compared with the product it replaces. Another example here is electrical hair straighteners and tongs replacing hairdryers. Apart from the greater spend on straighteners than dryers, this change is also partly to improve the number of price quotes collected each month
- Finally, it is important that the review of the basket considers not just the list of items to be priced, but also where the prices are collected. Blu-ray discs were introduced into the basket a year ago as a central collection of prices over the internet. Following a successful introduction, this item has now been added to the local collection from shops while still collecting internet prices. Similarly a computer games item has been split into internet and shop purchases

As noted earlier, it is important that growth in the overall size of the basket is limited each year so that production costs and processing times may be contained. A number of items therefore have been removed from the basket in 2010 to make room for the new additions. Note that the removal of these items from the basket does not necessarily imply that the markets for these goods and services are very small or are declining significantly.

- Some items have been removed to make way for new additions to the basket within the same product grouping. For example, a bar of toilet soap has been removed in 2010 to be replaced by liquid soap, although both products represent soap. In other cases, items have been removed so that new items may be introduced covering distinct markets not previously represented explicitly within the product grouping. For example, the fizzy canned drink has been removed so that small bottles of mineral water can be represented. Also cans and jars of baby food have been removed since spending on these items is less than on powdered baby formula
- In some cases a product will still remain represented in the basket even if there is no longer an explicit item. For example, one element of gas service charges, namely those collected centrally from larger businesses, has been removed but the item is still covered by local collection of these prices
- Elsewhere analysis suggested that there was scope to remove items from certain product groupings without any significant loss of precision in estimates of price changes overall. Within these groupings, those items with relatively low index weights or those items which are variants of other items have typically been chosen; examples include squash court hire and disposable cameras. In each case, it is judged that price changes for these goods remain adequately represented by those items that remain in the basket. The removal of items in such cases therefore represents a rebalancing of the basket, helping to offset the expansion of coverage in other product areas

Other changes

Two changes are also being introduced this year to improve representativeness. These relate to the measurement of mortgage interest payments and the collection of clothing prices.

The Mortgage Interest Payments (MIPs) component in the RPI has been based previously on the Standard Variable Rate (SVR) of interest from the main bank and building society providers using data supplied by the Bank of England. However, the mortgage market has evolved with increased take up of alternative mortgage types including fixed rate, discount and tracker mortgages which are not covered in the SVR measure. As a result, an alternative measure of interest, the Average Effective Rate (AER) has been developed jointly by the Bank of England and ONS. This is more representative of mortgage rates available, covering around 90 per cent of bank and building society mortgage lending. It includes various mortgage rates weighted together based on market share and for the RPI, these rates are weighted by the relevant stock of mortgages each January. The final MIPs series then reflects both new and existing mortgages and will be able to follow the evolution of the mortgage market in future years. This change is described in greater detail in a consultation document and a response to that consultation, ONS (2009b and 2010).

The second change is to the treatment of prices for clothing items. This change is aimed at improving the quality of the resulting index. Previously when a clothing product was replaced with new stock, small changes to the composition of the garment were treated as a quality change and the price movement was excluded from the calculation. Due to the frequent change in both fashion and seasonal availability, this approach was reducing the sample size. As the quality change between the old and new garment cannot easily be measured, a direct price comparison shall be used as an estimate of the price change of the type of garment within each outlet. The aim is to

Table 4
High level RPI weights since 1987[1]

RPI group	1987	1992	1997	2002	2007	2008	2009	2010
Food	167	152	136	114	105	111	118	112
Catering	46	47	49	52	47	47	50	47
Alcohol	76	80	80	68	66	59	63	64
Tobacco	38	36	34	31	29	27	27	27
Housing[2]	157	172	186	199	238	254	236	237
Fuel and light	61	47	41	31	39	33	49	40
Household goods	73	77	72	73	66	66	70	67
Household services	44	48	52	60	65	64	61	59
Clothing and footwear	74	59	56	51	44	42	39	40
Personal goods and services	38	40	40	43	39	41	41	41
Motoring expenditure	127	143	128	141	133	133	121	144
Fares and other travel costs	22	20	20	20	20	20	20	20
Leisure goods	47	47	47	48	41	38	38	37
Leisure services[3]	30	32	59	69	68	65	67	65

Notes: *Source: Office for National Statistics*

1 Weights are specified as parts per 1000 of the all items RPI.
2 Depreciation costs were added to the housing group in 1995.
3 Foreign holiday costs were added to the leisure services group in 1993, followed by UK holidays a year later.

improve the coverage, that is, the number of quotes used in calculating the index. The change also brings the collection more in line with methods across Europe.

Weights

Table 4 gives a snapshot of how the high level weights in the RPI[6] have changed over the last 24 years, since the last rebasing of the series.

The table illustrates that over the period there are some clear shifts in expenditure. Broadly speaking, weights for services have increased while those for goods have decreased. The most recent weights in the table also illustrate that changes from one year to the next are less marked – for this reason, users should guard against drawing conclusions about evolving spending patterns just from the update of the basket in any one year.

Notes

1 CPI indices are chain-linked first each January, when weights for CPI classes and higher level aggregates are updated, and again in February when changes to the basket are introduced and hence weights for individual item indices are reviewed.

2 The CPI is organised according to the internationally agreed COICOP (Classification of Individual Consumption by Purpose) system, as used in the UK National Accounts. The RPI uses a classification system specified by an earlier RPI Advisory Committee, and has evolved gradually over the RPI's long history as a published UK official statistic.

3 RPI weights are based primarily on household spending estimates derived from the Living Costs and Food Survey, and relate to expenditures by private households only, excluding the top 4 per cent of households by income and those pensioner households mainly dependent on state benefits. CPI weights are based on National Accounts estimates of household final consumption consistent with the wider CPI population coverage (that is, all private households, residents of institutional households and foreign visitors to the UK).

4 At the extreme, if price changes for all the possible items that could be selected in a particular group were identical each month, it would be necessary to select only one of the items for inclusion in the basket. Price changes for this one item would be perfectly representative of price changes for the group as a whole.

5 Under CPI regulations, items should be included in the CPI where estimated consumers' expenditure is 1 part per thousand or more of all expenditure covered by the CPI; based on household final consumption data underpinning calculation of the 2010 CPI weights, this is equivalent to around £740 million.

6 Coverage extensions during the development of the CPI/HICP mean that long term comparisons of weights within CPI are more difficult.

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ARTICLE

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Incorporating derivatives data in the National Accounts and Balance of Payments

SUMMARY

This article outlines forthcoming changes to the National Accounts and Balance of Payments. The Office for National Statistics (ONS) aims to introduce data on derivatives business of UK banks into the financial accounts and balance sheets for the *2010 Blue Book* and Balance of Payments *Pink Book*. Revisions will go back to the start of 2006.

In the National Accounts, currently only limited transaction data is published for the bank, central government and rest of the world sectors. Data for the rest of the world sector is also presented within the Balance of Payments statistics. Additional balance sheet data is published annually in *Blue Book* Table 4.5 and *Pink Book* Table FD.

Derivative transactions which take place exclusively between other sectors of the economy, such as other (non-bank) financial institutions and private non-financial corporations, will be included once reliable data sources are available.

Background

The European System of Accounts (1995) defines derivatives as financial assets based on or derived from a different underlying instrument. The underlying instrument is usually another financial asset, but may also be a commodity or an index. Financial derivatives are also referred to as secondary instruments and since the hedging or offsetting of risk is frequently a motivation for their creation, they can be referred to as hedging instruments. Only those secondary instruments, which have a market value, because they are tradable or can be offset on the market, are financial assets in the system of accounts and are classified as derivatives.

Derivatives include:

- **Options** – both tradable and over-the-counter (OTC). These are contingent assets which give their holders the right, but not the obligation, to purchase from (in the case of a call option) or to sell to (in the case of a put option) the issuer of the option (the option writer) financial or non-financial assets (the underlying instrument) at a predetermined price (the strike price) within a given time span (American option) or on a given date (European option). The purchaser of the option pays a premium (the option price) for the commitment of the option writer to sell or to purchase the specified amount of the underlying asset or to provide, on demand of the purchaser, appropriate remuneration. By convention, that commitment is treated as a liability of the option writer because the option price represents the current cost to the option writer of buying out the contingent liability
- **Warrants** – these are a form of tradable options, which give their holders the right to purchase from the issuer of the warrant (usually a corporation) a certain number of shares or bonds under specified conditions for a designated period of time. There is also currency warrants, the value of which is based on the amount of one currency required to purchase another currency at or before the expiration date of the warrant and cross-currency warrants tied to third currencies. The issuer of the warrant is considered to have incurred a liability representing the current cost of buying out the contingent liability
- **Futures** – but only if they have a market value because they are tradable or can be offset. Futures are commitments to deliver, or to take delivery of, a specified quantity of a standard grade of a commodity, foreign exchange, or a security at a fixed price and for a specified delivery date or period. Futures may also be based on an index rather than a specific financial or non-financial asset
- **Swaps** – but only if they have a market value because they are tradable or can be offset. Swaps are contractual arrangements between two parties who agree to exchange, over time and

according to predetermined rules, streams of payment of the same amount of indebtedness. The most prevalent varieties are interest rate swaps, foreign exchange swaps and currency swaps (also named cross-currency interest swaps). Interest rate swaps involve an exchange of interest payments of different character, such as fixed rate for floating rate, two different floating rates, fixed rate in one currency and floating rate in another, and so on. Foreign exchange swaps (including all forward contracts) are transactions in foreign currencies at a rate of exchange stated in advance. Currency swaps involve an exchange of specified amounts of two different currencies with subsequent repayments, which include both interest and repayment flows, over time according to predetermined rules

- **Forward rate agreements (FRAs)** – but only if they have a market value because they are tradable or can be offset. FRAs are contractual arrangements in which two parties; in order to protect themselves against interest rate changes, agree on an interest to be paid, at a settlement date, based on a notional amount of principal that is never exchanged. The payments are related to the difference between the agreement rate and the prevailing market rate at the time of settlement.

Derivatives do not include:

- the underlying instrument upon which the financial derivative is based
- repayable margin payments related to financial derivatives. They are classified in other deposits or loans depending on the institutional units involved
- secondary instruments, which are not tradable and cannot be offset on the market

Derivatives are widely used in the financial and commercial sectors, both for hedging against risk and also, in the case of financial institutions that specialise in the derivatives markets, market-making and trading in derivatives for profit. Derivatives have also been introduced indirectly to the fields of retail finance and savings – examples of where derivatives are linked to financial products might include fixed-rate or capped mortgages, or equity-linked investment bonds offering investors a return linked to rises in a stock index, while offering an element of protection against future falls in the value of the index.

Usage of derivatives have expanded beyond purchasing commodity contracts to ensure future supplies of a raw material at a pre-determined price. The growth in derivatives usage has been driven in part by the greater commercial (and regulatory) emphasis on risk management in the conduct of an enterprise's business. The main risk determinants are foreign exchange, interest-rate, and commodity-related (including more recently power and gas). Derivatives markets are constantly innovating, and new risk variants or products continually appear.

Transactions will be shown on a net basis (assets less liabilities) for each sector, whereas positions will be shown on a gross (total assets and total liabilities) basis. Semken (2005) may provide readers with useful background information.

