

Economic & Labour Market Review

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The Director of ONS is also the National Statistician.

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In brief

Independence – ONS becomes a non-ministerial government department

On 1 April 2008, the Office for National Statistics (ONS) celebrated its newly independent status, following the biggest shake-up of the statistical system for more than half a century. At the highest level, ONS is no longer answerable to a minister in the Treasury but to the new UK Statistics Authority, chaired by Sir Michael Scholar, who will report directly to Parliament.

The National Statistician, Karen Dunnell, has become Chief Executive of the Authority. She sits on the Authority's board alongside Deputy Chairs Lord David Rowe-Beddoe (responsible for the governance of ONS) and Professor Adrian Smith (responsible for promoting and safeguarding official statistics across the UK) and fellow members Sir Alan Langlands, Professor Stephen Nickell, Moira Gibb, Professor David Rhind, Partha Dasgupta and Steve Newman.

One of the most immediate and noticeable changes to take effect on 1 April was the move of the General Register Office and National Health Service Central Register out of ONS to the Identity and Passport Service and NHS Information Centre, respectively. Their work requires ministerial input so does not sit well with the non-ministerial status of the UK Statistics Authority.

Another major change is to the way statistics will be assessed and quality assured. The Authority will conduct assessments on statistical outputs against its own Code of Practice, and then determine whether to designate them National Statistics. The process will be carried out by an assessment team working directly to the Authority, independent of statistical producers. The team will be led by a Head of Assessment who, once appointed, will also sit on the board. Current National Statistics will retain their status, and will be reassessed in due course.

To further underline statistical independence, privileged access to statistics before publication is likely to be considerably reduced for ministers. Fewer people will be granted access to figures and all privileged access will be restricted to a substantially reduced period before release. The Government has proposed a limit

of 24 hours.

These changes present an opportunity to raise the profile and credibility of ONS, and the Government Statistical Service as a whole, with the public, the media and politicians, as well as increasing public trust in official statistics.

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CPI and the Budget

On 12 March 2008, 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 summarised the changes in duty rates, and provided estimates of their contributions to the consumer prices index (CPI) and retail prices index (RPI) inflation rates. It also compared this with the measures announced in the previous year's Budget.

In the article, it is estimated that changes to duties announced in the March 2008 Budget will in total add 0.25 percentage points to the one-month change in the CPI, if duty changes are passed on immediately and in full to consumers. This total breaks down as follows (with date of implementation):

- tobacco: +0.05 per cent (12 March)
- alcohol: +0.12 per cent (17 March), and
- road fuel: +0.08 per cent (1 October)

This total is greater than the estimated increase from the measures that were implemented following their announcement in the March 2007 Budget. Once last year's tax changes are taken into account, the net effect of the two most recent Budgets on the CPI annual inflation rate is estimated to be approximately +0.06 percentage points.

The 2007 Budget measures are now fully reflected in the CPI; the effects of the 2008 Budget will feed into the index over several months, including the delayed increase in road fuel duties from 1 October 2008.

For the RPI, it is estimated that this year's Budget will add 0.29 percentage points to the one-month change. The effect of changes in excise duties for alcohol, tobacco and road fuel are similar to those in the CPI; there was also a +0.02 per cent

contribution from vehicle excise duty (13 March) which is not included in the CPI. This total is greater than the estimated increase arising from the 2007 Budget. Overall, the net effect of the two most recent Budgets on the RPI annual rate is estimated to be approximately +0.07 percentage points.

More information

✉ www.statistics.gov.uk/cci/article.asp?id=1956

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Improvements to DWP published Jobseeker's Allowance statistics

Following a review by the Department for Work and Pensions (DWP) of the methodology for compiling DWP Jobseeker's Allowance (JSA) statistics, improvements were identified to the way in which data were processed within DWP.

The improved methodology involved:

- using individual level claimant count data, and additional DWP administrative data, to set claim end dates for cases previously recorded as 'live' within DWP JSA statistics that were not 'live', and
- using individual level claimant count data to identify cases that should be recorded as 'live' JSA cases

As DWP data are published on a quarterly basis, these improvements affected all quarterly estimates of the number of JSA claimants, going back to the beginning of the series in August 1999. The effect was to reduce the number of recorded claimants by, on average, 3 per cent.

DWP JSA statistics now follow the trend in the ONS claimant count statistics very closely. Existing differences are due to known defined reasons and stem from five main differences in the way in which the counts are calculated:

- the headline claimant count covers UK, whereas DWP covers only Great Britain
- the headline claimant count measures 'live' claimants on the second Thursday of the month, whereas DWP JSA

measures 'live' claimants on the last day of the quarter

- the headline claimant count includes claims which are processed clerically, whereas DWP only include computer processed claims
- the headline claimant count statistics are seasonally adjusted whereas the DWP statistics are not
- ONS claimant count statistics allow approximately three weeks for late processed claims to be input into the DWP computer system whereas DWP JSA statistics allow approximately three months

The full version of the document 'Improvements to DWP published Jobseekers Allowance statistics' can be found on the DWP website

More information

✉ www.dwp.gov.uk/asd/asd1/improvements_to_JSA.pdf

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ONS at the Royal Economics Society Conference

Economists from the Office for National Statistics (ONS) contributed to a special session at the Royal Economics Society conference at Warwick University on 17–19 March, with a presentation on future changes in National Accounts to recognise the increasing importance of innovation and the knowledge economy. The session, organised by Professor Jonathan Haskel, from Queen Mary, University of London, benefited from contributions from leading academics and various government departments and agencies.

Fernando Galindo-Rueda of ONS discussed recent and planned improvements in the estimation of investment in lasting, intangible knowledge assets. These include software – where recent methodological improvements have led to significant GDP revisions – and the less well-known entertainment and artistic originals, which embody knowledge produced by sections of the so-called 'creative economy'. The presentation concluded with an overview of development plans for new R&D satellite accounts, in line with a recent international agreement to treat R&D as investment, building a new type of scientific knowledge

asset. A preliminary analysis of the impact of this decision was provided in article published in the December 2007 edition of *Economic & Labour Market Review*.

Other speakers in the session covered developments in international thinking and the treatment of innovation in economic analysis. Professor Paul Stoneman of Warwick Business School outlined new work on 'soft innovation', related less to technology and product functionality than to user perceptions and aesthetics. Professor Jonathan Haskel summarised recent work to estimate 'intangible investment' in the UK, and the new insights it provides on economic growth and productivity. Carol Corrado of the Conference Board (recently of the US Federal Reserve Bank) drew out some of the implications of this approach, as developed in the US, especially the distributional effects of treating certain labour intensive services as activities which create assets for the future.

As discussant, Simon Price of the Bank of England – speaking in a personal capacity – encouraged the presenters to provide a solid conceptual and quantitative basis for the analysis of the knowledge economy. He also challenged those involved in this work to develop stronger criteria to distinguish between innovation investments which help individual firms to compete in their markets, and those which genuinely add to productive capacity in the economy as a whole.

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Correction

There was an error in one of the charts in the article 'Regional gross value added' in the March edition of *Economic & Labour Market Review*. On page 46, in Figure 3, 'GVA per head: by NUTS1 region', the index for Scotland in 1995 should be 100, not 70 as shown.

UPDATES

Updates to statistics on www.statistics.gov.uk

10 March

Index of production

Manufacturing: steady in last three months
www.statistics.gov.uk/cci/nugget.asp?id=198

Producer prices

Factory gate inflation remains at 5.7% in February
www.statistics.gov.uk/cci/nugget.asp?id=248

12 March

UK trade

Deficit remains at £4.1 billion in January 2008
www.statistics.gov.uk/cci/nugget.asp?id=199

17 March

Measuring inflation

Changes to CPI and RPI shopping baskets in 2008
www.statistics.gov.uk/cci/nugget.asp?id=318

18 March

Inflation

February: CPI up to 2.5%; RPI up to 4.1%
www.statistics.gov.uk/cci/nugget.asp?id=19

19 March

Average earnings

Pay growth steady in the year to January 2008
www.statistics.gov.uk/cci/nugget.asp?id=10

Employment

Rate increases to 74.8% in three months to January
www.statistics.gov.uk/cci/nugget.asp?id=12

Public sector employment

Employment increases in Q4 2007
www.statistics.gov.uk/cci/nugget.asp?id=407

20 March

Public sector

February: £2.0 billion current budget surplus
www.statistics.gov.uk/cci/nugget.asp?id=206

Retail sales

Food sales drive positive growth in three months to February
www.statistics.gov.uk/cci/nugget.asp?id=256

27 March

Business investment

1.8% rise in Q4 2007
www.statistics.gov.uk/cci/nugget.asp?id=258

Investment

Institutional net investment £11.3 billion in Q4 2007
www.statistics.gov.uk/cci/nugget.asp?id=396

28 March

Balance of payments

2007 Q4: UK deficit narrows
www.statistics.gov.uk/cci/nugget.asp?id=194

GDP growth

Economy rose by 0.6% in Q4 2007
www.statistics.gov.uk/cci/nugget.asp?id=192

31 March

Index of services

0.5% three-monthly rise into January
www.statistics.gov.uk/cci/nugget.asp?id=558

Productivity

Productivity growth decreases in Q4 2007
www.statistics.gov.uk/cci/nugget.asp?id=133

UK Government debt and deficit

Deficit 2.8% of GDP
www.statistics.gov.uk/cci/nugget.asp?id=277

1 April

Corporate profitability

15.5% in Q4 2007
www.statistics.gov.uk/cci/nugget.asp?id=196

FORTHCOMING RELEASES

Future statistical releases on www.statistics.gov.uk

7 April

MQ5: investment by insurance companies, pension funds and trusts – Q4 2007

9 April

Index of production – February 2008

10 April

New construction orders – February 2008**UK trade – February 2008**

14 April

Producer prices – March 2008

15 April

Consumer price indices – March 2008

16 April

Labour market statistics – April 2008**MM19: Aerospace and electronics cost indices – January 2008**

17 April

Digest of engineering turnover and orders – February 2008

18 April

Public sector finances – March 2008

21 April

Focus on consumer price indices – March 2008

22 April

MM22: Producer prices – March 2008

23 April

Average weekly earnings – April 2008**Public sector finances: supplementary (quarterly) data**

24 April

Retail sales – March 2008**SDM28: Retail sales – March 2008**

25 April

Gross domestic product (GDP) – preliminary estimate Q1 2008**Index of services – February 2008**

28 April

MM17: Price Index Numbers for Current Cost Accounting (PINCCA) – March 2008

30 April

Distributive and service trades – February 2008

Economic review

April 2008

Anis Chowdhury

Office for National Statistics

SUMMARY

GDP output continued to grow fairly robustly in 2007 quarter four, similar to the rate in previous quarter. Growth continued to be driven by the service sector and offset by flat output expansion in the manufacturing sector. On the expenditure side, household spending and business investment weakened in quarter four in comparison with quarter three. The current account deficit narrowed in quarter four; the goods trade deficit was unchanged in quarter four and contributed negatively to growth. The labour market continues to be buoyant in quarter four but average earnings remain relatively subdued. The public sector finance position deteriorated in February 2008. Consumer price inflation accelerated in February and was above the Government's inflation target. Producer output price inflation was unchanged in February but continued to exhibit inflationary tendencies; input price inflation accelerated in February 2008.

GROSS DOMESTIC PRODUCT

Fourth quarter growth of 0.6 per cent

GDP growth for the fourth quarter of 2007 is estimated to have grown fairly strongly, similar to the rate in the previous quarter but a modest easing from growth in the second quarter of 2007. GDP growth in the latest quarter was 0.6 per cent, unchanged from the previous quarter but down from 0.8 per cent growth in the second quarter. The annual rate of growth also slowed, reaching 2.8 per cent,

down from 3.1 per cent in quarter three (Figure 1).

The growth rate in the UK economy in quarter four continued to be driven by strong although slower service sector output compared with the previous quarter. This was offset by a marginal pick up in industrial production growth – although this sector continued to display weakness for the second successive quarter. Within total production, growth was driven by a sharp acceleration in the output of the electricity, gas and water supply industries. Mining and quarrying

(including oil and gas) output contracted slightly. Manufacturing output was flat. The construction sector continued to grow strongly.

OTHER MAJOR ECONOMIES

Global growth weakens in quarter four

Data for 2007 quarter four are now available for most major OECD countries. Data for quarter four reported a mixed but a broadly weakening picture of global growth, reversing the generally strong picture of growth recorded in the previous quarter.

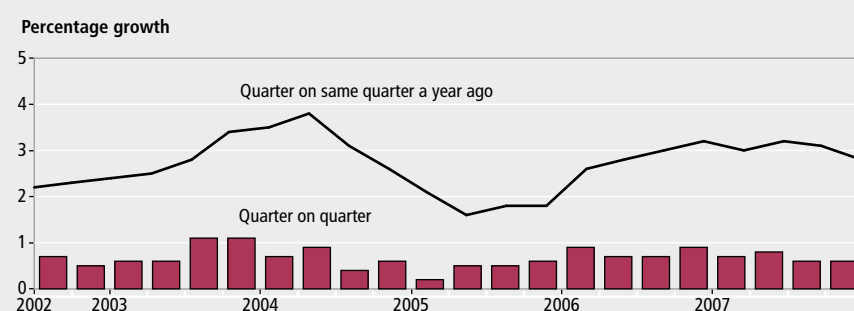
US GDP data for the fourth quarter of 2007 showed a sharp deceleration compared with quarter three. Growth was just 0.2 per cent on a quarter on quarter basis compared with 1.2 per cent growth in the previous quarter. The marked slowdown in growth was primarily due to a contraction in inventories after showing positive growth in the previous quarter; a slowdown in net exports but still contributing positively to growth, with exports exceeding imports and slower consumption growth. Residential investment also contributed to lower growth with continued contraction in this sector.

Japan's GDP growth showed a marked acceleration in 2007 quarter four. Growth was 0.9 per cent compared with 0.3 per cent in the previous quarter. Growth was mainly driven by an increase in business investment and net exports. Government expenditure also added to growth, though to a lesser extent. This was offset by continued contraction in residential investment growth. Private consumption made a relatively subdued contribution to growth.