Methodology

Banks enter into derivative agreements with other banks, other financial corporations, non-financial corporations, government, householders and units overseas. When recording an asset/liability for the banking sector, the corresponding liability/asset sector is also identified. For example if a UK bank holds a derivative contract with a tradable positive value of £1 million which can be redeemed at an overseas bank, the asset sector is the UK banking sector and the liability sector is the rest of the world sector.

Balance sheet data for the banking sector is collected quarterly by the Bank of England in a specialised Derivatives survey (the DQ form). This survey contains a detailed analysis of reporting banks assets and liabilities by economic sector of counterparty.

In order to estimate transactions data the following model is used:

Change in value of derivatives portfolio = Net transactions + Net holding gains/losses
Re-arranging this equation shows:

Net transactions = Change in value of derivatives portfolio – Net holding gains/losses

Net holding gains/losses are approximated as:

Dealing profits – Net spread earnings

Therefore, by approximating net holding gains/losses as dealing profits less net spread earnings transactions data can be estimated by subtracting dealing profits less net spread earnings from the change in balance sheet data over the period.

The dealing profits and net spread earnings of UK banks are also collected by the Bank of England (via the Profit and Loss (PL) survey) and provide aggregate data for the banking sector.

The PL form provides counterpartied information for dealing profits and net spread earnings, separated out between the UK and overseas sectors. However there is no information on counterparties within the UK sector. As an approximation, the sector positions (of the previous quarter) from the balance sheets have therefore been used to apportion the transaction data amongst the domestic sectors.

The sector detail on banks' aggregate positions from the DQ survey, although identifying banks and building societies as separate sub-groups of counterparty, is restricted to 'other financial corporations' for the residual category within the financial sector. In order to create balance sheet data for the two sub-sectors of the other financial corporations sector (that is the insurance and pension funds (IP) sector and the other financial institutions (OI) sector), proxy information on the level of banks' deposit liabilities (OI and IP assets) and banks' short-term lending (OI and IP liabilities) for the same end-period is used. For transactions in the financial account, the same proxy ratios are used, but lagged by one quarter.

For more information on this method for deriving transactions data, please see the **Annex** to this article.

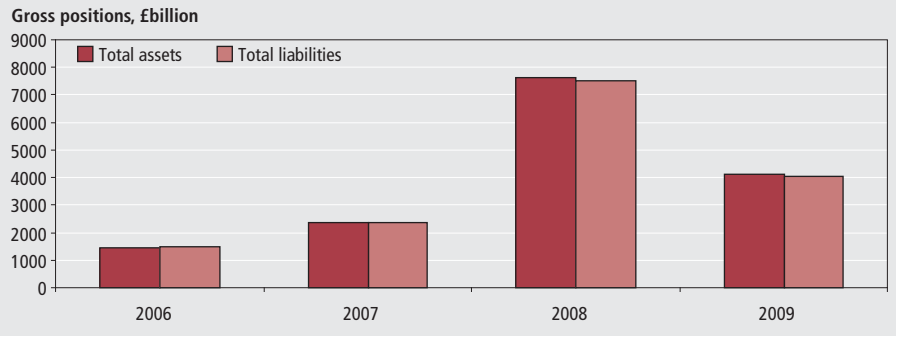
The balance sheet data are consistent with Table F1.1 of the Bank of England's publication *Monetary and Financial Statistics* (see Bank of England 2010).

The transaction and balance sheet data for all sectors will be published in the United Kingdom Economic Accounts (see ONS 2010), and downloadable from the ONS website, from the 30 June 2010. Balance of Payments balance sheet data will be reported in Table 8.1 and a geographic breakdown of the balance sheet will be recorded in Table 10.1.

Impact

Incorporating bank sector derivatives data into the National Accounts will result in significant revisions to balance sheets. **Figure 1** shows total assets and liabilities for the banking sector. Please note, the overall net worth of the banking sector remains largely unaffected as revisions to gross assets are offset by revisions to gross liabilities. For an indication of the effects on the balance

Figure 1
Derivatives: total assets and liabilities for the banking sector



Source: Table F1.1 'Financial derivative positions of banks at market values', taken from Bank of England (2010)

sheet of other sectors please see Table F1.1 of the Bank of England's publication *Monetary and Financial Statistics* (Bank of England 2010).

There was a sharp rise in banks' derivative positions in 2008, due to the financial turmoil. Frequent movements in interest rates, increased market activity together with a significant depreciation of sterling caused both interest rate products, as well as all contracts valued in foreign currency to rise sharply. These market movements have now stabilised and we are now seeing derivative positions fall towards pre-crisis levels by the end of 2009.

ANNEX

Model for deriving net transactions using balance sheet data, dealing profits and net spread earnings

The following explanation outlines the rationale behind approximating net transactions as change in value of derivatives portfolio less 'dealing profits less net spread earnings'.

Book-keeping identities for DQ and PL forms

V	value of a derivatives portfolio, at end of period
A	acquisitions during period
D	disposals during period
HGL	net holding gains and losses during period
x	net contractual payments received from portfolio during period
TDQ	transactions, on DQ definition
IR	definition of implied revaluations from DQ data
DP	dealing profits less net spread earnings in period (form PL definition)
OCVA	other changes in volume of assets

Step 1

Write the accounting identity for change in value of net asset position. Holding gains and losses (HGL) are understood to be calculated after net payments or receipts of income. Making the assumption that 'other changes in volume of assets' (OCVA), such as write-offs, are typically zero in the case of financial derivatives, then:

$$\Delta V_t = A_t - D_t + HGL_t + OCVA_t$$

That is

$$\Delta V_t = A_t - D_t + HGL_t$$

In other words:
Change in value of derivatives portfolio = Net transactions + Net holding gains/losses

Step 2

Form DQ definition of transactions. All income flows, x, are included as transaction terms. Negative sign on x reflects that an income receipt is equivalent to a disinvestment of accrued income.

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$T_t^{DQ} = A_t - D_t - x_t$

Step 3

Define a term 'implied revaluations' from the DQ changes in levels and transactions data. It follows that:

$IR_t = \Delta V_t - T_t^{DQ} = HGL_t + x_t$

Step 4

Dealing profits are defined on an International Accounting Standard (IAS) basis, subject to form PL statistical definitions. Write this definition as net holding gains and losses plus net income withdrawn:

$DP_t = HGL_t + x_t = IR_t$

Step 5

Therefore, in this framework, 'dealing profits and net spread earnings' and 'implied revaluations' are equivalent as each term is the sum of holding gains and losses plus net withdrawals of income. Other changes in volume are assumed to be zero. This should hold true both for an individual reporting bank, and for reporting banks in aggregate.

Step 6

Next, consider aggregate positions, indexing across reporting banks by letter (i). For each reporting bank (i), identify HGL and income (x) arising from non-bank counterparts (nb) and from other reporting bank counterparts (indexed by j not equal to i). Inter-bank HGL and income elements will offset each other on aggregation over the banking sector.
First, the position for bank (i):

$$DP(i)_t = HGL(i,nb)_t + \sum_{j \neq i} HGL(i,j)_t + x(i,nb)_t + \sum_{j \neq i} x(i,j)_t$$

Then, aggregate across banks (i), noting that the inter-bank positions offset.

$$DP_t = \sum_i DP(i)_t = \sum_i HGL(i,nb)_t + \sum_i x(i,nb)_t$$

Step 7

As

$\Delta V_t = A_t - D_t + HGL_t$

$A - D = \Delta V - HGL$

Where A–D represents net transactions over the period, and HGL can be approximated as dealing profits less net spread earnings, we can see net transactions can be estimated as change in value of derivatives portfolio less 'dealing profits less net spread earnings'.

ARTICLE

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Civil Service Statistics 2009: A focus on gross annual earnings

SUMMARY

This article presents a summary of annual Civil Service statistics for the year ending 31 March 2009. It compares trends over time with a particular focus on gross annual earnings broken down to different groups in the workforce such as men, women, ethnic minorities and those with a disability.

Previously produced by the Cabinet Office, responsibility for the collection and publication of Civil Service Statistics was transferred to the Office for National Statistics (ONS) in 2006. This transfer of responsibility was outlined in an 'In brief' article in the February 2007 edition of *Economic & Labour Market Review*[1].

Key Findings

- In 2009, the median gross annual earnings (excluding overtime or one-off bonuses) for all civil servants was £22,100, an increase of £540 (2.5 per cent) since the previous collection (2008) and £3,210 (17 per cent) since 2004;
- The gender pay gap was smaller in March 2009 than in March 2008 on two of the three measures. The 2009 gender pay gap for full-time employees is 13 per cent, down from 15 per cent in 2008. The gender pay gap for all employees decreased to 16 per cent from 18 per cent in 2008. However, for part-time employees the 2009 gender pay gap is 5.1 per cent, compared with 2.4 per cent in 2008;
- The ethnicity pay gap, the difference in pay between white and ethnic minority employees is 2.5 per cent;
- The age pay gap, the difference in earnings between employees aged 50 years and over and those aged 16-49 years is 7.9 per cent;
- There is a 16 per cent pay gap between full-time and part-time (on a full-time equivalent basis) workers across the Civil Service in 2009;
- The disability pay gap, the difference in median gross annual earnings between 'disabled' and 'non-disabled' civil servants stands at 3.8 per cent;
- The regional pay gap, the difference in pay between employees in London and those working elsewhere in a known location in the United Kingdom is 21 per cent.

Civil Service statistics

The most recent Civil Service Statistics were published on 20 January[2]. This article will look at the headline statistics that formed part of that publication. Attention will further focus on the differences in gross annual earnings between sub-groups of the Civil Service population. In so doing, the article will highlight the breadth of statistics collected by the Annual Civil Service Employment Survey (ACSES) with the aim of increasing its usage across government as an informative data source.

This article is presented in five parts. First, a brief discussion is presented to provide context with regards to the development of Civil Service Statistics as an ONS output and how it has evolved from the previous Mandate[3] collection, which was developed and managed by Cabinet Office. Second, an overview of the survey methodology process is presented, in order to explain to those unfamiliar with the survey and its outputs how the data are collected; a brief section will also detail how the survey should be viewed over time from a statistical standpoint. Third, the paper will consider the notion of diversity across the Civil Service and the policies that have been introduced in an attempt to achieve a more diverse and representative workforce. Fourth, the article will consider the concept of gross annual salary before shifting focus to key diversity statistics such as gender, age, ethnicity, disability, national identity, working pattern and region of employment. Lastly a synthesis is provided, together with

pointers to further research that may be undertaken to improve understanding of the Civil Service workforce.

Data sets: QPSES and ACSES

In 2005 ONS undertook a successful development programme to improve the quality of public sector employment (PSE) statistics and related outputs. As part of this work, definitions for public sector employment across all departmental statistics were agreed and a single definitive set of quarterly PSE estimates introduced. A direct outcome of this development programme was that a new Quarterly Public Sector Employment Survey (QPSES) was established to fill the gap not met by other sources and to improve the accuracy and coverage of estimates. ONS now publishes (as National Statistics) official public sector employment estimates each quarter, in the form of a Statistical Bulletin[4], approximately 11 weeks after the period to which they refer.

A secondary effect of the development of QPSES was that it improved the consistency across government of official employment statistics, especially those directly associated with the public sector. It also became possible to rationalise the number of collections from public bodies.

One of the existing surveys, chosen to be part of the rationalisation framework was the Mandate collection, which had previously been administered by the Cabinet Office. The Cabinet Office had conducted the Mandate collection on a six-monthly basis. With the introduction of the quarterly survey this collection became annual and was transferred to ONS.

Since 2006, the Office for National Statistics has been responsible for the collection and publication of annual Civil Service Statistics. Civil Service Statistics are sourced from the Annual Civil Service Employment Survey (ACSES) which, following a development programme in 2007, replaced the Mandate collection.

Comparison over time

Information about staffing in the Civil Service has been collected and published across government since 1950, and statistics are available from the Civil Service Statistics website back to 1970[5]. Since 2007 Civil Service Statistics have been compiled from a single source, the ACSES. Prior to 2007, government departments supplied information either via the Mandate collection or by a departmental return.

Broadly, the survey methodology for ACSES is very similar to the Mandate collection. However the development programme initiated two key improvements. First, ACSES makes use of a uniform method of collection for all government departments whereas previously, as mentioned, two collection tools were used:

- the Mandate collection accounted for approximately 85 per cent of the Civil Service and comprised (as is now the case for ACSES) a comprehensive anonymous data set generally extracted from the human resources systems of government departments and their agencies
- for historical reasons some departments were not considered to be 'Mandate reliant' and supplied only summary tables instead. These were called Departmental Returns and covered only a limited subset of (aggregated) data

Second, ACSES offers flexibility of collection. In consultation with the Cabinet Office and other government departments the content of the survey is continuously updated and reviewed. Each year, variables may be removed or added from the survey as policy requirements change, for example, 'Marital Status' was removed prior to the 2007 data collection. This ensures burdens on departments are kept to a minimum, and that ACSES is as responsive and flexible a survey tool as possible in order to meet the changing demands and priorities of government.

ACSES accounts for 100 per cent of the Civil Service population.

Collecting frame - ACSES

The ACSES collects detailed statistics on individuals, with Civil Service status, who work within Civil Service government departments. Once the information supplied by a government department or agency has been confirmed the data are amalgamated (data from all government departments and agencies are merged) into a single file from which various analyses of the figures are published.

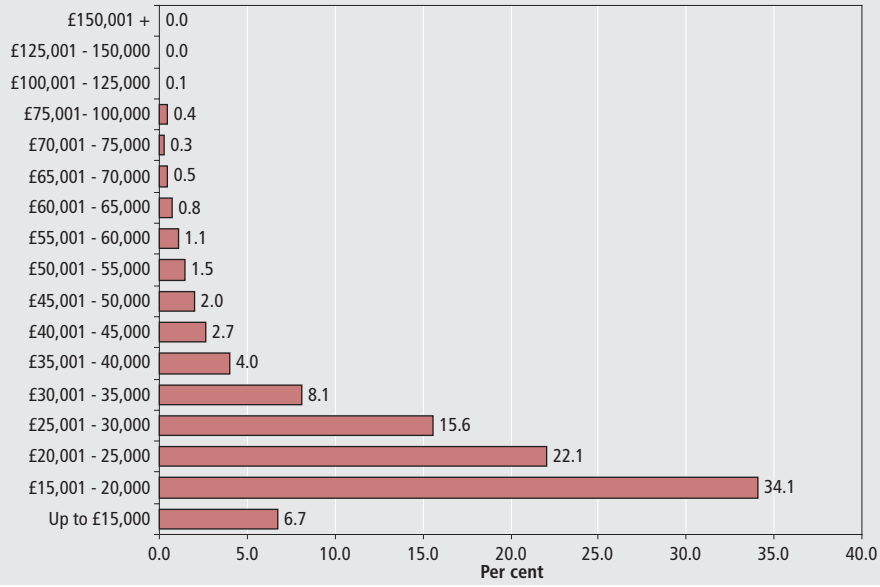
The findings from the ACSES survey are an amalgamation of data reported to ONS by each government department and agency. As such, this article attempts to interpret some of the key stories and trends with respect to one specific variable, gross annual earnings alongside the wealth of diversity information the survey collects.

Diversity across the Civil Service

The term diversity encompasses differences in ethnicity, age, gender, disability, and national identity as well as other identifying features. Across government, positive action has sought to increase the diversity of the Civil Service workforce.

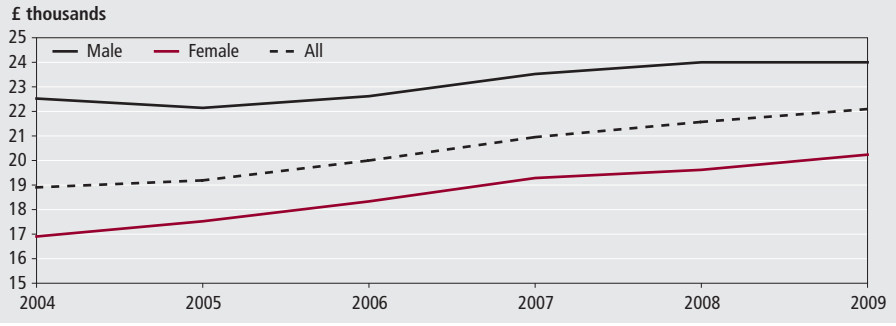
The rest of this article will expose the diverse nature of the Civil Service with a particular focus on gross annual earnings. While considering this research, it is important to acknowledge that although the following statistics provide a useful comparison of sub-groups' earnings they do not reveal differences in the rates of pay for

Figure 1
Civil Service staff in salary band, March 2009



Source: Annual Civil Service Employment Survey

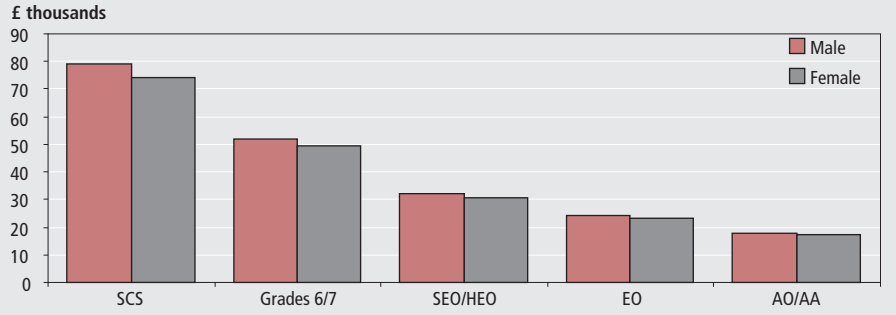
Figure 2
Median gross annual earnings, 2004–2009[1,2,3,4]



Notes: *Source: Annual Civil Service Employment Survey*

1 Survey reference date for 2004 and 2005 was 1 April.
2 Survey reference date for 2006 and 2007 was 30 September.
3 Survey reference date for 2008 and 2009 was 31 March.
4 2004-2006 based on permanent employees only.

Figure 3
Median gross annual salary of civil servants by gender and responsibility level, March 2009



Source: Annual Civil Service Employment Survey

comparable jobs. The best measure of this is to take account of the responsibility level of the job held by individuals across the different diversity classifications; however this is only one facet of a very complex issue.

All of the following diversity statistics, with the exception of those on working pattern, are based on the records of all civil servants (unless otherwise stated). Part-time employees are included as part of all calculations with their earnings put on an equivalent basis to full-time employees' earnings (this is achievable as ACSES collects the number of hours worked by each part-time employee).

Gross median annual earnings

ACSES attempts to collect the gross salary of every civil servant. Gross salary is the annual salary, inclusive of basic pay (including consolidated performance pay) and pay-related allowances such as regional and skills allowances. It does not include bonuses. In 2009, the gross salary of 99 per cent of civil servants was reported by their respective department or agency.

The earnings statistics presented in this article are based on the median rather than the mean. The median is the value below which 50 per cent of employees fall. It is preferred, by ONS, over the mean for earnings data as it is influenced less by extreme values and because of the known skewed distribution of earnings.

Pay across the Civil Service for all employees has increased over the last five years. In 2009[6], the median gross annual earnings (excluding overtime or one-off bonuses) for all employees were £22,100, a 2.5 per cent increase (£540) since the previous collection (2008) and 17 per cent (£3,210) since 2004.

Figure 1 shows the distribution of base pay in the Civil Service. It shows that the majority (63 per cent) of civil servants earn less than £25,000 per annum.

Gender

In 2009, just over half (53 per cent) of all employees were women. Within the Civil Service the representation of women has been increasing year on year since 1991 and women have accounted for more than half of civil servants since 2001[7].

Based on data collected as part of the 2009 ACSES, median gross annual earnings for male employees were £23,990 and for females, £20,250. The gender pay gap was smaller in March 2009 than in March 2008 on two of the three measures. The 2009 gender pay gap for full-time employees is 13 per cent, down from 15 per cent in 2008. The gender pay gap for all employees decreased to 16 per cent from 18 per cent in 2008. However, for part-time employees the 2009 gender pay gap is 5.1 per cent, compared with 2.4 per cent in 2008.

By analysing the difference in annual earnings for male and female employees over the past five years, two trends are particularly evident (**Figure 2**).

First, the overall gender pay gap has decreased over time – the median gross annual earnings of male and female employees have moved closer together. In 2004, the gender pay gap for all employees was 25 per cent compared to a 16 per cent difference between the annual earnings of all males and females in 2009. Second, women's annual earnings are rising at a faster rate than men's. In 2004, women earned £16,910, this compares to a median income for female employees in 2009 of £20,250; an increase of 20 per cent compared to an increase of 6.4 per cent for males over the same period. When responsibility level is taken into account, the gender pay gap for males and females across the recognised responsibility levels diminishes to between 3 and 6 per cent (**Figure 3**).

When age is taken into account it appears that a difference in pay, albeit slight, exists for males and females aged less than 30 years. A 6.0 per cent difference is evident between males aged less than 30 years of age (£17,750) and females of the same age (£16,680). This is in contrast to males and females aged 30 years and over where males earn on average £25,690 and females earn £21,230 - this equates to a difference in pay of 17 per cent.

Ethnicity

When joining the Civil Service, employees are asked to declare their ethnicity. For the purposes of the ACSES collection this information is then allocated to one of 16 categories that best describes the individuals' ethnic background. Civil servants are given the option of 'not declaring' their ethnicity. The ethnicity of 22 per cent of employees in 2009 data was 'not declared' or 'not known'.

In 2009, the proportion of employees in the Civil Service who declared themselves as being from a minority ethnic background

Table 1
Civil Service employment: median earnings by ethnicity and responsibility level,[1,2] March 2009

£

Responsibility level[3,4]	White	Asian	Black	Chinese	Mixed	Other ethnicity	Not Declared or non-response	All employees
Senior Management								
Senior Civil Service	77,060	78,240	77,420	80,110	73,070	83,340	79,460	77,440
Other Management								
Grades 6 and 7	51,250	50,080	49,680	50,720	51,420	51,750	50,730	51,060
Senior and Higher Executive Officers	31,960	31,350	31,910	32,620	31,990	31,980	31,980	31,980
Executive Officers	23,460	23,530	24,380	23,330	23,460	23,930	23,560	23,540
Administrative								
Administrative Officers and Assistants	17,600	17,550	19,110	17,470	17,240	17,600	16,070	17,390
Not reported	25,900	0	..	0	..	0	32,660	27,350
All employees	22,630	21,350	22,990	22,570	22,610	23,110	20,210	22,100

Notes: *Source: Annual Civil Service Employment Survey*

1 Numbers are rounded to the nearest ten, and numbers less than five are represented by "..".
2 Salaries represent the full-time equivalent earnings of part-time employees rounded to the nearest ten.
3 With the exception of the Senior Civil Service, government departments have delegated pay and grading. For statistical purposes departments are asked to map their grades to a common framework by responsibility level.
4 This table shows staff in their substantive responsibility level unless on temporary promotion in which case staff are recorded at the higher responsibility level.