Data for Italy was not available for 2007 quarter four as it is in the process of revising its methodology for measuring GDP. Data will be available with the next quarterly release (23 May). Growth for the other two big mainland EU economies – Germany and France – showed a weakening in 2007 quarter four compared with the previous quarter. According to Eurostat's estimate, euro area GDP decelerated to 0.4 per cent in 2007 quarter four compared with the strong 0.8 per cent growth in quarter three.

German GDP grew by only 0.3 per cent in 2007 quarter four, a marked slowdown

Figure 1
Gross domestic product



from growth of 0.7 per cent in quarter three. The breakdown to the growth was not available at the time of the headline release; indications are that the slowdown in growth was likely to be led by lower private consumption growth.

French GDP growth decelerated to 0.3 per cent in 2007 quarter four, from 0.8 per cent growth in the previous quarter. The weakening in growth was mainly due to a marked slowing in private consumption growth and decelerating inventories. This was offset by solid investment growth and a positive net trade picture.

FINANCIAL MARKETS

Share prices flat; pound depreciates

Equity performance has been volatile recently, and recorded muted growth in 2007 quarter four. The FTSE All-Share index rose by just 0.5 per cent. This follows a fall of 3.1 per cent in quarter three. The weakness in equity growth can mainly be attributed to global growth concerns, particularly regarding the US economy, brought on by continued problems regarding the credit squeeze, attributable to the US housing and the sub-prime mortgage market. Increasing interest rates in the UK further contributed

to this lack lustre performance. Equity prices weakened further in 2008 quarter one by falling on average by 4 per cent in the two months to February 2008.

In the currency markets, 2007 quarter four saw sterling's average value broadly depreciate compared with the previous quarter. The pound appreciated against the dollar by around 1 per cent in 2007 quarter four, a lower rate of appreciation compared with 1.7 per cent in the previous quarter. Against the euro, sterling's value depreciated by around 3 per cent after depreciating by 0.2 per cent in the previous quarter. Overall, the quarterly effective exchange rate depreciated by approximately 3 per cent in quarter four after flat growth in the previous quarter (Figure 2). In the two months to February 2008, the pound depreciated on average by around 1.4 per cent against the dollar. Against the euro, the pound depreciated on average by 2 per cent. Overall, the effective exchange rate depreciated on average by 2 per cent in the two months to February 2008.

The recent movements in the exchange rate might be linked to a number of factors. First, exchange rate movements can be related to the perceptions of the relative strengths of the US, the euro and UK economy. The lower rate of appreciation in quarter four may have come in response

to fears about lower growth in the UK economy and therefore prospects of lower interest rates to stimulate the economy. Indeed, the Bank of England reduced interest rates by 25 basis points in February 2008 to 5.25 per cent. This followed the 25 basis points cut in December 2007, and was mainly in response to the effects of the sub-prime crisis in terms of downward risks to growth and inflation. Another reason could have been due to concerns about the size of the UK current account deficit.

In the US, however, there have been particular concerns in recent months regarding the relative weakness of GDP growth, brought on by housing market weakness and the sub-prime crisis. In fact, US interest rates were lowered by a further 0.75 basis points in March 2008 to 2.25 per cent following a 0.75 basis points reduction in January 2008, in response to fears of a potential recession. These interest rate reductions will have made the dollar less appealing to investors compared with other currencies.

Another factor could be the lack of international appetite for US dollar denominated assets, particularly from central banks, who are choosing to spread their currency assets on their balance sheets (for portfolio and risk management purposes), thereby further undermining the value of the dollar.

In contrast in the euro area, the depreciation of the pound against the euro in the fourth quarter of 2007 may have come in response to prospects of monetary tightening in the eurozone. The eurozone interest rate is currently at 4 per cent, having been maintained there since the 0.25 basis point increase in June 2007, partly in response to concerns about inflationary pressures.

OUTPUT

Services sector slows but continues to drive economic growth

GDP growth in 2007 quarter four was estimated at 0.6 per cent, similar to the rate in the previous quarter. On an annual basis it was 2.8 per cent, down from 3.1 per cent in the previous quarter.

Construction activity continued to grow strongly in the fourth quarter of 2007. Construction output is estimated to have grown by 1.1 per cent, an acceleration from growth 0.4 per cent in the previous quarter. Comparing the quarter on the same quarter

Figure 2
Exchange rates

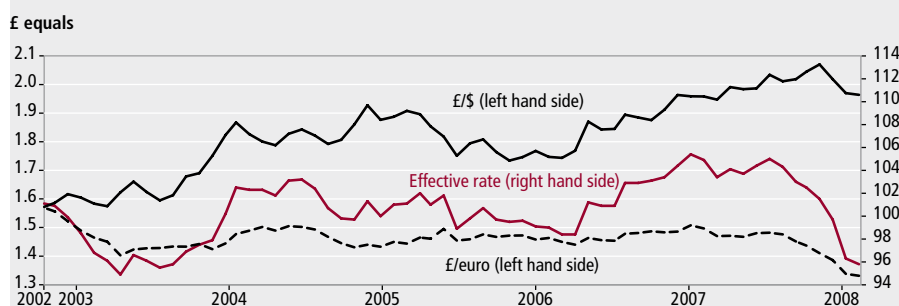


Figure 3
Construction output



a year ago, construction output rose by 2.5 per cent following growth of 2.3 per cent in the previous quarter (**Figure 3**).

In terms of external surveys of the construction sector, the Chartered Institute of Purchasing and Supply (CIPS) survey signalled weakening activity in 2007 quarter four with the average headline index at 55.9, down from 62.3 in the previous quarter, but still indicative of strong growth. In February 2008, the headline index weakened with the balance at 52.4. The Royal Institute of Chartered Surveyors construction survey for 2007 quarter four reported an easing in the growth of construction workloads with the balance at plus 16, down from plus 17 in the previous quarter.

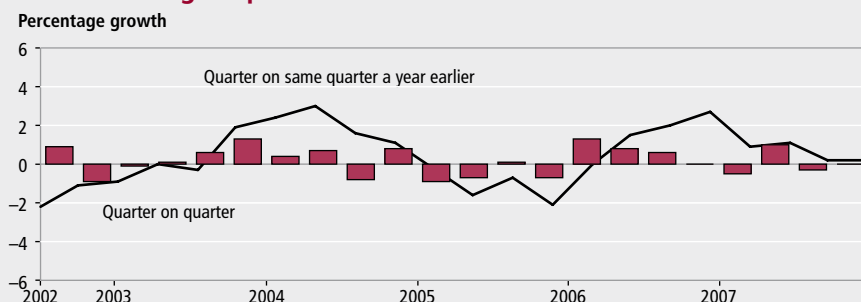
Total output from the production industries recorded virtually stagnant growth in 2007 quarter four, although it registered a modest improvement from the previous quarter. Growth was just 0.2 per cent, reversing a contraction of 0.3 per cent in the previous quarter. On an annual basis growth rose by 0.7 per cent, up from 0.1 per cent in the previous quarter.

The weakness in total production continued to be led by a lacklustre performance in the manufacturing sector. Manufacturing output was flat in the latest quarter following a contraction of 0.3 per cent in the previous quarter. On an annual basis, manufacturing output grew by just 0.2 per cent, unchanged from the previous quarter (**Figure 4**). Mining and quarrying output also showed a weak picture in the latest quarter. Growth contracted by 0.1 per cent, a lower rate of contraction compared with the 1 per cent decrease in the previous quarter. On an annual basis, growth was 1.8 per cent, up sharply from a fall of 0.5 per cent in quarter three.

This was partially offset by an acceleration in the output of the electricity, gas and water supply industries. Growth was 2.8 per cent in 2007 quarter four compared with 0.7 per cent in quarter three. On an annual basis, growth was 4.6 per cent, up markedly from 0.1 per cent in the previous quarter.

Production growth has generally been slow since the second quarter of 2006 due to weakness in mining and quarrying and utilities output, offset through most of this period by relatively strong manufacturing output. There was a pick up in production in 2007 quarter two, but this appears not to have been sustained in quarter three and four, due to weak manufacturing output growth in the latest two quarters. However, manufacturing output has been volatile in

Figure 4
Manufacturing output



recent quarters.

According to the latest Index of Production figures, total production growth was flat in the three months to January 2008 compared with the previous three months. Output of the electricity, gas and water supply industries increased by 1.9 per cent but this was offset by a decline in the output of the mining and quarrying industries of 1.9 per cent. Manufacturing output was flat.

The output of the agriculture, forestry and fishing industries strengthened in the latest quarter with output increasing by 2.1 per cent, reversing a contraction of 0.5 per cent in the previous quarter.

External surveys of manufacturing for 2007 quarter four showed a fairly positive

picture (**Figure 5**). In the past, it has not been unusual for the path of business indicators and official data to diverge over the short term. These differences happen partly because the series are not measuring exactly the same thing. External surveys measure the direction rather than the magnitude of a change in output and often inquire into expectations rather than actual activity.

The CIPS average headline index for manufacturing indicated a stable but robust picture in the latest quarter. The headline index was 53.4, down from 55.4 in the previous quarter. In February 2008, the CIPS headline was 51.3, up from a virtually stagnant 50.6 in the previous month. The

Figure 5
External manufacturing

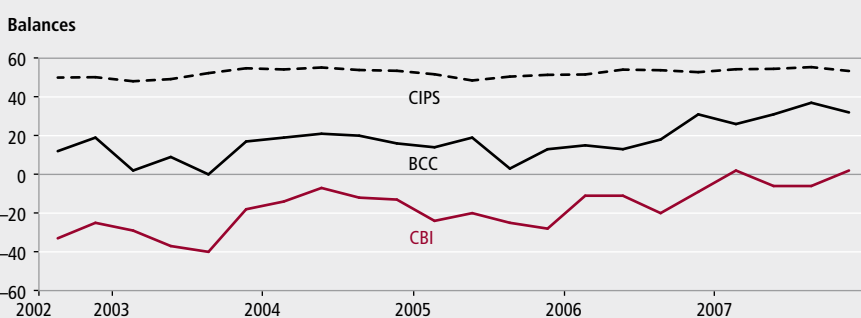
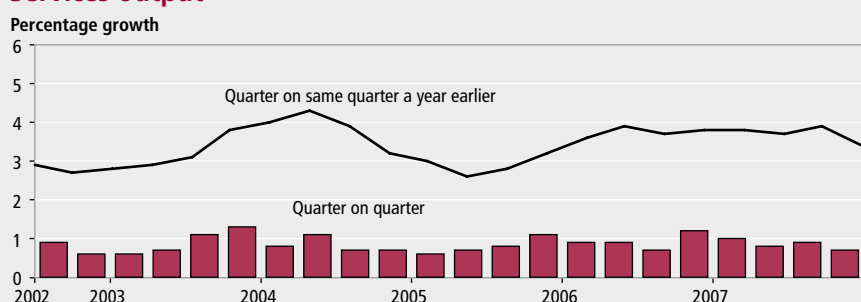


Figure 6
Services output



Confederation of British Industry (CBI) in its 2007 quarter four Industrial Trends survey reported a strengthening in its total order books with the balance at plus two, up from minus six in the previous quarter. That position further strengthened according to the CBI's monthly survey in March 2008 with the balance at plus seven – driven by overseas demand. The British Chambers of Commerce (BCC), in its 2007 quarter four survey, reported a mixed but overall a fairly buoyant picture of manufacturing activity. The home sales balance was plus 32 from plus 37 in the previous quarter.

Overall the service sector, the largest part of the UK economy, continues to be the main driver of UK economic growth. Growth continued to be fairly buoyant despite easing in the latest quarter compared with the previous quarter.

Services output grew by 0.7 per cent in 2007 quarter four, a moderate reduction from 0.9 per cent growth in the previous quarter (**Figure 6**). On an annual basis services output expanded by 3.4 per cent, down from 3.9 per cent in the previous quarter.

Growth was recorded in varying degrees across all four broad sectors. The main contribution to the decline in services output growth came from businesses services and finance, where output decelerated sharply in the latest quarter to 0.6 per cent from 1.4 per cent in quarter three. On an annual basis growth was 4.4 per cent, down from 5.2 per cent in the previous quarter. The distribution, hotels and catering sector also contributed, but to a lesser extent, towards the downward adjustment to services output. Growth was only 0.2 per cent compared with 0.8 per cent in the previous quarter. On an annual basis growth was 3.0 per cent, down from 4.5 per cent in quarter three. The weakening in the above two sectors was offset by the strengthening in the output of the transport, storage and communication sector with growth of 1.7 per cent, reversing the contraction of 0.1 per cent in quarter three. Growth annually was 3.9 per cent, slightly down from 3.8 per cent in quarter three. Government and other services output also grew fairly strongly at 0.7 per cent, up marginally from growth of 0.6 per cent in the previous quarter. Growth annually was 2.1 per cent, up from 1.8 per cent in the previous quarter.

The external surveys on services showed a mixed picture of service sector activity. The CIPS average headline index in 2007 quarter four was 52.5, although markedly

Figure 7
External services

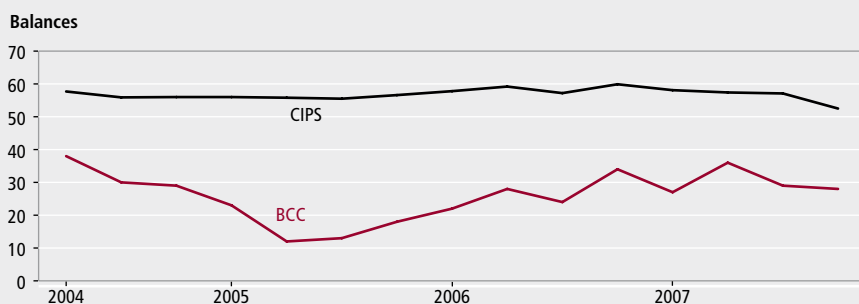
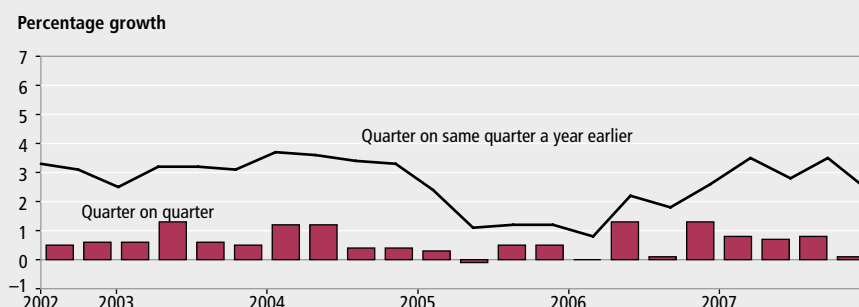


Figure 8
Household demand



down from 57.1 in the previous quarter but still buoyant and above the long-run average. In February 2008 the headline index picked up to 54.0 from 52.5 in January. It should be noted that the CIPS survey has a narrow coverage of the distribution and government sectors.

The CBI and BCC reported a generally weakening picture of service sector activity (**Figure 7**). The CBI service sector survey for February 2008 reported falling sentiment and business volumes for the business and professional services sector and the consumer service sector compared with the previous quarter. The consumer services volume balance was at minus seven down from plus four in the previous quarter. For business and professional services, the balance was at plus six, down from plus 26 in the previous quarter. The BCC survey for 2007 quarter four survey reported a weakening picture of service sector activity, but overall balances for home orders and sales remained positive at plus 18 and plus 28 from plus 26 and plus 29 respectively.

The UK sectoral account shows the UK corporate sector being a net lender in 2007 quarter four. However, the level was relatively modest and an improvement compared with the substantial net borrowing position in the previous quarter.

Despite the surplus, the overall debt level remains high due to the heavy borrowing between 1997 and 2001. The household sector remains a net borrower as income growth proved insufficient to finance total outlays. Households debt levels continue to be relatively high, although the quarterly interest payments on the loans are still being kept down by low interest rates as a proportion of income, although they have steadily increased in recent quarters due to rises in interest rates. The level of central government borrowing increased in 2007 quarter four from the previous quarter and still remains high due to higher rises in cash expenditure exceeding tax receipts. The current account of the UK balance of payments continues to be in deficit.

EXPENDITURE

Consumers' spending weakens

Household consumption expenditure decelerated in 2007 four compared with the previous quarter. Growth was just 0.1 per cent, down markedly from that of 0.8 per cent in quarter three. Compared with the same quarter a year ago, growth was 2.4 per cent, down from 3.5 per cent in quarter three (**Figure 8**).

Lower spending was primarily driven by a fall in durable goods expenditure and slower growth in semi-durables and non-durable goods expenditure. There was fairly buoyant growth in services expenditure.

There are a number of reasons why consumer spending could have slowed; primarily amongst them are the impact of the credit crisis and past interest rate rises feeding through to spending decisions. Both these factors may have contributed to some extent towards spending weakening. In particular, the Bank of England's recent quarter four Credit Conditions Survey highlighted increased tightening in credit conditions for some households.

One key indicator of household expenditure is retail sales which slowed in 2007 quarter four compared with quarter three. Retail sales volumes grew by 0.6 per cent in quarter four, a deceleration from growth of 1.5 per cent in the previous quarter.

The slowdown in retail sales in the latest quarter occurred despite widespread discounting and early sales, the impact of which is reflected in the price deflator (that is, shop prices) which fell on average by around 1.1 per cent in 2007 quarter four. This could suggest the impact of previous interest rate rises and the effects of the credit crunch may have been a constraining

factor in retail sales growth, together with diminished confidence on the part of consumers.

Retail sales figures are published on a monthly basis and the latest available figures for February 2008 showed a strengthening picture compared with the previous month and indicative of fairly buoyant growth (**Figure 9**). In the three months to February the volume of retail sales increased by 1.0 per cent compared with a 0.7 per cent increase in the three months to January. On an annual basis in February, the latest three months growth compared with the same three months a year ago recorded growth of 4.7 per cent, up from 4.4 per cent growth in January.

In the latest month, discounting still seems to be playing a part in retail sales growth although to a lesser extent compared with previous months. The price deflator fell by 0.3 per cent in February 2008 compared with a fall of 0.8 per cent in January.

Retail sales can be disaggregated into 'predominantly food' and 'predominantly non-food' sectors. In the three months to February 2008 retail sales growth was mainly driven by the 'predominantly food stores' sector which recorded growth of 1 per cent jumping from 0.3 per cent growth in the three months to January. The

'predominantly non-food stores' sector in contrast registered subdued growth of 0.2 per cent. Within this sector 'non-store retailing and repair stores' grew by 7.3 per cent, followed by 'household goods stores' with growth of 1.8 per cent. 'Textile, clothing and footwear stores' grew by 0.8 per cent. This was offset by a fall in sales in the 'non-specialised stores' of 3.6 per cent.

External surveys for retail sales presented a slowing picture of growth in February 2008. The CBI's monthly Distributive Trades survey for February reported a further slowdown, with the balance at minus three from plus four in January. The British Retail Consortium reported an increase of 1.5 per cent in retail sales on a like-for-like basis in February 2008, down from 2.6 per cent in the previous month (**Figure 10**).

Another indicator of household consumption expenditure is borrowing. Household consumption has risen faster than disposable income in recent years as the household sector has become a considerable net borrower and therefore accumulated high debt levels. Bank of England data on stocks of household debt outstanding to banks and building societies shows household debt at unprecedented levels relative to disposable income.

There are two channels of borrowing available to households: secured lending, usually on homes; and unsecured lending, for example on credit cards. On a general level, an increase in interest rates increases debt servicing costs, may discourage borrowing and in the process displace consumer expenditure on certain goods.

The financial account shows that the general movement from net lending to borrowing since 1992 has primarily been facilitated by increases in both secured and unsecured lending, but is mainly driven by loans on secured dwellings. In the latest quarter, there was a substantial fall in secured lending which rose by around £10 billion compared with around £33 billion in the third quarter. Unsecured lending also fell to around £3 billion, down from around £4 billion in 2007 quarter three.

The slowdown in secured lending could be primarily attributed to the credit squeeze. This may have manifested itself in banks and building societies adopting tight lending criteria, particularly towards first time buyers and those considered higher risk. There may also be an impact in the form of higher interest rates charged by banks for customers who have borrowed on variable interest rate mortgages in the short term, and in the longer term, there may be

Figure 9
Retail sales

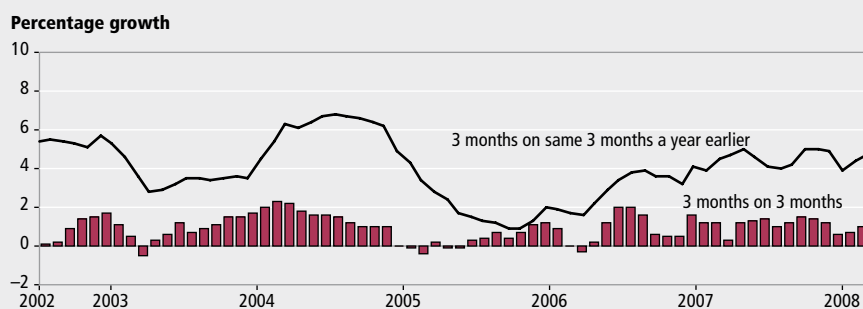
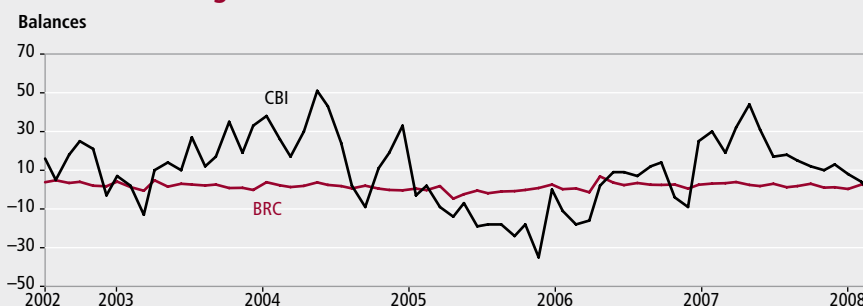


Figure 10
External retailing



an impact on those who took out fixed-rate mortgages.

The housing market plays a major influence on consumer expenditure patterns. Firstly, as a barometer of confidence in the economy and therefore a willingness to spend; secondly, in terms of demand it creates for household goods via house purchases; and thirdly, household expenditure may be linked to household equity withdrawal – slower house price growth can signify lower equity growth and therefore lower purchasing power. The recent slowdown in house prices and the housing market generally may have affected all three of the above, compounded by the credit squeeze. Both Nationwide and Halifax report an easing in growth in house prices in quarter four compared with quarter three. Despite this slowdown, house price growth is still holding up fairly well and its contribution to consumer spending may be imprecise. According to the Nationwide, annual house price growth in quarter four was 6.9 per cent compared with 9.3 per cent in the previous quarter. Halifax reported annual house price growth of 5.2 per cent in quarter four, down from 9.8 per cent in quarter three and below the long-run average of 8 per cent.

The saving ratio is also a determinant of household expenditure. In quarter four, there appears to be signs of retrenchment amongst consumers with a reorientation towards higher savings; this could be in light of ongoing economic uncertainty as a result of the credit crisis. The saving ratio in 2007 quarter four was 3.3 per cent, up from 2.6 per cent in the previous quarter (Figure 11).

An alternative measure of expenditure also showed a weakening picture. M4 (a broad money aggregate of UK money supply) rose by around £35.0 billion in 2007 quarter four compared with around £50.0 billion in quarter three. M4 lending (including cash and bank deposits) also fell sharply from around £77.0 billion in quarter three to around £51.0 billion in 2007 quarter four.

Finally, pressures on current disposable income together with uncertainty regarding future projection of incomes may have been factors in reducing consumption expenditure in quarter four.

Figure 11
Saving ratio

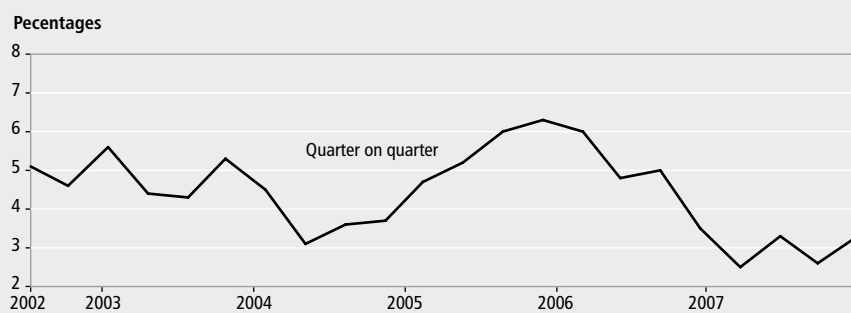


Figure 12
Total fixed investment

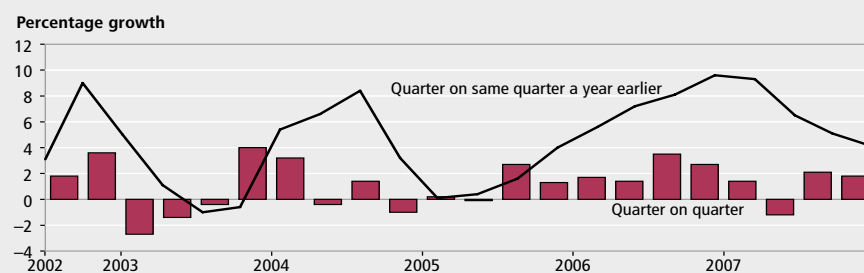
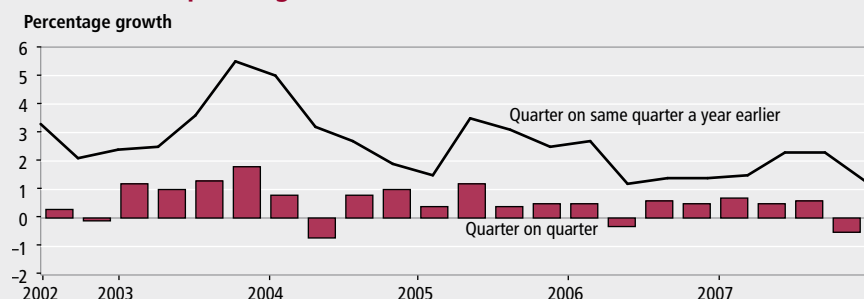


Figure 13
Government spending



BUSINESS DEMAND

Business investment buoyant

Total investment grew by 1.8 per cent in quarter four compared with growth of 2.7 per cent in the previous quarter.

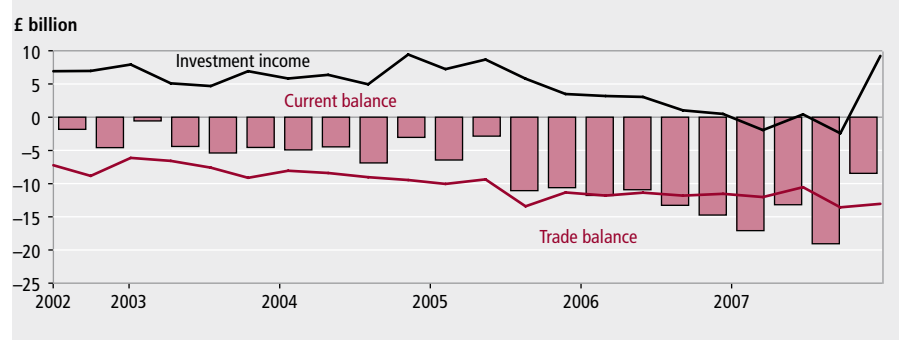
On an annual basis, total investment increased by 4.1 per cent, a slowdown from 5.1 per cent growth in the previous quarter. The growth in total investment was primarily due to an increase in machinery and capital equipment investment (Figure 12).

Business investment grew relatively strongly in the latest quarter, although it slowed compared with the previous quarter.

Business investment recorded robust growth of 1.8 per cent in 2007 quarter four, a deceleration from growth of 2.7 per cent in quarter three. On an annual basis, business investment grew by 5.3 per cent, down from 7.8 per cent in the previous quarter.

Business investment could have slowed for a number of reasons. Firstly, increased uncertainty and pessimism, particularly in regards to global demand, may have deterred investment; secondly, the downturn in investment could have come on the back of lower corporate profits; thirdly, the weakness in the equity market in recent quarters may have constrained revenue generation and hence investment; and last but not least, the general weakness

Figure 14
Balance of payments



in the property market in terms of lower price growth may have inhibited investment spending.