(i.e. Asian, Black, Chinese, Mixed and Other) was 8.9 per cent, this compares to 6.0 per cent in 2001. Employees from minority ethnic backgrounds are more highly represented in Executive Officer (10 per cent) and administrative grades (9.3 per cent). This compares with 4.2 per cent for the Senior Civil Service, the least ethnically diverse grade.

Table 1 displays the median earnings of employees by ethnicity and responsibility level. The median income for all white employees (£22,630) is greater than the median income for all employees (£22,100). Asian employees have the lowest median earnings as a whole population (£21,350).

There is a further contrast in the gross annual salary of male and female, white and ethnic minority civil servants. Ethnic minority males (£22,670) earn 7.8 per cent less than white males (£24,600), whereas ethnic minority females (£21,490) earn 4.1 per cent more than their white (£20,610) colleagues.

The ethnicity pay gap, the difference in pay between white (£22,630) and ethnic minority employees (£22,060) is 2.5 per cent.

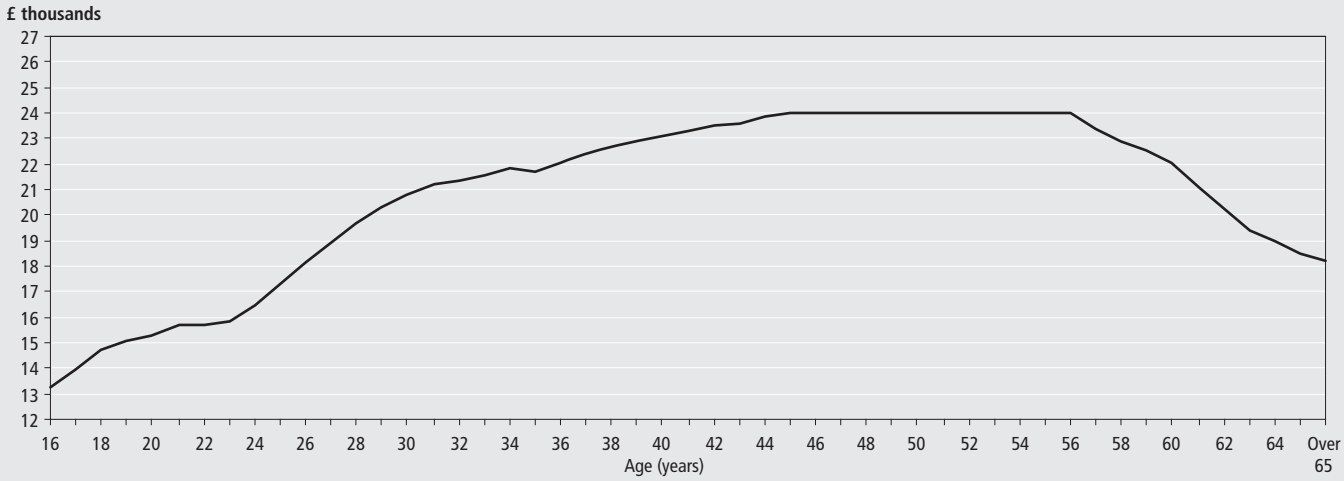
Age

The age structure of the Civil Service has changed markedly over time; for example, the median age of civil servants increased from 38 to 44 years between 1997 and 2009[7]. In 2009, 54 per cent of employees in the Civil Service were aged between 30 and 49 years. Just under one-third (31 per cent) were aged 50 years and over and only 14 per cent under 30 years.

As **Figure 4** clearly demonstrates the median income for employees in the Civil Service changes with respect to the age of the civil servant. Median earnings are lowest for civil servants aged 16 years (£13,270); however the rate of increase in median pay is greatest for civil servants aged 16 to 30 years (57 per cent increase). The majority of civil servants, according to Figure 4, can expect to reach their peak in gross annual earnings when aged 45 years (£23,990). After this point in time median earnings in general fall with the median for those aged over 65 years being £18,220.

There is a contrast between the median gross annual earnings of 16-49 year olds (£21,570) compared to those civil servants aged 50+ years (£23,410). This can largely be explained by the presence of older civil servants in more senior positions across the Civil Service. In 2009, approximately half (49 per cent) of the Senior Civil Service were aged 50 years and over. This compares with 30 per cent of civil servants employed at administrative grades. It is important to acknowledge, however, that age is often linked to experience and experience to

Figure 4
Civil Service employment: median earnings by age, March 2009



Source: Annual Civil Service Employment Survey

reward, which may explain this difference in median earnings.

The age pay gap - the difference in gross annual earnings between civil servants aged less than 50 years and those aged 50 years and over is 7.9 per cent.

Working pattern

Over time flexible working patterns have become increasingly common across the Civil Service. **Figure 5** demonstrates that the number of civil servants who work part-time has increased from 12 per cent in 1997 to 20 per cent in 2009. In 2009, around 80 per cent of employees worked full-time, with the remaining 20 per cent working part-time. Just over half (53 per cent) of all employees were women, with women making up 85 per cent of the part-time workforce.

The median gross annual earnings for part-time employees was £19,090. For males it was £20,110 and for females £19,090, a difference of 5.1 per cent.

When compared to the annual earnings of full-time workers it is evident that part-time workers, even when their salaries are converted to a full-time equivalent status, earn less than full-time employees. There is a 16 per cent pay gap between full-time and part-time (on a full-time equivalent basis) workers across the Civil Service in 2009.

Disability

In 2009, the proportion of civil servants recorded as 'disabled' was 7.1 per cent. This is over double the proportion of civil servants declaring themselves as disabled in 2001 (3.1 per cent)[8]. The proportion of employees with a declared disability was highest at the lower responsibility levels – 7.9 per cent of employees at Administrative grades compared with 4.3 per cent of the Senior Civil Service and 4.5 per cent of Grades 6/7. The disability pay gap, the difference in median gross annual earnings between 'disabled' (£21,700) and 'non-disabled' (£22,560) civil servants, stands at 3.8 per cent. When analysis is undertaken across the recognised responsibility levels, the median income of 'disabled' civil servants is higher than that of 'non-disabled' civil servants, apart from the Senior Civil Service where there is a 1.2 per cent difference in favour of non-disabled civil servants.

National identity

In 2009, of those where nationality is reported (83 per cent of employees), 40 per cent of civil servants declared themselves as British or Mixed British. Employees alternatively declared themselves as English (43 per cent), Irish (0.8 per cent), Scottish (8.5 per cent), and Welsh (5.3 per cent). A further, 1.9 per cent recorded another national identity (**Figure 6**).

In 2009, those employees who declared 'British' national identity had median earnings of £22,440, this compares with civil servants who declared themselves as Irish who earned on average £23,870 – the highest amount across all national identities and Welsh civil servants who earned the least, £21,130.

Region

The last 20 years have seen a reduction in the proportion of civil servants located in London and the South East. In 2009, 16 per cent of UK based civil servants worked in London. Nearly three-quarters (74 per cent) of civil servants worked outside London and the South East, with 9.7 per cent based in Scotland and 6.9 per cent based in Wales.

The regional pay gap, the difference in pay between employees in London (£27,970) and those working elsewhere in a known location (£22,100) in the United Kingdom is 21 per cent. When considering differences in pay for Civil Service employees across regions it is vitally important to take account of geographical monetary payments, for instance, 'London Weighting', which impact on the amounts received by employees.

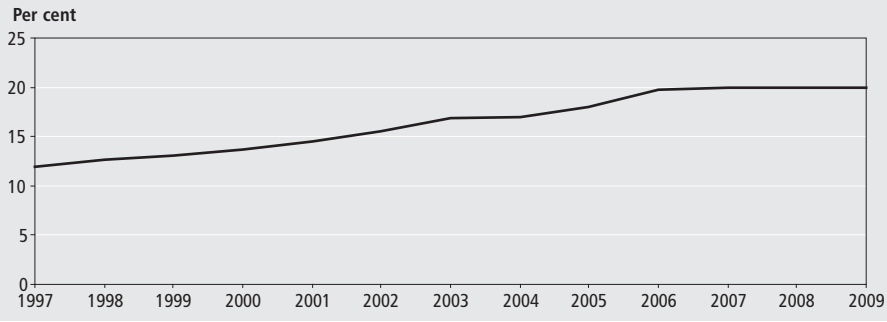
How do civil servants compare?

In line with the rest of the UK labour market the pay distribution in the Civil Service is skewed to the lower levels (Figure 1). Full-time civil servants had median earnings excluding overtime or one-off bonuses of £22,850 in 2009. This figure is lower than the Annual Survey of Hours and Earnings (ASHE) estimates for their counterparts in the private sector and also wider public sector – the median gross earnings of full-time employees in the private sector was £24,970[9] and in the public sector as a whole £27,686[9] – but it should be noted these figures include overtime and bonuses.

Conclusions

The purpose of this article is to draw attention to the value of the ACSES as a resource and also the underlying differences

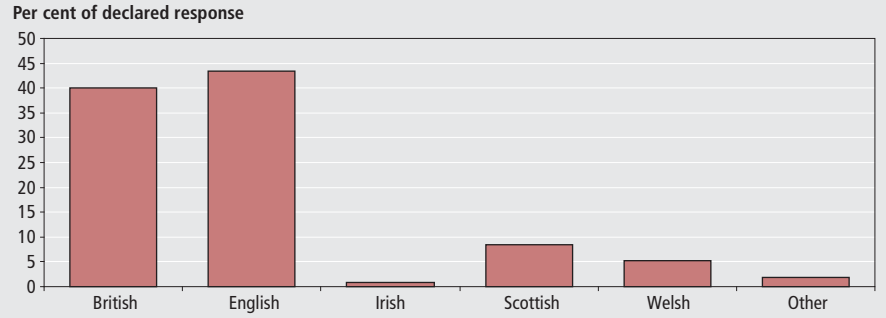
Figure 5
Civil Service employment: employees working part-time, 1997–2009[1,2,3,4]



Notes: *Source: Annual Civil Service Employment Survey*

1 Survey reference date 1 April (unless otherwise stated).
2 Survey reference date for 2006 and 2007 was 30 September.
3 Survey reference date for 2008 and 2009 was 31 March.
4 1997-2006 based on permanent employees only.