Evidence on investment intentions from the latest BCC and CBI surveys painted a weak picture. According to the latest quarterly BCC survey, the balance of manufacturing firms planning to increase investment in plant and machinery fell from plus 33 to plus 21. The CBI's Quarterly Industrial Survey in January 2008 reported a subdued investment picture, with the investment balance of plant and machinery weakening at minus 12 from minus 14 in the previous quarter.

According to the sectoral accounts, the private non-financial corporate sector was a net lender in 2007 quarter four lending £600 million, reversing net borrowing of £2.9 billion in the previous quarter. This turnaround was mainly due to higher earnings on direct foreign investment. Corporate sector debt levels remain high despite the sector surplus of recent years. The financial balance sheet shows the corporate sector had net liabilities of around £1.9 billion.

GOVERNMENT DEMAND

Government expenditure falls

Government final consumption expenditure contracted in the latest quarter. Growth fell by 0.5 per cent following an increase of 0.6 per cent in the previous quarter. On an annual basis, growth was 1.3 per cent, down from 2.3 per cent in the previous quarter (Figure 13).

Public sector finances deteriorate

The latest figures on the public sector finances reported an deterioration in the current financial year to February

2008, compared with the last financial year. It showed a higher current budget deficit and a higher level of net borrowing. Overall, the government continued to operate a financial deficit, with government expenditure continuing to exceed revenues, partly to fund capital spending. In the financial year April to February 2007/08, the current budget deficit was £5.7 billion; this compares with a deficit of £3.0 billion in the financial year to April to February 2006/07. In the financial year April to February 2007/08 net borrowing was £27.8 billion; this compares with net borrowing of £23.0 billion in the financial year April to February 2006/07. Although corporation, income tax and VAT receipts rose on a calendar basis, this was outweighed by a larger increase in total current expenditure, particularly on capital projects by central government, leading to the higher current budget deficit together with the higher net borrowing.

The financial account shows that the issuance of both sterling treasury bills and government securities has financed this net borrowing. The latest quarter saw the outstanding amount of government securities at £490.0 billion and of Treasury bills at £18.0 billion.

Since net borrowing became positive in 2002, following the current budget moving from surplus into deficit, net debt as a proportion of annual GDP has risen steadily. Public sector net debt in February 2008 was 36.0 per cent of GDP, up from 35.5 in February 2007. In the financial year 2006/07, net debt as a percentage of GDP was 36.6 per cent.

TRADE AND THE BALANCE OF PAYMENTS

Current account deficit narrows; goods deficit unchanged

The publication of the latest quarterly balance of payments figures shows that the current account deficit narrowed in 2007 quarter four to £8.5 billion, from a deficit of £19.1 billion in the previous quarter (Figure 14). As a proportion of growth domestic product (GDP), the deficit fell to 2.4 per cent of GDP from 5.5 per cent in 2007 quarter three. The narrowing in the current account deficit in 2007 quarter four was due to a switch from a deficit on income to a surplus on income, together with a higher surplus on services. The surplus on income stood at £9.3 billion and the surplus on trade in services widened to £10.1 billion. The deficit on trade in goods was unchanged at £23.2 billion compared with the previous quarter.

The run of current account deficits since 1998 reflects the sustained deterioration in the trade balance. The UK has traditionally run a surplus on the trade in services, complemented by a surplus in investment income, but this has been more than offset by the growing deficit in trade in goods, partly due to the UK's appetite for cheaper imports.

Data for 2007 quarter four recorded a continuation of the large trade deficit in goods. Exports of goods fell but imports of goods fell by a lesser amount resulting in the wide trade deficit. The goods trade deficit was £23.2 billion in the fourth quarter, unchanged from the previous quarter. In terms of growth, exports of goods fell by 0.9 per cent while goods imports fell by 0.6 per cent. Services exports fell by 0.2 per cent and services imports fell by 2.7 per cent. Over the quarter, total trade contracted by 1.0 per cent following growth of 4.3 per cent in the previous quarter.

Overall, the persistence of the current account deficit has led to the deterioration in the UK's international investment position with the rest of the world. The net asset/liability was negative to the tune of £351.3 billion at the end of the fourth quarter of 2007 compared with net external liabilities of £318.4 billion at the end of the previous quarter. UK assets abroad stood at £6,445.9 billion compared with a level of £6,169.3 billion at the end of the third quarter. UK liabilities stood at £6,797.2 billion in the fourth quarter compared with a level of £6,487.7 billion in the fourth

quarter. The rise in the level of both UK assets and UK liabilities in the fourth quarter reflects increases in net investment, price movements in government bonded securities and exchange rate movements, particularly the depreciation of sterling against the dollar.

According to the latest trade figures, in the three months ended January 2008, the deficit on trade in goods and services narrowed to £12.5 billion, from a £13.2 billion deficit in the previous three months. The deficit on the trade in goods narrowed to £22.9 billion in the three months to January compared with £23.2 billion in the previous three months. The surplus on the trade in Services widened to £10.4 billion in the three months to January compared with £10 billion in the previous three months.

However, these figures are distorted by volatility in VAT Missing Trader Intra-Community (MTIC) fraud and therefore need to be treated with caution. According to the latest figures, the level of trade in goods excluding trade associated with MTIC fraud is estimated to be £0.1 billion in January 2008, unchanged from the previous month, and was £0.2 billion in the fourth quarter of 2007.

External surveys on exports reported a mixed picture for exports in the latest quarter. The BCC reported that the export sales net balance fell by nine points to plus 22 and the export orders balance fell 10 points to plus 19. The latest CBI quarterly survey in contrast reported an improving picture. The export orders balance was plus 10 in 2007 quarter four, up from plus six in the previous quarter. However, in the first quarter of 2008 this appears to have reversed with the export orders balance weakening to minus eight in February 2008, according to the latest monthly Industrial Trends survey.

LABOUR MARKET

Labour market activity buoyant

The labour market in the latest reference period illustrated a continued strong picture – with high levels of employment and low levels of unemployment as seen throughout 2006 and in 2007. The robust labour market continues to be a reflection of relatively strong demand conditions in the UK economy.

The latest figures from the Labour Force Survey (LFS) pertain to the three-month period up to January 2008. The number of people in employment and the employment rate rose. The number of unemployed people and the unemployment rate fell. The claimant count fell. The inactivity rate and the number of inactive people of working age have both fallen. The number of vacancies rose. Average earnings including bonuses fell, while the figure excluding bonuses was unchanged. Overall average earnings remain subdued with weak real wage growth.

Looking at a detailed level, the increase in the employment level was mainly driven by employees and part-time employment. In the case of the latter, it reversed the previous picture of the employment level mainly being driven by full-time employees. The current working age employment rate was 74.8 per cent in the three months to January 2008, up 0.3 percentage points from the three months to October 2007 and up 0.4 percentage points from a year earlier. The number of people in employment rose by 166,000 in the three months to January 2008 compared with the previous quarter, to an employment level of 29.46 million – the highest since records began in 1971. The unemployment rate was 5.2 per cent in

the three months to January 2008, down 0.1 percentage points from the three months to October 2007 and down 0.3 percentage points from a year earlier (Figure 15). The number of unemployed people decreased by 32,000 in the three months to January 2008 and was down 89,000 from a year earlier, leaving the current level of unemployment at 1.61 million.

According to the LFS, in the period November 2007 to January 2008, the number of people in employment rose by 166,000. The increase was led by a rise in employees of 150,000 and a 10,000 rise in self-employment. In terms of full and part-time workers, the numbers of people in full-time employment rose by 58,000 while the number of people in part-time employment increased by 108,000.

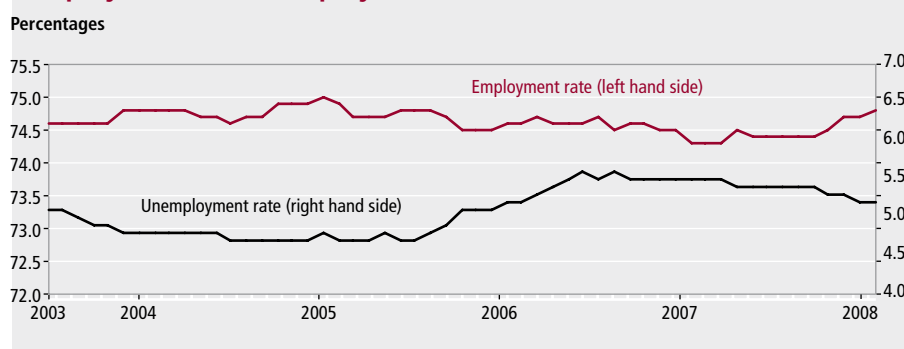
Workforce jobs increases

According to employer surveys, there was an increase of 13,000 jobs in the three months to December 2007. The largest quarterly contribution to the increase came from distribution, hotels and restaurants (up 43,000), followed by transport and communication (up 18,000), and education, health and public administration (up 10,000). This was offset by decreases across a number of sectors with the largest decrease in manufacturing (down 29,000) followed by construction (down 19,000) and other services (down 13,000). Over the year, total workforce jobs increased by 208,000. Of the total, the largest contribution to the increase over the year came from finance and business services (up 149,000) followed by distribution, hotels and restaurants (up 103,000) and education, health and public administration (up 23,000). The manufacturing sector, in contrast, lost the largest number of jobs on the year (down 53,000), followed by other services (down 12,000).

Claimant count level continues to fall

The claimant count measures the number of people claiming the Jobseeker's Allowance. The latest figures for February 2008 showed the claimant count level at 793,500, the lowest level since June 1975. The claimant level was down 2,800 on the previous month and down 126,500 on a year earlier. The claimant count rate in February 2008 was

Figure 15
Employment and unemployment



2.5 per cent, unchanged from the previous month but down 0.4 percentage points from a year earlier.

Vacancies rise

The number of vacancies created in the UK continued to show a healthy demand position for the economy. There were 678,500 job vacancies in the three months to February 2008, up 1,600 from the previous three months and up 59,700 from the same period a year earlier.

Inactivity level falls

The working age inactivity rate was 21.0 per cent in the three months to January 2008, down 0.2 percentage points on the three months to October 2007 and down 0.1 percentage points from a year earlier. In level terms, the number of economically inactive people of working age was down 68,000 over the quarter and by 2,000 over the year to reach a level of 7.89 million in the three months to January 2008. Inactivity falls in level terms were recorded across most groups. The largest level falls in inactivity were recorded for those categorised as 'looking after family/home' (down 61,000). This was offset by an increase in inactivity amongst the student category (up 29,000) followed by the long-term sick (up 17,000).

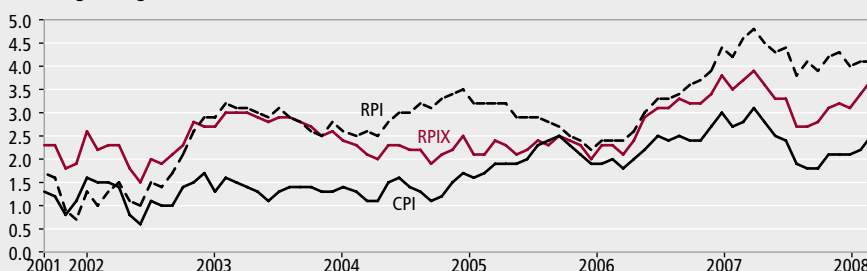
Average earnings subdued

Growth in whole economy average earnings showed a mixed picture in the three months to January 2008 compared with the three months to December, but overall remains relatively subdued. Average earnings including bonuses increased by 3.7 per cent in the three months to January 2008, down 0.1 percentage points from the previous month. Average earnings excluding bonuses rose by 3.7 per cent, unchanged from the previous month. In terms of the public and private sector split, the gap in average earning (excluding bonuses) narrowed in January. Public sector wage growth was 3.6 per cent, up 0.1 percentage points from December. Private sector wages grew by 3.7 per cent, unchanged from the previous month.

Overall, the numbers still point to a fairly buoyant labour market, with employment at high levels and unemployment at a stable level. This is consistent with higher

Figure 16
Inflation

Percentage change over 12 months



workforce participation rates, underpinned by robust GDP growth. Average earnings show stable but fairly modest growth, consistent with increased supply in the labour force.

PRICES

Producer output and input prices accelerate

Industrial input and output prices are an indication of inflationary pressures in the economy. During quarter four, output prices exhibited further signs of an acceleration of growth from quarter three 2007 and therefore provided signs of continued inflationary pressures. Input prices also accelerated in the fourth quarter compared with quarter three. This suggests that firms were attempting to maintain their profit margins by passing on the higher costs of inputs to customers after facing a profit squeeze earlier in 2007. In 2008 quarter one, there were continued inflationary pressures with further acceleration in both input and output prices.

Input prices on average rose by 10.6 per cent in 2007 quarter four. This compares with 2.8 per cent in 2007 quarter three. The core input price index, excluding food, beverages, tobacco and petroleum rose by an average of 3 per cent in 2007 quarter four (12 month non-seasonally adjusted growth), an acceleration from growth of 2.3 per cent in the previous quarter. The sharp rise in input prices came mainly on the back of rising crude oil and home food materials prices. According to the latest figures, input prices rose by 19.4 per cent in the twelve months to February 2008, up from 18.9 per cent in January. The largest contributions to the increase came from crude oil and home food materials which increased by 65.7 and 33.9 per cent respectively. The core input price inflation

measure also accelerated to 8.2 per cent, up from 7.4 per cent in January.

Output prices grew on average by 4.5 per cent in 2007 quarter four, an acceleration from growth of 2.6 per cent in the previous quarter. The underlying picture also suggests inflationary pressures. On the core measure which excludes food, beverages, tobacco and petroleum, producer output prices rose on average by 2.3 per cent in 2007 quarter four, up from 2.2 per cent in the previous quarter. The main contributions to the increase in output prices were provided by rises in petroleum products and food prices. In February 2008, the growth in output prices remained unchanged at 5.7 per cent from the previous month. The largest contributions to the increase came from petroleum products and food prices which rose by 23.4 and 8.4 per cent respectively. Core output prices also showed signs of inflationary pressures with growth of 3.0 per cent in February 2008, up from 3.2 per cent in January 2008.

Consumer prices rise and still above target

Growth in the consumer prices index (CPI) – the Government's target measure of inflation – was 2.5 per cent in February 2008, up from 2.2 per cent in January 2008. This is lower than the peak in March 2007 when inflation reached 3.1 per cent but above Government's 2 per cent inflation target (Figure 16).

The largest upward pressure came from housing and household services due to gas and electricity bills rising by more than a year ago. Part of the effect from these items comes from immediate implementation of tariff changes rather than the previous policy of phasing them in over a four month period. This means that the price rises announced over recent months are included in the February index whereas

previously only a part of these would have been included.

There were also small upward effects from: alcoholic beverages and tobacco with cigarette prices rising by more than a year ago; recreation and culture with an upward contribution from recording media such as pre-recorded DVDs partly offset by downward contributions from games, toys and hobbies, and cultural services.

The largest downward contribution came from food and non-alcoholic beverages, particularly fruit and vegetables. Fruit prices fell compared with a rise a year ago, with the largest individual contribution coming from strawberries. Vegetable prices rose by less than a year ago. A small

partially offsetting upward effect came from milk, cheese and eggs.

Small downward contributions came from: miscellaneous goods and services, where prices rose by less than a year ago, principally due to personal care appliances and products such as small electrical appliances and paper products; transport, where the price of passenger air and sea fares rose by less than a year ago, partially offset by an upward effect from fuels and lubricants; and communication, where landline telephone charges fell this year but were unchanged a year ago.

RPI inflation was 4.1 per cent in February, unchanged from January. The main factors affecting the CPI also affected

the RPI. Additionally, there was a large downward contribution from housing. The effect came mainly from mortgage interest payments where there was a smaller increase than last year but there was also a large downward effect from house depreciation.

RPIX inflation – the all items RPI excluding mortgage interest payments – was 3.7 per cent in February, up from 3.4 per cent in January.

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	2006	2007	2007 Q2	2007 Q3	2007 Q4	2007 Dec	2008 Jan	2008 Feb
GDP growth - chained volume measures (CVM)									
Gross domestic product at market prices	ABMI	2.9	3.0	0.8	0.6	0.6	..	..	..
Output growth - chained volume measures (CVM)									
Gross value added (GVA) at basic prices	ABMM	3.0	2.9	0.8	0.6	0.6	..	..	..
Industrial production	CKYW	0.3	0.3	0.9	-0.3	0.2	0.0	0.0	..
Manufacturing	CKYY	1.6	0.6	1.0	-0.3	0.0	-0.2	0.4	..
Construction	GDQB	1.0	2.3	0.8	0.5	1.1	..	..	..
Services	GDQS	3.6	3.8	0.8	0.9	0.7	..	..	..
Oil and gas extraction	CKZO	-9.4	-2.6	0.4	-1.6	1.0	1.4	-2.6	..
Electricity, gas and water supply	CKYZ	-2.0	0.0	-0.4	0.7	2.7	0.8	-0.2	..
Business services and finance	GDQN	5.4	4.8	1.5	1.3	0.7	..	..	..
Household demand									
Retail sales volume growth	EAPS	3.2	4.3	1.4	1.5	0.6	-0.3	1.1	0.9
Household final consumption expenditure growth (CVM)	ABJR	1.9	3.0	0.7	0.8	0.1	..	..	..
GB new registrations of cars (thousands) ¹	BCGT	2,340	2,390	573	671	468	140	..	..
Labour market^{2,3}									
Employment: 16 and over (thousands)	MGRZ	28,947	29,152	29,153	29,223	29,398	29,457	..	..
Employment rate: working age (%)	MGSU	74.6	74.5	74.4	74.4	74.7	74.8	..	..
Workforce jobs (thousands)	DYDC	31,294	31,536	31,536	31,607	31,620	..	..	..
Total actual weekly hours of work: all workers (millions)	YBUS	925.4	932.8	937.6	937.9	935.6	937.3	..	..
Unemployment: 16 and over (thousands)	MGSC	1,660	1,666	1,661	1,667	1,606	1,608	..	..
Unemployment rate: 16 and over (%)	MG SX	5.4	5.4	5.4	5.4	5.2	5.2	..	..
Claimant count (thousands)	BCJD	944.7	863.7	877.1	846.8	814.5	805.4	796.3	793.5
Economically active: 16 and over (thousands)	MG SF	30,607	30,818	30,814	30,890	31,004	31,065	..	..
Economic activity rate: working age (%)	MG SO	78.9	78.8	78.8	78.8	79.0	79.0	..	..
Economically inactive: working age (thousands)	YBSN	7,851	7,946	7,965	7,973	7,919	7,890	..	..
Economic inactivity rate: working age (%)	YBTL	21.1	21.2	21.2	21.2	21.0	21.0	..	..
Vacancies (thousands)	AP2Y	594.7	657.6	647.5	668.9	677.1	677.1	676.9	678.5
Redundancies (thousands)	BEAO	145	2,882	120	134	110	110	..	..
Productivity and earnings annual growth									
GB average earnings (including bonuses) ³	LNNC	..	..	3.4	4.1	3.8	3.8	3.7	..
GB average earnings (excluding bonuses) ³	JQDY	..	..	3.4	3.7	3.7	3.7	3.7	..
Whole economy productivity (output per worker)	A4YN	..	..	2.5	2.3	1.7	..	..	..
Manufacturing productivity (output per job)	LOUV	..	..	..	..	..	2.2	2.3	..
Unit wage costs: whole economy	LOJE	..	..	1.4	1.8	2.7	..	..	..
Unit wage costs: manufacturing	LOJF	..	..	..	..	..	1.2	1.6	..
Business demand									
Business investment growth (CVM)	NPEL	-4.6	7.9	0.5	2.7	-0.5	..	..	..
Government demand									
Government final consumption expenditure growth	NMRY	1.7	1.9	0.5	0.6	0.9	..	..	..
Prices (12-monthly percentage change – except oil prices)									
Consumer prices index ¹	D7G7	2.3	2.3	2.6	1.8	2.1	2.1	2.2	2.5
Retail prices index ¹	CZBH	3.2	4.3	4.4	3.9	4.2	4.0	4.1	4.1
Retail prices index (excluding mortgage interest payments)	CDKQ	2.9	3.2	3.4	2.7	3.1	3.1	3.4	3.7
Producer output prices (excluding FBTP) ⁴	EUAA	2.3	2.4	2.2	2.3	2.4	2.6	3.2	3.0
Producer input prices	EUAB	9.7	3.4	0.9	3.0	11.4	12.8	19.0	19.3
Oil price: sterling (£ per barrel)	ETXR	35.93	36.11	34.05	36.93	43.51	45.59	46.63	48.17
Oil price: dollars (\$ per barrel)	ETXQ	66.11	72.44	67.64	74.67	88.91	91.83	91.89	94.66

Seasonally adjusted unless otherwise stated									
	Source CDID	2006	2007	2007 Q2	2007 Q3	2007 Q4	2007 Dec	2008 Jan	2008 Feb

Financial markets

Sterling ERI (January 2005=100)	BK67	101.2	103.5	104.1	104.1	101.2	99.7	96.3	95.8
Average exchange rate /US\$	AUSS	1.8429	2.0018	1.9870	2.0211	2.0444	2.0185	1.9698	1.9638
Average exchange rate /Euro	THAP	1.4670	1.4619	1.4732	1.4705	1.4129	1.3863	1.3383	1.3316
3-month inter-bank rate	HSAJ	5.26	5.95	5.93	6.18	5.95	5.95	5.95	5.68
Selected retail banks: base rate	ZCMG						5.50	5.50	5.25
3-month interest rate on US Treasury bills	LUST	4.89	3.29	4.68	3.62	3.29	3.29	1.92	1.81

Trade and the balance of payments

UK balance on trade in goods (£m)	BOKI	-77,555	-87,649	-20,173	-23,169	-23,191	-7,513	-7,503	..
Exports of services (£m)	IKBB	127,157	138,424	34,547	34,805	35,271	11,769	11,712	..
Non-EU balance on trade in goods (£m)	LGDT	-45,468	-47,285	-9,922	-12,948	-12,869	-4,112	-4,292	..
Non-EU exports of goods (excl oil & erratics) ⁵	SHDJ	118.0	116.5	115.9	119.2	115.5	110.7	121.3	..
Non-EU imports of goods (excl oil & erratics) ⁵	SHED	124.5	131.6	128.8	135.5	134.6	131.0	129.3	..
Non-EU import and price index (excl oil) ⁵	LKWQ	103.9	104.2	104.5	103.5	104.1	105.1	108.0	..
Non-EU export and price index (excl oil) ⁵	LKVX	101.5	102.5	101.9	102.2	104.0	104.8	105.7	..

Monetary conditions/government finances

Narrow money: notes and coin (year on year percentage growth) ⁶	VQUU	5.1	5.8	4.8	5.4	5.8	5.8	6.3	6.6
M4 (year on year percentage growth)	VQJW	13.0	12.8	13.0	13.0	12.5	12.5	13.3	12.4
Public sector net borrowing (£m)	-ANNX	29,118	36,795	15,702	6,902	15,480	6,748	-13,957	2,670
Net lending to consumers (£m)	RLMH	13,104	12,234	2,572	3,586	3,747	715	879	2,353

External indicators – non-ONS statistics

		2007 Aug	2007 Sep	2007 Oct	2007 Nov	2007 Dec	2008 Jan	2008 Feb	2008 Mar
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Activity and expectations

CBI output expectations balance	ETCU	13	17	10	9	3	9	11	18
CBI optimism balance	ETBV			-13			-18		
CBI price expectations balance	ETDQ	17	19	15	22	17	14	18	20

Notes:

1 Not seasonally adjusted.

2 Annual data are for April except for workforce jobs (June), claimant count (average of the 12 months) and vacancies (average of the four quarters).

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 Volumes, 2003 = 100.

6 Replacement for series M0 which has ceased publication.

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

Independent forecasts

March 2008

UK forecasts

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

2008

	Average	Lowest	Highest
GDP growth (per cent)	1.7	-0.1	2.1
Inflation rate (Q4, per cent)			
CPI	2.4	1.9	3.0
RPI	2.7	1.6	3.8
Claimant count (Q4, million)	0.92	0.79	1.23
Current account (£ billion)	-59.1	-88.0	-40.2
Public Sector Net Borrowing (2007-08, £ billion)	41.0	25.0	50.7

2009

	Average	Lowest	Highest
GDP growth (per cent)	1.9	-1.3	2.7
Inflation rate (Q4, per cent)			
CPI	2.0	1.3	3.3
RPI	2.5	1.7	3.9
Claimant count (Q4, million)	0.99	0.74	1.31
Current account (£ billion)	-53.5	-90.7	-35.0
Public Sector Net Borrowing (2008-09, £ billion)	40.6	25.7	52.1

Notes

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

Selected world forecasts

The tables below supplement the Economic Review by providing a forward-looking view of the world economy. The tables show forecasts for a range of economic indicators taken from Economic Outlook (Dec 2007), published by OECD (Organisation for Economic Co-operation and Development).

2007

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	2.2	1.9	2.6	2.7
Consumer price (percentage change from previous year)	2.8	0.0	2.1	4.5
Unemployment rate (per cent of the labour force)	4.6	3.8	6.8	5.4
Current account (as a percentage of GDP)	-5.6	4.7	0.2	-1.4
Fiscal balance (as a percentage of GDP)	-2.8	-3.4	-0.7	-1.6

2008

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	2.0	1.6	1.9	2.3
Consumer price (percentage change from previous year)	2.7	0.3	2.5	4.2
Unemployment rate (per cent of the labour force)	5.0	3.7	6.4	5.4
Current account (as a percentage of GDP)	-5.4	4.8	-0.1	-1.4
Fiscal balance (as a percentage of GDP)	-3.4	-3.8	-0.7	-2.0

Notes

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

FEATURE

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Office for National Statistics

The gender pay gap in the UK

SUMMARY

The gender pay gap is a measure of the difference between the earnings of men and women. This article presents estimates of the gender pay gap from the Annual Survey of Hours and Earnings, the Labour Force Survey and the New Earnings Survey panel data set. It examines how different personal and labour market characteristics influence the earnings of men and women.

The results show that the gender pay gap of full-time employees has narrowed since the introduction of the Equal Pay Act in 1975. However, the gender pay gap varies depending on an individual's circumstances. For example, the number of dependent children, company size and type of occupation are major factors in the difference between men and women's earnings.

The Equal Pay Act 1970 came into force in 1975. The act sets legislation with the aim of eliminating discrimination in pay and other terms and conditions between men and women working in similar jobs. According to data published by the Equal Opportunities Commission¹ (now part of the Commission for Equality and Human Rights), 'the average woman working full-time could lose out on £330,000, in comparison with men's earnings, over the course of her working life'.

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

The gender pay gap has been widely researched. Research published by the Women and Equality Unit² concludes that the main factors influencing the gender pay gap are:

- human capital differences – differences in educational levels and work experience
- part-time working – the pay difference between full-time and part-time is large. As part-time working is concentrated among women, this is a major contributor to the gender pay gap
- travel patterns – on average, women spend less time commuting than men

- occupational segregation – women's employment is highly concentrated by occupation, with female-dominated occupations often being the lowest paid
- workplace segregation – high concentrations of female employees are associated with relatively low rates of pay

Other research has found that part of the gender pay gap is the result of rational choices made by the different sexes and not all due to discrimination.

The UK has two main sources of earnings data:

- the Annual Survey of Hours and Earnings (ASHE), formerly known as the New Earnings Survey (NES), and
- the Labour Force Survey (LFS)

This article presents the gender pay gap in both ASHE and the LFS. Initially, a brief description of both data sources is given, followed by a comparison of the two sources using age, occupation and region. The subsequent section contains more detailed investigations using ASHE and the LFS. Finally, the NES panel data set, a single longitudinal data set dating back to 1975, is used to identify long-term trends in the data.

Annual Survey of Hours and Earnings

In 2004, ASHE replaced the NES. ASHE provides information on the levels,

distribution and make-up of earnings and hours for employees within industries, occupations and regions in Great Britain. It is based on a 0.8 per cent (1.0 per cent prior to 2007) sample of employee jobs taken from HM Revenue & Customs pay-as-you-earn (PAYE) records. Employers are asked to provide detailed information on the earnings and hours of their employees, and the characteristics of the workplace. Since the information is provided by businesses, the data collected generally come direct from the payroll systems. ASHE does not cover employees who work for businesses whose turnover is lower than the VAT threshold and/or whose employees earn less than the PAYE threshold. The 2007 ASHE is based on approximately 142,000 returns. The Department of Enterprise, Trade and Investment conducts a similar but separate survey for employees in Northern Ireland, to allow for UK estimates to be calculated.