Figure 6
National identity of civil servants, March 2009



Source: Annual Civil Service Employment Survey

Table 2
Civil Service pay gaps 2009, 31 March 2009

Per cent

	Pay Gap	Across responsibility levels	
		Min	Max
Gender[1]	*16*	*3*	*6*
Ethnicity[2]	*2.5*	*0*	*2*
Age[3]	*7.9*	*2*	*11*
Working Pattern[4]	*16*	*0*	*6*
Disability[5]	*3.8*	*1*	*2*
Region[6]	*21*	*2*	*13*

Notes: *Source: Annual Civil Service Employment Survey*

1 Difference in pay between male and female employees.
2 Difference in pay between white and non-white employees.
3 Difference in pay between employees aged 50 years and above and 16 to 49 years.
4 Difference in pay between full-time and part-time employees, based on median full-time equivalent earnings.
5 Difference in pay between disabled and non-disabled employees.
6 Difference in pay between employees working in London and the rest of the UK.

in gross annual salary evident when analysis is carried out at a micro-level through the use of diversity statistics across the Civil Service.

At all times it is important to consider differences that exist among sub-groups. By understanding differences that currently exist it is possible for future planning to be directed and purposeful in its approach. This article takes an initial look at the differences across the Civil Service. In doing so, it draws attention to where further research might be undertaken to understand and examine why differences in gross annual salary exist for different groups of civil servants. A continuation of this work would be to monitor changes to these statistics over time.

The majority of the statistics presented in this article are based on a snapshot of data, a collection undertaken with reference to a single point in time and thus do not show changes that have unfolded over the last decade. For instance, analysis of gross annual earnings by gender for the last five years clearly indicates that the situation has altered.

Table 2 presents the differences in pay for sub-groups of the Civil Service. The table shows that the greatest disparity in pay is between civil servants based in different parts of the United Kingdom (21 per cent). However, the table also draws attention to the effect of taking account of responsibility level. It highlights, firstly, that when responsibility levels are taken into account, differences in pay reduce markedly for all sub-groups. Secondly, it further highlights the importance of considering a full range of factors, of which responsibility level is just one, before analysing differences between sub-groups and gross annual earnings.

While this analysis is informative it does not take account of differences in qualifications, choice of occupations (other than that the employees concerned are all civil servants), career plans and lifestyle choices individuals make throughout their lives. Nevertheless, it does perform an important function with regards to identifying differences that exist across the Civil Service and also the increasingly diverse nature of the Civil Service workforce.

Notes

1. www.statistics.gov.uk/elmr/02_07/downloads/ELMR_Feb07.pdf
2. www.statistics.gov.uk/pdfdir/cs0110.pdf
3. www.civilservice.gov.uk/about/resources/stats-archive/archived-reports.aspx
4. www.statistics.gov.uk/pdfdir/pse1209.pdf
5. www.civilservice.gov.uk/about/resources/stats-archive/archived-reports.aspx
6. Figures for 2009 refer to a reference point of 31 March.
7. http://beta.civilservice.gov.uk/news/2009/february/civil-servants-economic-downturn.aspx#0
8. 2009 disability figures is as a percentage of all those with a known disability status. Before 2007 is a percentage of all staff.
9. www.statistics.gov.uk/StatBase/Product.asp?vlnk=15313&Pos=2&ColRank=1&Rank=160

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ARTICLE

Plans for Blue Book 2010

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SUMMARY

The Blue Book 2010 (BB10) and Pink Book 2010 (PB10) will be published at the end of June this year. In line with Office for National Statistics (ONS) policy, this article is intended to inform users about the content of these publications, including forthcoming changes.

Scope of Blue Book 2010

ONS has been working for some time on system changes to improve the quality of the National Accounts. The current development programme (Effective National Accounts and Blue Book to measure the economy – 'ENABLE') aims to complete by March 2011 the integration of the National Accounts production systems, and their development and migration to a new IT platform. The Blue Book in 2010 will therefore be run on existing systems, using largely existing methodology. In addition, the relocation of National Accounts work from London will be largely complete by summer 2010.

The scope and timing of the Blue Book in 2010 will be:

- the Quarterly National Accounts consistent with the 2010 Blue Book dataset will be published on 30 June 2010
- the reference year will be 2006 = 100
- the last base year for the chained volume measure of Gross Domestic Product (GDP) will be 2006
- revisions to GDP will be taken on for 2006 and subsequent years
- there will be no revisions to GDP before 2006
- all 'industry' outputs will be classified according to the Standard Industrial Classification 2003
- in cases where Average Earnings Indexes are used for deflation, these will be replaced by the more conceptually appropriate Average Weekly Earnings indexes
- Retail Price Indexes will continue to be used for the purposes of deflation (that is adjusting current price estimates of GDP onto a 'volume' basis). It is expected that this will change in the Blue Book 2011 (see the section on 'Future developments' later in this article)

Methodology changes

One significant methodological change, which will be introduced during 2010, relates to the measurement of the activity of the Insurance industry. The methodology used currently is based on the conventions set out in the European System of Accounts 1979 (ESA79). Work is now well advanced to bring this into line with ESA95. This new Insurance methodology will be used as the basis of the estimates provided to the European Statistical Office (Eurostat) within the UK's Gross National Inventory (GNI) return in September 2010. (This return forms the basis of the UK's contribution to European funding under what is known as 'the fourth resource'). Revisions to GDP from this change will affect all periods from 1995. The estimates will be published in the UK, but it is not planned to implement the change fully in the published UK National Accounts until Blue Book 2011, when it will affect both current price and volume estimates of GDP.

Scope of Blue Book 2011

As mentioned earlier, the ENABLE programme is on track to complete, as planned, in March 2011. The programme

will deliver an integrated system for the production of estimates of GDP and the Sector Accounts. This integration will improve considerably the compilation process used for National Accounts, and is designed to support greater analysis of the dataset, improve the consistency of the estimates and the transparency of the processes used to align the three different measures of GDP (Production, Expenditure and Income). This will be a significant step forward for the quality of the UK National Accounts.

Initial plans for the scope and content of the Blue Book in 2011 include:

- the reference year will be 2008 = 100
- the last base year for the chained volume measure of GDP will be 2008
- the new methodology for measuring the activity of the Insurance industry (described above) will be introduced for the volume measure of GDP
- Public Sector Finance statistics will be made more consistent with National Accounts estimates
- improvements to Financial Services statistics, developed under a related programme, will be introduced
- where Retail Price Indexes (RPIs) are used currently for the purposes of deflation (that is adjusting current price estimates of GDP onto a 'volume' basis) the Consumer Prices Indices will be used instead (this provides a conceptually more relevant basis for deflation)
- in line with European standards, all 'industry' outputs will be classified on the new Standard Industrial Classification 2007

A related development will be the production of current price Input Output Analytical (I/O) tables. These were last produced in the early 2000s for the year 1995. New tables, for 2005, are now being complied and planned for publication in 2011.

Future developments

Over the next 2-3 years ONS plans to introduce a number of significant improvements to the systems, methods and analysis supporting core National Accounts outputs. As already noted, the ENABLE programme will provide an integrated and robust basis for producing the Quarterly National Accounts and the annual Blue Book from September 2011. The simplifications and integration of the National Accounts processes planned within the programme will also produce an environment to 'enable' future developments.

Beyond ENABLE, work is already underway on the next phases of the development of the UK National Accounts. Within this there are two broadly distinct work programmes: a set of medium term goals planned for implementation by 2014, and some longer term aspirations. The medium term goals include the preparation for the transition to the new European System of Accounts 2010 (yet to be finalised), which the UK will implement in line with European regulation in 2014. The key changes here include the treatment as capital of Research and Development activities, improvements to the treatment of pension statistics, treatment of goods sent abroad for processing and the delineation between market/non-market activities.

Consistent with the longer term aspirations for the development of the UK National Accounts, ONS also plans further methodological research. Some additional developments being considered in the next few years include:

- further research into the potential for balancing the three measures of GDP in constant price (volume) terms, in contrast to the existing approach which involves balancing nominal, or current price, estimates. Initially, this may be just for annual estimates, but ONS will investigate the feasibility of producing quarterly constant price Supply and Use tables, which would form the basis of the official estimates of GDP
- improvements in the measurement of Financial Services
- further development of the so-called 'satellite' accounts (including accounts for Research and Development and the Environment)
- research into wider measures of wellbeing; and
- the development of a labour accounting framework

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ARTICLE

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Services Producer Price Indices (experimental) – Fourth quarter 2009

SUMMARY

The experimental services producer price indices (SPPI) are primarily a suite of individual price indices that provide information on price change for a limited range of service industries. Each SPPI captures quarterly changes in the price received for services provided by UK businesses to other UK businesses and Government. These selected price indices are also aggregated together to create an aggregate SPPI with limited coverage. This aggregate SPPI is not representative of the whole service sector. This article shows the effects some industries are having on the aggregate SPPI. The data produced are used internally by the Office for National Statistics as a deflator for the Index of Services and the quarterly measurement of Gross Domestic Product (GDP). The index is also used by HM Treasury and the Bank of England to help monitor inflation in the economy.

Prices of business-to-business services fell 0.7 per cent in the 12 months to the fourth quarter of 2009. This is based on a comparison of the change in the aggregate services producer price index on the net sector basis.

Figure 1 shows how the percentage change for the aggregate SPPI (net sector) compares with the producer price index (PPI) for all manufactured goods (net sector).

The aggregate SPPI results, on both gross and net sector bases, are shown in **Table 1**. In the fourth quarter of 2009, the aggregate SPPI (net sector) rose 0.2 per cent from the previous quarter.

Figure 2 depicts the aggregate SPPI annual percentage change for both the net and gross sector time series. The 12 month net aggregate SPPI fell 0.7 per cent in the fourth quarter of 2009, compared with a fall of 0.9 per cent in the third quarter of 2009.

The gross aggregate SPPI fell 0.1 per cent in the fourth quarter, compared with a similar fall in the previous quarter.

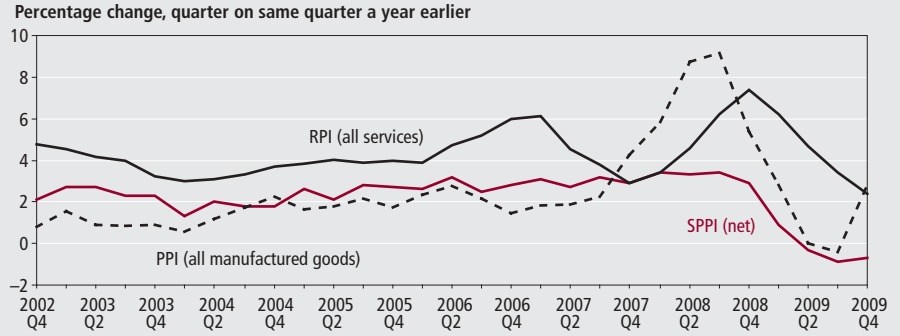
Industry-specific indices

Tables available on the ONS website contain the data for the 31 industries for which indices of services producer prices are currently available. The weights for each industry index are shown at both gross and net sector levels. The largest downward effect to the net sector aggregate SPPI over the past 12 months came from property rentals, largely due to current competitive market conditions. Property rentals also had the largest downward effect on the aggregate SPPI (net sector) quarter on quarter percentage change.

Other notable downward contributions came from freight forwarding and construction plant hire.