ASHE includes improvements to the coverage of employees not originally in the NES sample, imputation for item non-response, and the weighting of earnings estimates to overcome unit non-response. The questionnaire for ASHE was improved in 2005, including improvements to the collection of data relating to allowances and incentive pay. NES data for 2003 and earlier were reworked using the ASHE imputation and weighting methodology; however, the data do not take account of the improved coverage which has resulted in a discontinuity in the series.

In 2007, another discontinuity occurred due to further methodological improvements that were made. These included changes to the sample design itself, as well as the introduction of an automatic occupation coding tool, ACTR.

Labour Force Survey

The LFS is a quarterly sample survey of about 52,000 households living at private addresses in the UK, representing about 0.2 per cent of the population. The survey asks respondents for information on their personal circumstances and labour market status. Information is collected about their hours and earnings in their main and second job (if they have one). The LFS covers groups such as temporary employees, part-timers and the low paid, who are not necessarily covered by employers' records. The LFS has moved from reporting on a seasonal to a calendar quarter basis. Calendar quarter data sets are currently available for 1997, 1999, and 2001 to 2007 only. In order to present a complete time series, the equivalent seasonal quarter has been shown for 1998 and 2000.

ASHE v LFS

Both ASHE and the LFS collect information on hours and earnings. However, due to different data collection methods, the accuracy of the information collected varies. For ASHE, the information is almost always completed from employers' pay records and so is a good source for providing estimates on the level of earnings. In comparison, for the LFS, the information is collected from each member of the household. Where members of the household are not present, the information about the person is provided by another member of the household, usually a related adult. This is known as proxy response. The percentage of missing data for income is higher than for most other variables due to proxy inability or unwillingness to answer.

Previously it was thought that the LFS data were an unreliable source for earnings analysis. Ormerod and Ritchie

(2007) showed that the two sources are more consistent than first thought and concluded that earnings data in the LFS are an unbiased predictor for earnings in ASHE for the majority of the pay distribution. It reported that there were some differences at the higher end of the pay distribution, but the resource and complication to link both surveys outweighed the benefits in linking. The project supported the use of LFS data for earnings analysis for personal characteristics not available in ASHE.

Measuring the gender pay gap

The median is the most common measure used to summarise average earnings. This is the middle point of the population, with exactly the same number of people earning below this amount as above. In some instances, it can be more suitable to present the median rather than the mean, as the latter can be influenced by the relatively few extreme values in a pay distribution.

Although the gender pay gap provides a useful comparison between the earnings of men and women, it does not necessarily indicate differences in rates of pay for comparable jobs, such as the proportions in different occupations and their length of time in jobs.

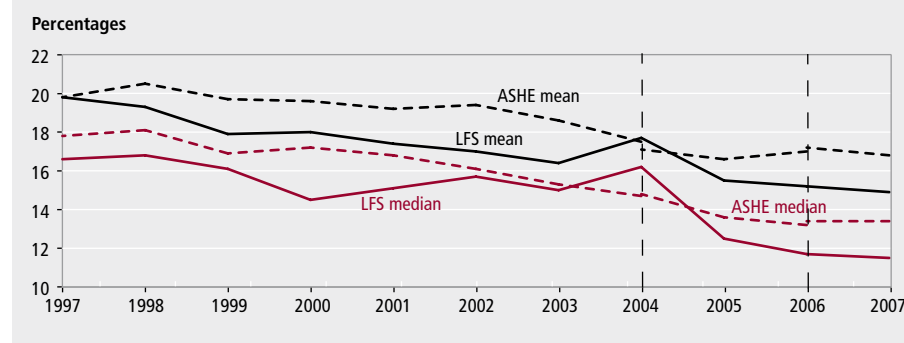
Various methods can be used to measure the earnings of women relative to men. The preferred method is to use hourly earnings excluding overtime for full-time employees. Including overtime can skew the results because men work relatively more overtime than women. Including part-time employees could have a similar effect because women make up a much bigger proportion of part-time employees than men and there is a large difference in hourly rates between full-time and part-time employees. Additionally, using weekly earnings would not take into account that women generally work fewer hours in the working week than men.

Comparing the gender pay gap in ASHE and the LFS

To make comparisons between the two data sources, the gender pay gap has been calculated on pay and hours including overtime, as this cannot be removed in the LFS data, for working age employees (men aged 16 to 64 and women aged 16 to 59). The gender pay gap is based on the hourly wage of men and women working full-time, which is defined as working more than 30 paid hours a week, 25 or more paid hours in the teaching profession.

Figure 1 shows that the median and mean gender pay gap of full-time employees

Figure 1
Gender pay gap of full-time employees of working age

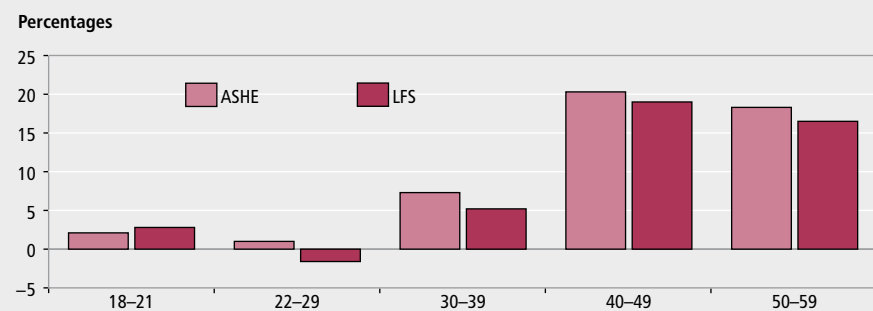


Note:

Vertical lines represent discontinuities in 2004 and 2006 ASHE results.

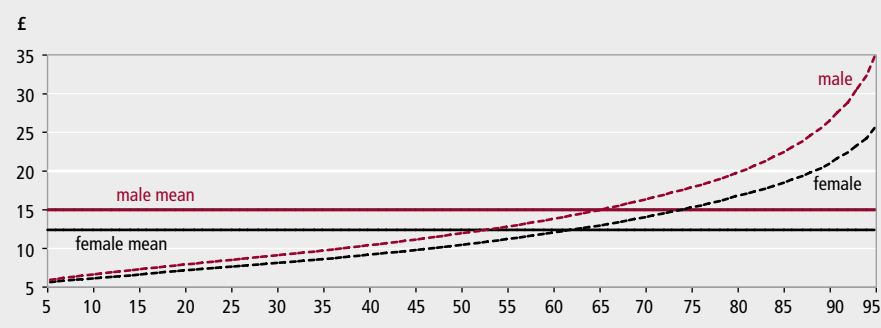
Source: Annual Survey of Hours and Earnings, Labour Force Survey

Figure 2
Median gender pay gap of full-time working-age employees:
by age band, 2007



Source: Annual Survey of Hours and Earnings, Labour Force Survey

Figure 3
Full-time hourly earnings excluding overtime: percentiles and mean, 2007



Source: Annual Survey of Hours and Earnings

of working age in both ASHE and the LFS has closed considerably since 1997. The mean estimates are consistently higher than the median estimates, which suggest that there are more men at the higher end of the pay distribution.

Unless otherwise stated, the remainder of this article will focus on the median measurement of the gender pay gap, using hourly earnings.

Age

Figure 2 represents the gender pay gap of full-time employees by age band. Both data sources show that earnings are similar when entering the job market, at 18 to 21 years old, but a gender pay gap appears after approximately ten years, for those aged from 30 to 39. The gender pay gap increases for the 40 to 49 age group. Older women are more likely to have career breaks from paid work to care for children and other dependants. These breaks impact on women's level of work experience, which in turn can impact on their pay rates.

Figure 2 shows that the largest pay gap of full-time employees in 2007 exists for those aged 40 to 49, at 20.3 per cent in ASHE and 19.0 per cent in the LFS. They are closely followed by those aged 50 to 59, where the

pay gap is 18.3 per cent and 16.5 per cent, respectively.

Occupation

Occupations are coded according to the 2000 Standard Occupational Classification, where nine major occupations are used.

In both ASHE and the LFS, full-time women earn less than full-time men in every occupation; the widest gender pay gap is visible in the male dominated skilled trades major group (such as painters and decorators), at 26.4 per cent in ASHE and 24.5 per cent in the LFS. A greater proportion of women than men work in low-paid occupations and women tend to be under-represented in the higher-paid jobs within occupations. More detailed analysis by occupation using ASHE is presented later in this article.

Region

On average, full-time women are paid less than full-time men in all regions in both ASHE and the LFS. In ASHE, the largest pay gap was in the South West government office region, at 16.8 per cent (14.3 per cent in the LFS). In the LFS, the largest difference was in the South East region, where women's median pay was 18.5 per

cent less than their male counterparts (16.2 per cent in ASHE).

The gender pay gap of full-time employees for both ASHE and the LFS by age, region and occupation generally show the same patterns. However, results for those working part-time are less comparable and less reliable. The inconsistencies could be due to several reasons:

- smaller sample sizes in the LFS
- self definition of full-time and part-time in the LFS
- rounding errors from respondents/proxy response in the LFS

For the remainder of this article, only ASHE will be used for analysis on the part-time gender pay gap.

ASHE results

The ASHE results are calculated from hourly earnings excluding overtime for all employees (not restricted to working age). This section of the article focuses on information provided from employer records and looks at characteristics such as company size, distribution of hours and occupation. More information on the earnings of men and women by sector, industry and travel to work areas is available in the ASHE survey results at www.statistics.gov.uk/statbase/product.asp?vlnk=13101

Unless otherwise stated, the results shown below are from the 2007 ASHE data set.

According to results in the 2007 ASHE, median hourly earnings excluding overtime were £11.34, up 2.8 per cent from £11.03 in 2006 for full-time employees on adult rates whose earnings were not affected by absence.

In 2007, the median hourly earnings of full-time men increased by 2.8 per cent compared with 3.1 per cent for women. The stronger growth in women's hourly earnings has resulted in a reduction of the gender pay gap by 0.2 percentage points to 12.6 per cent.

Figure 3 shows the distribution of earnings for men and women. The tenth percentile means that 90 per cent of employees earn more than this level of pay, while 10 per cent earn less. It shows the impact high earners have on the mean compared with the median. It also shows a widening of the pay gap of full-time employees by earnings when moving along the pay distribution: the gender pay gap at the tenth percentile is 7.7 per cent,

compared with 20.9 per cent at the 90th percentile.

Distribution of hours

The gender pay gap is usually presented separately for full- and part-time employees. Full-time is defined as those contracted to work more than 30 hours a week, or 25 hours or more in the teaching profession. Over recent years, flexible working has become more popular, meaning there is less of a distinction between full- and part-time workers.

In 2007, just over 70 per cent of all employees worked between 30 and 50 basic hours per week. The pay gap is widest for those working between 30 and 40 hours per week, at 19.0 per cent, closely followed by those working 50 hours or more per week, at 18.2 per cent. **Figure 4** shows that men earn more than women across the hours distribution, except for those working between ten to 20 and 20 to 30 hours per week, where women's earnings are slightly higher than men's.

Company size

The gender pay gap of full-time employees does not appear to vary considerably by the number of people employed in the whole enterprise (all units in a particular business are attached to an enterprise). The pay gap ranges from 12.4 per cent for companies with less than 25 employees to 18.4 per cent for those employing between 25 and 49.

The results show that the gender pay gap for part-time employees varies substantially. Part-time women are more likely to work in smaller companies (less than 25 employees) where the pay gap is 11.3 per cent. In comparison, part-time women earn more than part-time men in larger firms (500 or more employees), where the hourly pay is £7.39 for women and £7.05 for men, resulting in a gender pay gap of -4.8 per cent (a negative pay gap indicates that women earn more than men).

Occupation

Analysis by major occupational groups shows that the widest pay gaps among full-time employees are for skilled trades occupations (25.4 per cent), managers and senior officials (23.0 per cent), and process, plant and machine operatives (21.7 per cent). The narrowest pay gaps are for professional occupations (3.8 per cent) and sales and customer service occupations (5.9 per cent).

As with full-time employees, the widest pay gap for part-time employees is in the skilled trades occupations, at 30.5 per cent. The highest hourly pay among part-time employees is in the professional occupations, such as chemists and teachers, where the median pay for men and women is £20.63 and £19.78 respectively, resulting in a gender pay gap of 4.3 per cent. In contrast, the occupations with the lowest pay are the elementary occupations, such as traffic wardens and bar staff, where the pay for men is £5.86 and for women £5.82, resulting in a pay gap of 0.7 per cent.

Results by major occupational groups hide variation in the pay differences of men and women. Analysis by minor occupational groups shows that men generally earn more than women across occupations. However, there are a few exceptions: full-time women, for example, earn more than full-time men in secretarial and related occupations, with median hourly earnings of £9.35 compared with £8.84, resulting in a gender pay gap of -5.8 per cent. For part-timers, in the health and social welfare associate professionals, women's average hourly earnings are £13.54, while men's are £11.05, resulting in a gender pay gap of -22.5 per cent.

Further investigations by age within occupation show a significant change in the employment patterns of women. While the number of full-time women in employment declines, the equivalent part-time numbers increase significantly. This changing status

in women's employment occurs at early- to mid-thirties, which could possibly be due to women altering their working patterns to fit around family commitments.

LFS results

According to the LFS, women represented 48 per cent of the working-age labour force in April to June 2007. In the same period, the employment rate for women of working age was 70 per cent, compared with 78 per cent for men.

In April to June 2007, some 41 per cent of women of working age in employment were in part-time employment, compared with only 10 per cent of men.

The LFS results shown in **Table 1** are calculated from actual pay and hours including overtime for an individual's main job, restricted to those of working age. Pay excluding overtime is not available in the LFS, as overtime payments are not asked for separately. The survey does not collect information on earnings from the self-employed. In the LFS, whether a respondent is working full-time is down to their own assessment of their job; it is not determined by the number of hours worked.

This section of the article focuses on a range of personal or family characteristics, such as qualifications, ethnicity and family status. Unless otherwise stated, the results shown below are from the April to June 2007 LFS data set. The LFS estimates at this detailed level are consistent with the UK population estimates published in 2003, whereas those in the recent Labour Market Statistics First Release are based on more up-to-date population figures.

Family characteristics

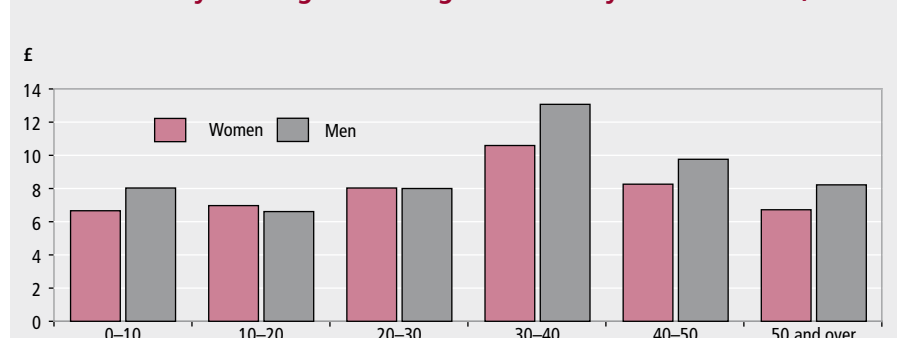
The gender pay gap of full-time employees varies by married/cohabiting status. Men and women who are not married or cohabiting have similar hourly pay, £8.72 for men and £8.82 for women, resulting in a gender pay gap of -1.1 per cent. However, the gender pay gap for married/cohabiting couples is 14.5 per cent.

The gender pay gap increases with the number of children present in a family. The average hourly pay of a full-time woman with one dependent child is £9.32, compared with £10.63 for full-time men, resulting in a gender pay gap of 12.3 per cent. In comparison, in a family where four or more dependent children are present, the gender pay gap stands at 35.5 per cent.

Personal characteristics

LFS respondents can be defined as having a long-term disability covered by the

Figure 4
Median hourly earnings excluding overtime: by hours worked, 2007



Source: Annual Survey of Hours and Earnings

Disability Discrimination Act, or a work-limiting disability, or both. The hourly pay of a full-time disabled woman is £9.07, compared with £9.70 for full-time disabled men, resulting in a gender pay gap of 6.5 per cent. In comparison, the results for those who do not classify themselves as disabled show the hourly pay of a full-time woman is £9.61, compared with £10.92 for full-time men, resulting in a gender pay gap of 12.0 per cent.

The gender pay gap of full-time employees varies considerably across ethnic groups. The widest pay gaps are for Asian/Asian Black employees at 12.6 per cent and White employees at 12.4 per cent. Black/Black British women earn on average £11.43

per hour while their male counterparts earn £10.74 per hour, resulting in a gender pay gap of -6.4 per cent.

Educational attainment

Historical differences in the level of qualifications held by both sexes are said to have contributed to the pay gap. However, the number of men and women holding higher educational qualifications continues to increase. According to the LFS, the level of qualification obtained has a relatively small impact on the gender pay gap. The gender pay gap of full-time employees is narrowest for those whose highest qualification is GCSEs, at 12.7 per cent. The widest pay gaps are for those educated to

A level, closely followed by those educated to degree or equivalent level, where the gender pay gap is 19.3 per cent and 18.6 per cent, respectively.

Job tenure

The LFS asks respondents how long they have continuously worked for their current employer. Information on how long the respondent has been in the workforce excluding career breaks is not available.

In general, the gender pay gap becomes more visible when a full-time employee has been in post for two or more years, where the pay gap is 13.4 per cent. For those who have worked in the same company for 20 years or more, the gap stands at 8.3 per cent.

Over the last decade, the biggest change can be seen in the group that has been continuously employed in the same company for more than six months, but less than a year. In 1997, the gender pay gap for this group was 14.9 per cent compared with 1.6 per cent in 2007.

Table 1

Median hourly earnings and gender pay gap of full-time working age employees, April to June 2007

	Median hourly earnings (£)		Not seasonally adjusted
	Male	Female	Gender pay gap (%)
Total	10.70	9.47	11.5
Married/cohabiting			
Married/cohabiting/civil partner	11.54	9.87	14.5
Non-married ¹	8.72	8.82	-1.1
Number of dependent children			
0	10.23	9.41	8.0
1	10.63	9.32	12.3
2	12.49	10.63	14.9
3	11.54	9.35	19.0
4 or more	11.22	7.24	35.5
Disability			
Disabled	9.70	9.07	6.5
Not disabled	10.92	9.61	12.0
Ethnicity			
White	10.73	9.40	12.4
Mixed	10.69	9.71	9.2
Asian/Asian British	10.13	8.85	12.6
Black/Black British	10.74	11.43	-6.4
Other (including Chinese)	11.05	10.00	9.5
Education			
Degree or equivalent	17.16	13.97	18.6
Higher education	13.42	11.11	17.2
GCE A level or equivalent	10.51	8.48	19.3
GCSE grades A-C or equivalent	9.00	7.86	12.7
Other qualifications	8.38	7.29	13.0
No qualification	7.58	6.50	14.2
Job tenure			
Less than 3 months	7.58	7.70	-1.6
3 months but less than 6	8.61	7.58	12.0
6 months but less than 12	8.02	7.89	1.6
1 year but less than 2	8.72	8.24	5.5
2 years but less than 5	10.34	8.95	13.4
5 years but less than 10	11.43	9.86	13.7
10 years but less than 20	12.54	11.16	11.0
20 years or more	13.23	12.13	8.3

Note:

1 Non-married includes those who are single, widowed, divorced or separated from their spouse.

Source: Labour Force Survey

New Earnings Survey panel data set

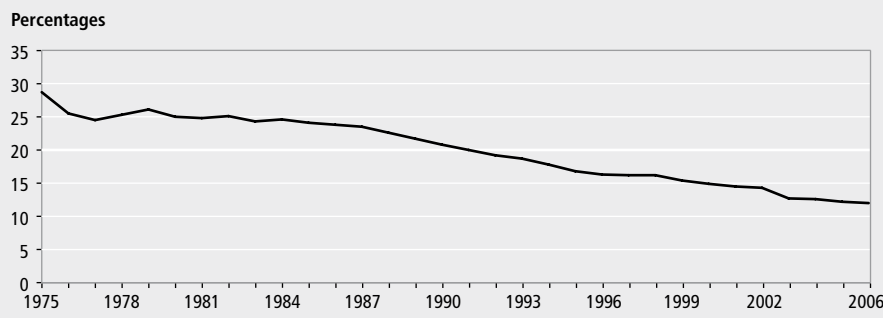
The NES panel data set is a single longitudinal data set containing a subset of the ASHE survey for each year since 1975. It only includes the main job for each person, so individuals are included once and can be tracked over time. It also excludes individuals who are allocated temporary National Insurance numbers, as these are not unique. Only a relatively small number of cases are excluded and the data are not weighted or adjusted for item non-response and so will give slightly different results from the full ASHE survey.

At the time of publication, the latest panel data set available includes data up to and including 2006.

Cross-sectional analysis of the panel data set shows that the gender pay gap of full-time employees has been declining over time, and is now at its narrowest since the Equal Pay Act came into force in 1975 (Figure 5). At that time, the pay gap between men's and women's average hourly earnings in full-time employment was 28.7 per cent compared with 12.0 per cent in 2006.

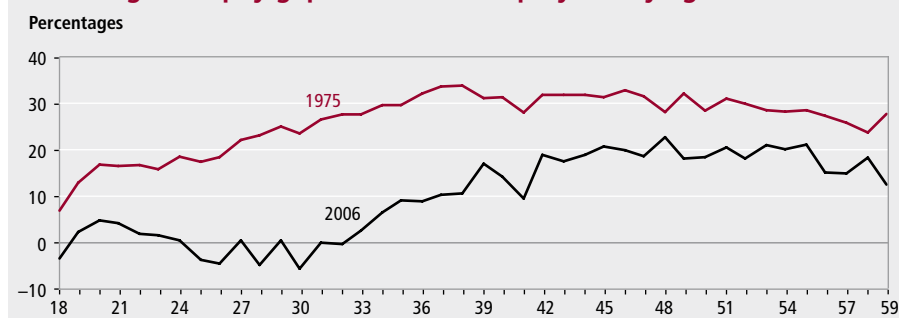
Figure 6 shows the gender pay gap by individual years of age in 1975 and 2006. The gender pay gap for all ages has declined over the last 30 years. In 1975, the gap appeared on entering the job market at 18, generally increasing to around the age of 40 before levelling off and slightly falling for those in their late fifties. In 2006, the gender pay gap fluctuates around equality

Figure 5
Median gender pay gap of full-time employees of working age



Source: New Earnings Survey panel data set

Figure 6
Median gender pay gap of full-time employees: by age



Source: New Earnings Survey panel data set

for individuals up to the age of 34, then increases before levelling off around 46 years of age and falling again for those in their late fifties. This trend may be a consequence of women having children later in life in 2006 compared with 1975.

Conclusions and future work

This article has presented analysis of the gender pay gap using ASHE, the LFS and the NES panel data set. It shows that in spite of legislation, a gender pay gap still exists. The results suggest that the position of women working full-time has improved compared with that of full-time men. However, the gender pay gap varies depending on an individual's circumstances. For example, the number of dependent children, company size and type of occupation are major factors in the difference between men's and women's earnings.

Results also show that, in 1975, the gender pay gap was visible when comparing the hourly earnings of men and women from 18 years of age. Some 30 years later, by 2006, this pay gap was not evident until the age of 34.

This article focuses on information from ONS surveys and does not look into how much of the gender pay gap is down to personal choice, that is, women choosing to take lower-paid jobs to concentrate on

their families.

ONS is carrying out further investigations into the decomposition of the gender pay gap using econometric modelling; these will be published later in 2008.

Notes

- 1 The Gender Agenda, Equal Opportunities Commission, July 2007.
- 2 The Gender Pay Gap, Women and Equality Unit, July 2001.

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FEATURE

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CPI and RPI: the 2008 basket of goods and services

SUMMARY

As part of a process of continual improvement, and to help ensure that the consumer prices index (CPI) and retail prices index (RPI) are representative of consumer spending patterns, the items that are priced in compiling the indices are reviewed each year. This article describes the review process and explains how and why the various items in the CPI and RPI baskets are chosen. The contents of the CPI and RPI baskets for 2008 are summarised in Annexes A and B of the full article, which can be downloaded from the National Statistics website at www.statistics.gov.uk/ccj/article.asp?id=1951

The main changes from the 2007 price collection are discussed. Similar articles have been published in previous years. This article also describes two changes to the methodology used to compile the CPI and RPI. These relate to the measurement of gas and electricity, and fresh fruit and vegetable prices.

The most useful way to think about both the consumer prices index (CPI) and retail prices index (RPI) 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 120,000 separate price quotations are used every month in compiling the indices, covering some 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 in estimating price changes more generally, 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. These might include the development of entirely new goods and services, or the tendency for consumers to substitute purchases away from those particular goods and services for which prices have risen relatively rapidly. For instance, if tea showed a dramatic rise in prices during one year, consumers might switch their spending towards other beverages, 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 steadily 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, and playgroup and nanny fees.

For the RPI, changes to the items and weights are introduced in the February index each year, but with an overlapping collection of prices 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 likewise 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 (2004) 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

It would be both impractical and unnecessary to measure price changes of every item bought by every household in compiling the CPI and RPI. 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 school fees, petrol, telephone charges, and electricity and gas supply.

However, 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 purposive or judgemental; the significant difficulties involved in defining an adequate sampling frame, that is, a list of all the individual goods and services bought by households, restricts the use of traditional random sampling methods when choosing the representative items.

For each product grouping, a number of items are selected for pricing whose price movements, taken together, will 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 do 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 above, 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 2008 index, and RPI section weights with effect from the February 2008 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 2008. A more detailed article on changes to the published CPI and RPI weights will be published on the National Statistics website in April 2008.

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 do 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, for example, 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 miscellaneous goods and services. 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, this has motivated some of the changes to the basket introduced in 2008. Conversely, it also helps to highlight areas where there is scope to remove items

Table 1
Allocation of items to CPI divisions in 2008

	CPI weight (per cent)	Observed variation in price changes ¹	Representative items ² (percentage of total)
Food and non-alcoholic beverages	10.9	High	22
Alcohol and tobacco	4.2	Low	4
Clothing and footwear	6.3	Medium	11
Housing and household services	11.5	Medium	5
Furniture and household goods	6.7	Medium	11
Health	2.2	Low	3
Transport	15.2	High	6
Communication	2.3	Low	1
Recreation and culture	15.2	High	17
Education ³	1.9	Low	1
Restaurants and hotels	13.7	Low	8
Miscellaneous goods and services	9.9	High	11

Notes:

- 1 Based on an analysis of variation in price changes between the individual items chosen to represent each division in the period 1999 to 2003.
- 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. See footnote 3 for specific example.
- 3 The item 'University tuition fees' is classified as one separate item, but the index takes into account prices for several hundred courses, including undergraduate, postgraduate and part-time.

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 production costs and processing times may be contained.

Such analysis, of course, cannot indicate 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 Expenditure and Food Survey, a continuous

survey of over 6,000 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 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.

Although the process for the 2008 basket review has been similar to those conducted in previous years, fewer changes are being made to the basket as the focus has been slightly different for two main reasons:

- when considering changes to the basket for 2008, extra attention was given to where and how price quotes for existing items are collected. Where suboptimal sampling techniques or problems existed with collection for an item, resources were dedicated towards those items. For example, class 12.1.2, appliances and products for personal care, was identified as one such area. Although no items within this class have changed for 2008, the range of shops for certain items has been broadened, and the number of prices collected increased to attempt to reduce the volatility that frequent half-price sales for certain items within this class can have. Similarly, for class 5.1.1, furniture and furnishings, it was recognised that the retailing sales and recovery cycles for furniture were becoming more dramatic, with less than half-price sales commonplace. To attempt to reduce the impact of any one shop, the sampling of each item was reviewed and, in 2008, additional outlets have been added to the collection, and
- existing item descriptions have also been a particular focus. For example, a thorough review of existing item descriptions in the light of coverage – the number of non-zero prices collected as a proportion of those attempted to be collected – for each item has been reviewed. In some cases, this has revealed that the item description specification is so narrow as to preclude certain varieties or supermarket own-brands

None of these points should undermine the basket review, however. Changes where spending demands inclusion/exclusion from the basket are being made, along with refinements to existing item descriptions or sampled outlets.