These downward movements were

Figure 1
Experimental aggregate SPPI compared with the PPI



Source: Office for National Statistics

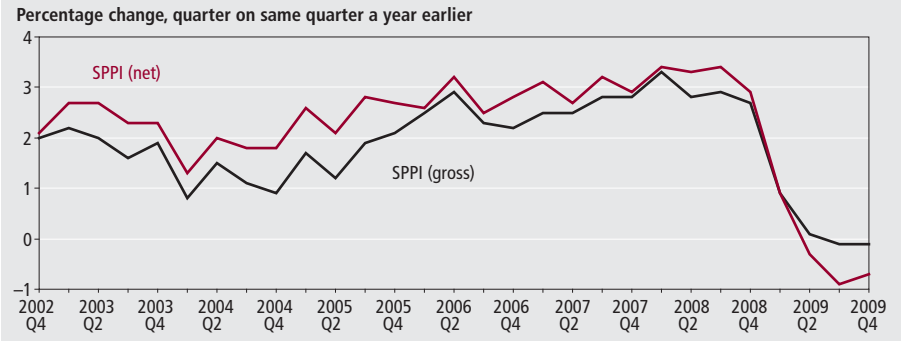
Office for National Statistics 56

Table 1
SPPI results

	SPPI quarterly index values, 2005=100		Percentage change, quarter on same quarter a year earlier	
	Gross sector	Net sector	Gross sector	Net sector
2000 Q1	91.6	89.3	*–0.9*	1.0
2000 Q2	91.4	89.4	*–0.1*	1.4
2000 Q3	91.5	89.7	*0.4*	1.8
2000 Q4	91.6	90.0	*0.4*	1.6
2001 Q1	92.1	90.8	*0.5*	1.7
2001 Q2	93.6	92.2	*2.4*	3.1
2001 Q3	94.0	92.3	*2.7*	2.9
2001 Q4	94.2	92.5	*2.8*	2.8
2002 Q1	94.3	92.5	*2.4*	1.9
2002 Q2	95.2	93.3	*1.7*	1.2
2002 Q3	95.9	93.9	*2.0*	1.7
2002 Q4	96.1	94.4	*2.0*	2.1
2003 Q1	96.4	95.0	*2.2*	2.7
2003 Q2	97.1	95.8	*2.0*	2.7
2003 Q3	97.4	96.1	*1.6*	2.3
2003 Q4	97.9	96.6	*1.9*	2.3
2004 Q1	97.2	96.2	*0.8*	1.3
2004 Q2	98.6	97.7	*1.5*	2.0
2004 Q3	98.5	97.8	*1.1*	1.8
2004 Q4	98.8	98.3	*0.9*	1.8
2005 Q1	98.9	98.7	*1.7*	2.6
2005 Q2	99.8	99.8	*1.2*	2.1
2005 Q3	100.4	100.5	*1.9*	2.8
2005 Q4	100.9	101.0	*2.1*	2.7
2006 Q1	101.4	101.3	*2.5*	2.6
2006 Q2	102.7	103.0	*2.9*	3.2
2006 Q3	102.7	103.0	*2.3*	2.5
2006 Q4	103.1	103.8	*2.2*	2.8
2007 Q1	103.9	104.4	*2.5*	3.1
2007 Q2	105.3	105.8	*2.5*	2.7
2007 Q3	105.6	106.3	*2.8*	3.2
2007 Q4	106.0	106.8	*2.8*	2.9
2008 Q1	107.3	107.9	*3.3*	3.4
2008 Q2	108.3	109.3	*2.8*	3.3
2008 Q3	108.7	109.9	*2.9*	3.4
2008 Q4	108.9	109.9	*2.7*	*2.9*
2009 Q1	108.3	108.9	*0.9*	*0.9*
2009 Q2	108.4	109.0	*0.1*	*–0.3*
2009 Q3	108.6	108.9	*–0.1*	*–0.9*
2009 Q4	108.8	109.1	*–0.1*	*–0.7*

Source: Office for National Statistics

Figure 2
Experimental aggregate SPPI



Source: Office for National Statistics

partially offset by upward contributions, especially from advertising placement, maintenance of motor vehicles and sewerage services as reported by the Office of Water Services (Ofwat).

Next results

The next set of SPPI results will be published on 26 May 2010 on the National Statistics website at www.statistics.gov.uk/sppi

Further information

All SPPI tables and articles on the methodology and impact of rebasing the SPPI and the re-development of an index for business telecommunications (together with more general information on the SPPI) are available at www.statistics.gov.uk/sppi.

A Summary Quality Report for the SPPI can be found at: www.ons.gov.uk/about-statistics/methodology-and-quality/quality/qual-info-economic-social-and-bus-stats/quality-reports-for-business-statistics/summary-quality-report-for-services-producer-price-indices.pdf

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TECHNICAL NOTE

1. The experimental Services Producer Price Indices (SPPI) replaced the former Corporate Services Price Index (CSPI). The SPPIs are primarily a suite of individual price indices that provide information on price change for a limited range of service industries. Each SPPI captures quarterly changes in the price received for services provided by UK businesses to other UK businesses and Government. These selected price indices are also aggregated together to create an aggregate SPPI with limited coverage. This aggregate SPPI is not representative of the whole service sector. It is not currently classified as a National Statistic.

2. Following the assessment of the SPPI as National Statistics in the autumn of 2009, the UK Statistics Authority report determined that the SPPI can be designated as National Statistics subject to the implementation of a number of requirements to improve compliance with the Code of Practice for Official Statistics. A link to the published report is attached:

   www.statisticsauthority.gov.uk/assessment/assessment-reports/assessment-report-25---assessment-of-services-producer-price-indices.pdf

   One of the requirements relates to how the top-level SPPI figure is described in publications. At present, there is potential for users to misinterpret the top-level SPPI figure as covering the whole service sector when in fact, the figure is an aggregate of the component SPPIs currently published in this Statistical Bulletin (currently 32 individual SPPIs covering approximately 52 per cent of the services sector). The UK Statistics Authority recommended that the partial coverage of the top-level SPPI should be made clearer in publications.

   As a result, the description of the top-level SPPI on the front page of this Statistical Bulletin has been amended to 'the aggregate of selected Services Producer Price Indices'. Throughout the rest of this bulletin it is referred to as 'aggregate SPPI'. Please note that this change is merely a change in the manner of presentation of the aggregate SPPI, and does not indicate a change to data sources, coverage, or methodology.

3. Unless otherwise stated, index numbers shown in the main text are on a net sector basis. These relate only to transactions between the corporate services sector and other sectors. Detailed tables available on the ONS website also contain gross sector indices which include transactions within the corporate services sector.

4. Indices relate to average prices per quarter. The full effect of a price change occurring within a quarter will only be reflected in the index for the following quarter. All index numbers exclude VAT and are not seasonally adjusted.

5. SPPI inflation is the percentage change in the net sector index for the latest quarter compared with the corresponding quarter in the previous year.

6. Grants from the European Commission helped ONS to begin developing the SPPI. Funding of approximately 600,000 euros was awarded between 2002 and 2005. This has now ceased.

7. A number of external data sources are currently used in the compilation of the SPPI, as follows:

   Investment Property Database (IPD) – property rental payments
   Office of Communications (Ofcom) – business telecommunications
   Office of Water Services (OFWAT) – sewerage services (prices are updated annually at quarter 2)
   Parcelforce – national post parcels (prices are updated annually at quarter 2)
   Office of Rail Regulation (ORR) – business rail fares (prices are updated annually at quarter 1)
   Bank of England (BOE) – financial intermediation (Banks)

8. Following a quality review by ONS in January 2007 a decision was made to withdraw the Banking SPPI from publication. As a result the index has been re-developed and was re-introduced in Q3 2008. Under the re-development, the quality of the data collection and processing has been improved and the number of products included in the index has increased. However, the new index is not regarded as proxy for all Financial Intermediation services within the Standard Industrial Classification (SIC) 65. It has not therefore been included in the top-level SPPI. The services measured are classified to SIC 65.12/1, and are published as a separate index known as the "SPPI for Financial Intermediation (Banks)".

9. SPPI policy is to show significant revisions, but to suppress minor changes to avoid unnecessary inconvenience to users. Indices for the most recent two quarters are regarded as provisional and can be changed as later data become available. The National Statistics website contains information on the SPPI revisions policy:

   www.statistics.gov.uk/about/methodology_by_theme/revisions_policies/default.asp

Key time series

1 National accounts aggregates

Last updated: 30/03/10

Seasonally adjusted

	£ million		Indices (2005 = 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
2004	1,202,956	1,070,951	95.9	95.9	98.4	97.9	97.7	98.0	98.2
2005	1,254,058	1,116,648	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2006	1,325,795	1,181,141	105.7	105.8	101.7	102.9	103.0	102.8	102.7
2007	1,398,882	1,245,735	111.5	111.6	105.4	105.5	105.7	105.7	105.6
2008	1,448,391	1,298,795	115.5	116.3	106.9	106.1	106.2	108.9	109.6
2009	1,395,872	1,260,660	111.3	112.9	101.3	100.8	101.3	110.4	111.5
2004 Q1	294,112	261,280	93.8	93.6	97.9	97.2	96.9	96.5	96.5
2004 Q2	299,142	265,977	95.4	95.3	98.0	97.8	97.6	97.6	97.6
2004 Q3	302,115	269,503	96.4	96.5	97.8	97.9	97.7	98.5	98.8
2004 Q4	307,587	274,191	98.1	98.2	100.0	98.7	98.5	99.5	99.7
2005 Q1	308,723	274,756	98.5	98.4	99.6	99.0	99.0	99.5	99.4
2005 Q2	313,479	279,258	100.0	100.0	101.1	99.7	99.7	100.3	100.3
2005 Q3	313,378	278,669	100.0	99.8	99.2	100.3	100.3	99.6	99.6
2005 Q4	318,478	283,965	101.6	101.7	100.0	101.0	101.0	100.6	100.7
2006 Q1	326,085	291,002	104.0	104.2	101.2	102.1	102.2	101.9	102.0
2006 Q2	327,836	291,886	104.6	104.6	101.5	102.5	102.6	102.0	101.9
2006 Q3	333,542	297,046	106.4	106.4	101.8	103.0	103.1	103.3	103.2
2006 Q4	338,332	301,207	107.9	107.9	102.3	103.8	104.0	103.9	103.8
2007 Q1	344,238	306,154	109.8	109.7	103.6	104.6	104.7	105.0	104.7
2007 Q2	348,010	309,585	111.0	110.9	104.7	105.2	105.4	105.5	105.2
2007 Q3	351,635	313,159	112.2	112.2	105.1	105.8	106.0	106.0	105.8
2007 Q4	354,999	316,837	113.2	113.5	108.0	106.3	106.6	106.5	106.5
2008 Q1	363,438	324,362	115.9	116.2	109.6	107.1	107.2	108.2	108.4
2008 Q2	363,981	324,596	116.1	116.3	107.9	107.0	107.1	108.5	108.6
2008 Q3	361,706	325,359	115.4	116.5	106.3	106.0	106.1	108.8	109.8
2008 Q4	359,266	324,478	114.6	116.2	103.9	104.1	104.2	110.1	111.6
2009 Q1	348,525	315,778	111.2	113.1	102.1	101.4	101.6	109.6	111.3
2009 Q2	345,463	312,335	110.2	111.9	100.3	100.7	101.1	109.4	110.7
2009 Q3	348,982	314,688	111.3	112.7	100.4	100.4	100.9	110.8	111.7
2009 Q4	352,902	317,859	112.6	113.9	102.4	100.9	101.3	111.6	112.4

Percentage change, quarter on corresponding quarter of previous year

			IHYO	ABML[4]	YBGO[4]	IHYR	ABMM[4]	IHYU	ABML/ABMM[4]
2004 Q1	*5.7*	*5.4*	*5.7*	*5.4*	*3.0*	*3.6*	*3.4*	*2.0*	*1.9*
2004 Q2	*5.6*	*5.3*	*5.6*	*5.3*	*3.4*	*3.2*	*3.2*	*2.3*	*2.1*
2004 Q3	*5.2*	*5.4*	*5.2*	*5.4*	*2.5*	*2.6*	*2.6*	*2.6*	*2.8*
2004 Q4	*5.7*	*5.9*	*5.7*	*5.9*	*3.0*	*2.4*	*2.4*	*3.1*	*3.4*
2005 Q1	*5.0*	*5.2*	*5.0*	*5.2*	*1.8*	*1.8*	*2.1*	*3.1*	*3.0*
2005 Q2	*4.8*	*5.0*	*4.8*	*5.0*	*3.2*	*2.0*	*2.2*	*2.8*	*2.7*
2005 Q3	*3.7*	*3.4*	*3.7*	*3.4*	*1.4*	*2.5*	*2.6*	*1.2*	*0.7*
2005 Q4	*3.5*	*3.6*	*3.5*	*3.6*	*0.0*	*2.4*	*2.6*	*1.1*	*1.0*
2006 Q1	*5.6*	*5.9*	*5.6*	*5.9*	*1.6*	*3.2*	*3.2*	*2.4*	*2.6*
2006 Q2	*4.6*	*4.5*	*4.6*	*4.5*	*0.4*	*2.8*	*2.9*	*1.7*	*1.5*
2006 Q3	*6.4*	*6.6*	*6.4*	*6.6*	*2.6*	*2.7*	*2.9*	*3.7*	*3.6*
2006 Q4	*6.2*	*6.1*	*6.2*	*6.1*	*2.3*	*2.8*	*2.9*	*3.3*	*3.1*
2007 Q1	*5.6*	*5.2*	*5.6*	*5.2*	*2.3*	*2.4*	*2.5*	*3.1*	*2.7*
2007 Q2	*6.2*	*6.1*	*6.2*	*6.1*	*3.1*	*2.7*	*2.7*	*3.4*	*3.3*
2007 Q3	*5.4*	*5.4*	*5.4*	*5.4*	*3.3*	*2.7*	*2.8*	*2.6*	*2.5*
2007 Q4	*4.9*	*5.2*	*4.9*	*5.2*	*5.6*	*2.4*	*2.6*	*2.5*	*2.6*
2008 Q1	*5.6*	*5.9*	*5.6*	*5.9*	*5.8*	*2.4*	*2.4*	*3.1*	*3.5*
2008 Q2	*4.6*	*4.8*	*4.6*	*4.8*	*3.1*	*1.7*	*1.6*	*2.9*	*3.2*
2008 Q3	*2.9*	*3.9*	*2.9*	*3.9*	*1.0*	*0.2*	*0.1*	*2.6*	*3.8*
2008 Q4	*1.2*	*2.4*	*1.2*	*2.4*	*–3.8*	*–2.1*	*–2.3*	*3.4*	*4.8*
2009 Q1	*–4.1*	*–2.6*	*–4.1*	*–2.6*	*–6.9*	*–5.3*	*–5.2*	*1.3*	*2.7*
2009 Q2	*–5.1*	*–3.8*	*–5.1*	*–3.8*	*–7.1*	*–5.9*	*–5.6*	*0.9*	*1.9*
2009 Q3	*–3.5*	*–3.3*	*–3.5*	*–3.3*	*–5.5*	*–5.3*	*–4.9*	*1.9*	*1.7*
2009 Q4	*–1.8*	*–2.0*	*–1.8*	*–2.0*	*–1.4*	*–3.1*	*–2.7*	*1.4*	*0.7*

Notes:

Source: Office for National Statistics

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.

2 Gross domestic product: by category of expenditure

Last updated: 30/03/10

£ million, chained volume measures, reference year 2005, seasonally adjusted

	Domestic expenditure on goods and services at market prices											
	Final consumption expenditure			Gross capital formation								
	Households	Non-profit institutions[1]	General government	Gross fixed capital formation	Changes in inventories[2]	Acquisitions less disposals of valuables	Total	Exports of goods and services	Gross final expenditure	*less* imports of goods and services	Statistical discrepancy (expenditure)	Gross domestic at product market prices
	ABJR	HAYO	NMRY	NPQT	CAFU	NPJR	YBIM	IKBK	ABMG	IKBL	GIXS	ABMI
2004	766,856	30,827	262,917	204,756	4,843	–39	1,270,173	306,582	1,576,497	348,894	0	1,227,387
2005	784,140	30,824	268,088	209,758	4,472	–377	1,296,905	330,794	1,627,699	373,641	0	1,254,058
2006	795,595	31,868	272,271	223,305	4,789	304	1,328,132	368,076	1,696,207	406,374	0	1,289,833
2007	815,157	30,040	275,488	240,613	6,646	562	1,368,506	357,677	1,726,183	403,341	0	1,322,842
2008	822,086	30,832	282,681	232,202	866	1,295	1,369,962	361,535	1,731,497	401,137	–271	1,330,088
2009	795,847	29,628	288,819	197,592	–15,185	1,233	1,297,934	323,256	1,621,190	353,383	–3,161	1,264,646
2004 Q1	189,235	7,875	65,615	50,706	515	–113	314,855	74,389	389,121	84,284	0	304,784
2004 Q2	191,672	7,737	65,323	51,680	294	65	316,727	76,058	392,705	86,139	0	306,510
2004 Q3	192,642	7,664	65,746	51,351	953	8	317,863	76,895	394,700	87,840	0	306,806
2004 Q4	193,307	7,551	66,233	51,019	3,081	1	320,728	79,240	399,971	90,631	0	309,287
2005 Q1	194,294	7,745	66,418	51,092	2,978	–45	322,029	77,762	399,757	89,398	0	310,313
2005 Q2	195,610	7,676	66,986	51,273	2,025	90	323,588	80,830	404,405	91,846	0	312,550
2005 Q3	196,450	7,687	67,265	53,964	–251	–292	325,046	84,250	409,304	94,834	0	314,490
2005 Q4	197,786	7,716	67,419	53,429	–280	–130	326,242	87,952	414,233	97,563	0	316,705
2006 Q1	197,278	7,941	67,862	53,372	2,346	106	328,906	95,835	424,741	104,616	0	320,125
2006 Q2	199,392	8,025	67,692	54,499	63	241	329,912	97,932	427,844	106,555	0	321,289
2006 Q3	198,692	8,012	68,232	56,780	1,679	–30	333,365	86,854	420,220	97,364	0	322,855
2006 Q4	200,233	7,890	68,485	58,654	701	–13	335,949	87,455	423,402	97,839	0	325,564
2007 Q1	202,299	7,447	68,394	59,659	928	76	338,804	88,279	427,083	99,211	0	327,872
2007 Q2	203,492	7,413	68,650	59,620	–12	348	339,510	88,650	428,160	98,193	0	329,967
2007 Q3	204,321	7,471	69,165	59,777	3,130	45	343,909	90,348	434,256	102,647	0	331,609
2007 Q4	205,045	7,709	69,279	61,557	2,600	93	346,283	90,400	436,684	103,290	0	333,394
2008 Q1	206,823	7,693	69,853	59,370	3,261	212	347,212	91,462	438,674	102,979	86	335,781
2008 Q2	206,278	7,789	70,423	59,512	1,529	436	345,968	91,727	437,696	102,201	17	335,511
2008 Q3	205,676	7,723	70,809	57,362	378	366	342,315	91,219	433,534	101,037	–104	332,393
2008 Q4	203,309	7,627	71,596	55,958	–4,302	281	334,467	87,127	421,593	94,920	–270	326,403
2009 Q1	200,058	7,556	71,304	51,855	–4,757	418	326,434	80,888	407,322	88,742	–681	317,899
2009 Q2	198,344	7,470	71,963	48,119	–2,949	244	323,191	79,466	402,657	86,168	–773	315,716
2009 Q3	198,359	7,354	72,402	49,475	–4,883	217	322,924	79,938	402,862	87,201	–835	314,826
2009 Q4	199,086	7,248	73,150	48,143	–2,596	354	325,385	82,964	408,349	91,272	–872	316,205

Percentage change, quarter on corresponding quarter of previous year

										IHYR
2004 Q1	*3.4*	*1.6*	*4.7*	*3.8*		*4.4*	*0.2*	*3.5*	*3.3*	*3.6*
2004 Q2	*3.3*	*0.7*	*3.2*	*7.4*		*3.9*	*5.3*	*4.2*	*7.6*	*3.2*
2004 Q3	*3.2*	*–0.6*	*2.6*	*7.1*		*3.1*	*6.8*	*3.8*	*8.5*	*2.6*
2004 Q4	*3.0*	*–2.1*	*1.7*	*2.3*		*2.7*	*7.9*	*3.7*	*8.4*	*2.4*
2005 Q1	*2.7*	*–1.7*	*1.2*	*0.8*		*2.3*	*4.5*	*2.7*	*6.1*	*1.8*
2005 Q2	*2.1*	*–0.8*	*2.5*	*–0.8*		*2.2*	*6.3*	*3.0*	*6.6*	*2.0*
2005 Q3	*2.0*	*0.3*	*2.3*	*5.1*		*2.3*	*9.6*	*3.7*	*8.0*	*2.5*
2005 Q4	*2.3*	*2.2*	*1.8*	*4.7*		*1.7*	*11.0*	*3.6*	*7.6*	*2.4*
2006 Q1	*1.5*	*2.5*	*2.2*	*4.5*		*2.1*	*23.2*	*6.2*	*17.0*	*3.2*
2006 Q2	*1.9*	*4.5*	*1.1*	*6.3*		*2.0*	*21.2*	*5.8*	*16.0*	*2.8*
2006 Q3	*1.1*	*4.2*	*1.4*	*5.2*		*2.6*	*3.1*	*2.7*	*2.7*	*2.7*
2006 Q4	*1.2*	*2.3*	*1.6*	*9.8*		*3.0*	*–0.6*	*2.2*	*0.3*	*2.8*
2007 Q1	*2.5*	*–6.2*	*0.8*	*11.8*		*3.0*	*–7.9*	*0.6*	*–5.2*	*2.4*
2007 Q2	*2.1*	*–7.6*	*1.4*	*9.4*		*2.9*	*–9.5*	*0.1*	*–7.8*	*2.7*
2007 Q3	*2.8*	*–6.8*	*1.4*	*5.3*		*3.2*	*4.0*	*3.3*	*5.4*	*2.7*
2007 Q4	*2.4*	*–2.3*	*1.2*	*4.9*		*3.1*	*3.4*	*3.1*	*5.6*	*2.4*
2008 Q1	*2.2*	*3.3*	*2.1*	*–0.5*		*2.5*	*3.6*	*2.7*	*3.8*	*2.4*
2008 Q2	*1.4*	*5.1*	*2.6*	*–0.2*		*1.9*	*3.5*	*2.2*	*4.1*	*1.7*
2008 Q3	*0.7*	*3.4*	*2.4*	*–4.0*		*–0.5*	*1.0*	*–0.2*	*–1.6*	*0.2*
2008 Q4	*–0.8*	*–1.1*	*3.3*	*–9.1*		*–3.4*	*–3.6*	*–3.5*	*–8.1*	*–2.1*
2009 Q1	*–3.3*	*–1.8*	*2.1*	*–12.7*		*–6.0*	*–11.6*	*–7.1*	*–13.8*	*–5.3*
2009 Q2	*–3.8*	*–4.1*	*2.2*	*–19.1*		*–6.6*	*–13.4*	*–8.0*	*–15.7*	*–5.9*
2009 Q3	*–3.6*	*–4.8*	*2.2*	*–13.7*		*–5.7*	*–12.4*	*–7.1*	*–13.7*	*–5.3*
2009 Q4	*–2.1*	*–5.0*	*2.2*	*–14.0*		*–2.7*	*–4.8*	*–3.1*	*–3.8*	*–3.1*

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: 17/03/10

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
Nov–Jan 2008	48,874	31,055	29,432	1,622	17,820	*63.5*	*60.2*	*5.2*	*36.5*
Nov–Jan 2009	49,260	31,408	29,341	2,066	17,852	*63.8*	*59.6*	*6.6*	*36.2*
Feb–Apr 2009	49,354	31,358	29,078	2,280	17,996	*63.5*	*58.9*	*7.3*	*36.5*
May–Jul 2009	49,450	31,342	28,876	2,467	18,107	*63.4*	*58.4*	*7.9*	*36.6*
Aug–Oct 2009	49,548	31,396	28,914	2,482	18,152	*63.4*	*58.4*	*7.9*	*36.6*
Nov–Jan 2010	49,646	31,309	28,860	2,449	18,338	*63.1*	*58.1*	*7.8*	*36.9*
Male	MGSM	MGSG	MGSA	MGSD	MGSJ	MGWH	MGSS	MGSY	YBTD
Nov–Jan 2008	23,777	16,846	15,908	939	6,930	*70.9*	*66.9*	*5.6*	*29.1*
Nov–Jan 2009	23,991	17,040	15,796	1,244	6,951	*71.0*	*65.8*	*7.3*	*29.0*
Feb–Apr 2009	24,042	17,014	15,626	1,388	7,027	*70.8*	*65.0*	*8.2*	*29.2*
May–Jul 2009	24,093	16,973	15,451	1,523	7,120	*70.4*	*64.1*	*9.0*	*29.6*
Aug–Oct 2009	24,148	16,944	15,413	1,531	7,203	*70.2*	*63.8*	*9.0*	*29.8*
Nov–Jan 2010	24,202	16,863	15,352	1,511	7,339	*69.7*	*63.4*	*9.0*	*30.3*
Female	MGSN	MGSH	MGSB	MGSE	MGSK	MGWI	MGST	MGSZ	YBTE
Nov–Jan 2008	25,097	14,208	13,525	684	10,889	*56.6*	*53.9*	*4.8*	*43.4*
Nov–Jan 2009	25,268	14,367	13,546	822	10,901	*56.9*	*53.6*	*5.7*	*43.1*
Feb–Apr 2009	25,313	14,344	13,452	892	10,969	*56.7*	*53.1*	*6.2*	*43.3*
May–Jul 2009	25,357	14,369	13,425	944	10,988	*56.7*	*52.9*	*6.6*	*43.3*
Aug–Oct 2009	25,400	14,452	13,501	951	10,949	*56.9*	*53.2*	*6.6*	*43.1*
Nov–Jan 2010	25,444	14,446	13,508	938	10,998	*56.8*	*53.1*	*6.5*	*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
Nov–Jan 2008	37,643	29,762	28,158	1,604	7,881	*79.1*	*74.8*	*5.4*	*20.9*
Nov–Jan 2009	37,821	30,035	28,001	2,034	7,786	*79.4*	*74.0*	*6.8*	*20.6*
Feb–Apr 2009	37,868	29,980	27,732	2,248	7,888	*79.2*	*73.2*	*7.5*	*20.8*
May–Jul 2009	37,916	29,926	27,493	2,433	7,990	*78.9*	*72.5*	*8.1*	*21.1*
Aug–Oct 2009	37,961	29,953	27,509	2,444	8,009	*78.9*	*72.5*	*8.2*	*21.1*
Nov–Jan 2010	38,006	29,849	27,441	2,408	8,157	*78.5*	*72.2*	*8.1*	*21.5*
Male	YBTG	YBSL	YBSF	YBSI	YBSO	MGSP	MGSV	YBTJ	YBTM
Nov–Jan 2008	19,619	16,413	15,484	930	3,205	*83.7*	*78.9*	*5.7*	*16.3*
Nov–Jan 2009	19,746	16,584	15,352	1,232	3,162	*84.0*	*77.7*	*7.4*	*16.0*
Feb–Apr 2009	19,774	16,570	15,194	1,376	3,205	*83.8*	*76.8*	*8.3*	*16.2*
May–Jul 2009	19,803	16,518	15,013	1,505	3,285	*83.4*	*75.8*	*9.1*	*16.6*
Aug–Oct 2009	19,830	16,471	14,959	1,512	3,359	*83.1*	*75.4*	*9.2*	*16.9*
Nov–Jan 2010	19,858	16,383	14,890	1,493	3,474	*82.5*	*75.0*	*9.1*	*17.5*
Female	YBTH	YBSM	YBSG	YBSJ	YBSP	MGSQ	MGSW	YBTK	YBTN
Nov–Jan 2008	18,025	13,349	12,674	675	4,676	*74.1*	*70.3*	*5.1*	*25.9*
Nov–Jan 2009	18,075	13,451	12,650	802	4,624	*74.4*	*70.0*	*6.0*	*25.6*
Feb–Apr 2009	18,094	13,410	12,538	872	4,684	*74.1*	*69.3*	*6.5*	*25.9*
May–Jul 2009	18,113	13,408	12,481	928	4,705	*74.0*	*68.9*	*6.9*	*26.0*
Aug–Oct 2009	18,131	13,481	12,550	932	4,650	*74.4*	*69.2*	*6.9*	*25.6*
Nov–Jan 2010	18,149	13,466	12,550	916	4,683	*74.2*	*69.2*	*6.8*	*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: 23/03/10

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	EL2S	EAD6	CZBH	CDKQ	CBZX	PLLU[3]	PLLV[3,4]	RNNK[3,4]	RNNQ[3,4]
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	16.0	16.9
2008 Nov	4.1	4.3	3.9	3.0	3.9	3.9	5.0	5.0	8.1	14.1
2008 Dec	3.1	4.6	4.1	0.9	2.8	3.9	4.6	5.0	3.2	12.6
2009 Jan	3.0	4.5	4.1	0.1	2.4	3.4	3.5	4.0	1.7	10.8
2009 Feb	3.2	4.6	4.2	0.0	2.5	3.5	3.0	3.7	0.8	8.9
2009 Mar	2.9	4.3	3.9	–0.4	2.2	3.2	2.0	3.2	–0.4	7.5
2009 Apr	2.3	3.8	3.4	–1.2	1.7	2.7	1.3	2.5	–5.8	2.6
2009 May	2.2	3.6	3.3	–1.1	1.6	2.6	–0.3	1.2	–8.8	0.2
2009 Jun	1.8	3.1	2.9	–1.6	1.0	1.9	–1.0	0.3	–12.0	–2.9
2009 Jul	1.8	3.1	2.8	–1.4	1.2	2.1	–1.3	0.2	–12.2	–3.4
2009 Aug	1.6	2.9	2.7	–1.3	1.4	2.3	–0.3	0.8	–7.7	–2.1
2009 Sep	1.1	2.2	2.1	–1.4	1.3	2.0	0.4	1.3	–6.2	–1.2
2009 Oct	1.5	2.6	2.5	–0.8	1.9	2.8	1.8	2.1	0.5	0.9
2009 Nov	1.9	3.0	2.9	0.3	2.7	3.5	2.9	2.0	4.2	0.8
2009 Dec	2.9	2.8	2.6	2.4	3.8	3.8	3.5	2.5	7.4	1.2
2010 Jan	3.5	1.9	1.7	3.7	4.6	3.3	3.8	2.6	7.7	1.4
2010 Feb	3.0	1.4	1.2	3.7	4.2	2.9	4.1	2.9	6.9	1.9

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/04_10/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 weekly earnings – total pay	M
2.16A	Average weekly earnings – bonus pay	M
2.17	Average weekly earnings – regular pay	M
2.18	Productivity and unit wage costs	M

Weblink: www.statistics.gov.uk/elmr/04_10/data_page.asp

2.19	Regional labour market summary	M
2.20	International comparisons	M
2.21	Labour disputes	M
2.22	Vacancies by size of enterprise	M
2.23	Vacancies by industry	M
2.24	Redundancies: levels and rates	M
2.25	Redundancies: by industry	Q
2.27	Employment levels by country of birth and nationality	M
2.28	Working age employment rates by country of birth and nationality	Q
2.29	Lone parent claimants of Jobseeker's Allowance by age of youngest child	M
2.30	Key out of work benefits	M
2.31	Production industry employee jobs	M
2.32	Public sector employment by industry	Q

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

Weblink: www.statistics.gov.uk/elmr/04_10/data_page.asp

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
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 and unemployment	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

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01633 456961
rpi@ons.gsi.gov.uk

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National Statistics Customer Contact Centre
0845 601 3034
info@statistics.gsi.gov.uk

Skills and Education Network
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Department for Children, Schools and Families Public Enquiry Unit
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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

2010 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)

2009 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

Business Enterprise Research and Development

2008 edition

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

Share Ownership

2008 edition

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

United Kingdom Balance of Payments (Pink Book)

2009 edition. Palgrave Macmillan, ISBN 978-0-230-57610-0. Price £52.00.

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

United Kingdom National Accounts (Blue Book)

2009 edition. Palgrave Macmillan, ISBN 978-0-230-57611-7. Price £52.00.

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

Statistical Bulletins

- 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

2009 quarter 4

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

United Kingdom Economic Accounts

2009 quarter 4. Palgrave Macmillan, ISBN 978-0-230-23488-8. Price £37.50.

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

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

2009 quarter 4

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

Statistical Bulletins

- 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

March 2010. Palgrave Macmillan, ISBN 978-0-230-23602-8. Price £50.00.

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

Focus on Consumer Price Indices

February 2010

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

Monthly review of external trade statistics (MM24)

January 2010

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

Producer Price Indices (MM22)

February 2010

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

Statistical Bulletins

- 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

2009 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

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Labour Force Survey: Interim reweighting and annual review of seasonal adjustment, 2009
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Mavis Anagboso and Yonathan van den Brink

Development of construction statistics
Tony Crook and Graham Sharp

Patterns of pay: results of the Annual Survey of Hours and Earnings 1997 to 2009
Ceri Holdsworth

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List is provisional and subject to change.

MAY 2010

Comparing the last 3 UK recessions
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Financial statistics for policy – an update
Household savings ratio and consumption
The UK's Independent Investment Position
Regional Economic Indicators