Finally, it should also be noted that the vast majority of 650 or so representative items remains unchanged in 2008.

Table 2
Additions to the basket in 2008

CPI class	RPI section	New item	Notes
01.2.2 Mineral waters, soft drinks and juices	2120 Soft drinks	Pure fruit smoothie	New item. Introduced to represent distinct and emerging market and diversify range of soft drinks collected.
01.1.7 Vegetables	2125 Fresh vegetables	Peppers	New item. Introduced to increase number of fresh vegetables prices collected. Although spending does not demand that peppers be included in the basket, vegetable prices vary greatly so it is beneficial to collect across as broad a range of items as possible. Previously in the basket (as green pepper), removed in late 1990s.
01.1.6 Fruit	2127 Fresh fruit	Small-type oranges	New item. Can take various forms, for example, clementines and mandarins. As with peppers (see above), spending does not demand inclusion, but fruit prices are volatile and so it is beneficial to collect across a broad range of items.
11.1.1 Restaurants and cafes	2201 Restaurant meals	Muffin	New item. While beverages from coffee shops and bakeries are adequately represented in the basket already, a snack item is also being included from 2008 in the shape of the muffin. This is to represent spending on all such snacks (such as croissants and cakes) that are typically bought with a coffee. Prices collected will be for 'eat-in' wherever possible.
02.1.3 Beer	3102 Beer off-sales	20 bottles lager (4.3–7.5%)	Replaces 'stubbies' item, to be collected from supermarkets and some off-licences only. Stubbies have become an increasingly difficult item to collect and monitor due to range of sizes and alcohol content. Whereas previously much supermarket space was devoted to stubbies, it has now switched to full size (330ml) bottles of lager.
12.7.0 Other services (not elsewhere classified)	5203 Personal services	Flower bouquet, next day delivery	Replaces long standing 'Red rose to Watford' item. This replacement represents changes in flower delivery over recent years and is a cost saving. A limited number of companies, so currently offer delivery, with price independent of region rather than collect these throughout the country, it makes sense to collect directly from the main companies.
09.1.4 Recording media	6302 CDs and tapes	Non-chart CD album	New item. Introduced to split high weight of CD albums (chart CD album item remains in basket). Will represent purchase of 'classic' albums, prices for which may change differently from those for chart CDs.
09.1.4 Recording media	6303 Toys, photographic and sports equipment	Portable digital storage device	New item. Represents growing market for all forms of portable storage, including camera memory cards, sticks etc, those used in mobile telephones and USB memory 'keys', typically used in personal computers.
09.2.1/2 Major durables for in/outdoor recreation and culture	6402 Entertainment and other recreation	Livery charges	New item in the basket for 2008. Improves coverage of an under-represented class in CPI and represents a distinct market not currently represented.

Changes to the basket in 2008

Changes to the basket of goods and services this year were introduced with the February 2008 consumer price indices published on 18 March; that is, monthly changes in prices from February 2008 to January 2009 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 2008 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 2008 should certainly 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 in 2008 affect both the CPI and RPI indices.

The following bullet points give a brief summary and explanation of the themes behind the changes to the basket for 2008:

- 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:

- furniture and furnishing (5.1.1), with price collectors visiting an increased number of stores and several hundred more prices collected throughout the country for existing items
- other appliances and products for personal care (12.1.2), with more prices collected for existing items in the field, especially for electric razors and hair dryers
- 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

<p>such goods. For example, pure fruit smoothies, introduced to represent the growing consumer demand for healthy crushed pure fruit drinks. In recent years, supermarkets have devoted an increasing amount of space to smoothies, as choice and, in turn, consumer spending have increased. The introduction of this item can also be seen to diversify the current sampling of fruit drinks – already the basket covers a wide range of fruit juice drinks, although nothing specifically targeting the smoothie</p> <p>■ as in most years, some of the new additions do represent developments in technology, illustrating evolving trends. In 2008, portable digital storage media is included for the first time – this item should not necessarily be</p>	<p>seen as a direct replacement for the 35mm camera film, as it covers far more than just camera memory cards. Aside from use in cameras to store photographs, portable storage media, in the form of various memory cards and USB storage sticks (all of which can be selected by price collectors), can give added functionality to portable music (mp3) players, games consoles, mobile telephones, transporting files between computers and so on. The market for digital storage has been growing steadily in recent years and the item now warrants inclusion in the basket</p> <p>■ 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 items, usually where</p>	<p>spending is significant. For example, a new non-chart pre-recorded CD has been introduced to supplement the existing CD item to better represent the high spending on CD albums. Similarly, new items in the form of peppers and small-type oranges (such as mandarins, satsumas and clementines) are added to fresh vegetables and fruit, respectively, in 2008. This is to increase the coverage of two classes with particularly high variability in prices</p> <p>■ in other cases, the new items are direct replacements for similar products that leave the basket in 2008. For example, large crates of regular sized (275–330ml) bottled lager replace the lager stubbies item which was more popular ten years ago. This is also partly for operational reasons – varieties</p>
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Table 3
Items removed from the basket in 2008

CPI class	RPI section	Dropped item	Notes
01.1.7 Vegetables	2129 Other foods	Frozen vegetarian ready meal	Removed. Very low-weighted item. Ready meals and convenience foods remain represented in basket by chilled ready meal, frozen pizza and frozen non-vegetarian meal. Removal allows improvement of coverage of fresh vegetables.
02.1.3 Beer	3102 Beer off-sales	Lager stubbies	Replaced. Stubbies have become difficult to collect and coverage has decreased over 2007. Even in supermarkets it has proven difficult to collect a long run series of prices as pack sizes and alcohol contents vary so greatly. Shelf space has become dominated by regular bottled lager and the new lager item (see Table 2) represents this.
05.1.2 Carpets and other floor coverings	4302 Furnishings	Washable carpet	Removed. Spending on washable carpets is low and decreasing. Class is already well represented with a number of other carpet items.
05.3.1 Major appliances and small electrical goods	4303 Electrical appliances	Microwave oven	Removed. Very low-weighted item. Removal of this item represents falling expenditure on microwaves over the past decade, due to the fact that unit prices are now so low.
09.1.5 Repair of audio-visual equipment and related products	4401 Domestic services	TV repair	Removed. Low-weighted item. Spending on TV repair has been low and decreasing for a number of years as television prices fall and technology (and reliability) improves. Increasingly, people replace broken televisions rather than fix them, especially with the current dominance of flat panel televisions.
07.2.1 Spare parts and accessories	6102 Maintenance of motor vehicles	Steering lock device	Removed. Spending has decreased in line with improved 'on-board' security of newer cars, for example, automatic steering wheel locks.
09.1.4 Recording media	6302 CDs and tapes	CD single (top 40)	Removed. Very low-weighted item within well-represented class. Removal allows introduction of a second CD album item. Popularity of music downloads has led spending on (and shop space devoted to) CD singles to decrease in recent years. Audio CDs remain represented with two CD album items in the basket.
09.1.4 Recording media	6303 Toys, photographic and sports goods	35mm camera film	Replaced by portable digital storage media. Low-weighted item within well-represented class. Follows the removal of the 35mm camera last year. Spending on camera films has naturally declined with the popularity and affordability of digital cameras and photography.

Note:

'Low-weighted' denotes an item with a CPI weight of less than 0.5 parts per thousand in 2007.

of stubbies in supermarkets change frequently and achieving a consistent sample in terms of alcohol content, brand and size can be tricky. It should be stressed that bottled lager is in no way a new item in 2008 – smaller size packs of lager are already priced in the basket and this new item purely represents bulk purchases (20 bottles) in supermarkets

- 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. This is reflected in some changes made to the outlet sample drawn for furniture items (mentioned above) and for fast-food burger takeaway. During 2007, research was undertaken into both of these commodities, seeking to improve representation in the furniture collection and streamline that for fast-food burgers. For furniture, more outlets will be visited in 2008, with more prices being collected than in the past. For burgers, the review has improved the efficiency of collection and will reduce the number of prices collected in some locations
- finally, as in 2007, the seasonality of some items within the basket is also reviewed. For example, peaches have historically been collected during the summer months, with prices carried forward out of season. In 2008, attempts will be made to collect peaches in as many months as they are widely available

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 have therefore been removed from the basket in 2008 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 either very small or declining significantly in recent years:

- some items have been removed to make way for new additions to the basket within the same product grouping. For example, one of the existing fruit juice items is removed in 2008 to be replaced by the pure fruit smoothie, although both products represent pure fruit juice drinks. In other cases, the items have been removed so that new items may be introduced covering distinct markets not previously represented explicitly within the product grouping. For example, 35mm camera films have been removed this year so that the market for portable storage media can be represented
- in some cases, a product will still remain represented in the basket even if there is no longer an explicit item. For example, although two king-size cigarette items have been removed from the basket, one new item has been included, which effectively covers the two

- 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 vehicle steering locks and microwaves, both of which leave the basket in 2008 without replacements. 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

Methodological changes

Two methodological changes were also introduced with the February index. These relate to the measurement of gas and electricity and fresh fruit and vegetable prices.

Previously, gas and electricity price changes were phased in over a four-month period to reflect the fact that the tariff rate did not change for a customer until the day the meter was read (or the bill was estimated). It is clear that tariff increases are now implemented at the time the change is made, regardless of when the meter is read. As a result, the phasing in of price changes ceased with the publication on 18 March. Any residual phasing effects from tariff changes which had not fed through completely by February were also introduced in full in the February index.

The item weights for fresh fruit and vegetables including potatoes have previously varied throughout the year to reflect differing spending patterns. However, the higher-level section weights have been fixed so that the principle of the fixed basket of goods is maintained. From the February index, the seasonal weights were replaced by annual weights. The change reflects the fact that most types of fruit and vegetable are available in shops all year round.

Weights

Table 4 gives a snapshot of how the high-level weights in the RPI⁶ have changed over the last 22 years, since the last rebasing of the series.

The table illustrates that, over the period, there are some clear shifts in expenditure.

Table 4
High-level weights¹ in RPI since 1987

RPI group	1987	1992	1997	2002	2006	2007	2008
Food	167	152	136	114	105	105	111
Catering	46	47	49	52	50	47	47
Alcohol	76	80	80	68	67	66	59
Tobacco	38	36	34	31	29	29	27
Housing	157	172	186 ²	199	222	238	254
Fuel and light	61	47	41	31	33	39	33
Household goods	73	77	72	73	71	66	66
Household services	44	48	52	60	66	65	64
Clothing and footwear	74	59	56	51	49	44	42
Personal goods and services	38	40	40	43	41	39	41
Motoring expenditure	127	143	128	141	140	133	133
Fares and other travel costs	22	20	20	20	19	20	20
Leisure goods	47	47	47	48	41	41	38
Leisure services	30	32	59 ³	69	67	68	65

Notes:-

1 Weights are specified as parts per thousand 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.

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 Expenditure 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 (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 one part per thousand or more of all expenditure covered by the CPI; based on household final consumption data underpinning calculation of the 2008 CPI weights, this is equivalent to around £680 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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FEATURE

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International comparisons of labour disputes in 2006

SUMMARY

This article continues a regular series on international labour disputes. It presents data on labour disputes in member countries of the European Union and the Organisation for Economic Co-operation and Development, between 1997 and 2006. Comparisons are made of overall strike rates between countries as well as strike rates by industry. The article also describes the differences in definitions and coverage of the statistics between countries and how they affect comparability.

This article continues a regular series of international labour dispute features and presents statistics on labour disputes in member countries of the Organisation for Economic Co-operation and Development (OECD) and the European Union (EU) between 1997 and 2006. In 2004, ten countries joined the EU, increasing membership to 25 countries; statistics have been presented for these countries where available. Statistics for international comparisons are always a little behind those available for the UK alone. More recent figures for the UK are presented in Tables 6.29 and 6.30 in the electronic tables section of *Economic & Labour Market Review*. A detailed analysis of labour disputes in the UK in 2007 is expected to appear in the June 2008 edition.

A number of countries have been unable to supply statistics on labour disputes for 2006 as yet. These countries include France, Belgium, Iceland, Estonia, Japan and Cyprus. Thus, the OECD¹ comparisons for 2001 to 2006 are based on 24 countries, while those for the EU in 2006 are based on 18.

The statistics presented in this article are useful for showing relative levels of working days lost through disputes in each country and how they have changed over time. However, an exact comparison between countries is not possible because there are important differences in the methods used for compiling statistics on labour disputes in the individual countries. These differences in coverage are shown in the Technical Note, and are discussed in the

second half of the article.

Please note that, although these articles appear annually and cover ten-year periods, there are often revisions to previous years' figures in the current article. Generally, these revisions will only affect recent years, and will have arisen because either the statistics on working days lost, or those on employment, have been revised by the individual countries during the year. In some cases, the revisions can be quite large, and particular care should be taken when making comparisons between articles. Revisions have been made to the OECD total from 1999 onwards in the first table, although some revisions are small and may not be noticeable with rounded statistics. France, Spain, Finland, Malta, Australia, Canada and New Zealand have revisions in all three tables.

Overall comparisons

Table 1 shows the number of working days lost through labour disputes per thousand employees (the strike rate) over the ten-year period 1997 to 2006² for each of the OECD and EU countries, where figures are available. This shows that the UK strike rate increased from six per 1,000 in 2005 to 28 in 2006, ranking it seventh highest out of 27. Over the OECD as a whole, ten countries saw their strike rate fall in 2006 and 11 showed a rise, the largest of which was Norway, increasing from a rate of five in 2005 to 68 in 2006. The OECD average strike rate has not changed this year, staying consistent at 24 days.

Figure 1 shows the strike rates in 2006

Table 1

Labour disputes: working days not worked per thousand employees¹ in all industries and services

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Average ²		Percentage change 1997–2001 to 2002–06
											1997 –2001	1997 –2006	
United Kingdom	10	11	10	20	20	51	19	34	6	28	14	28	100
Austria	6	0	0	1	0	3	398	0	0	0	1	80	7,900
Belgium	13	28	*	77	*	*	*	*	*	*	(41)	*	*
Denmark	42	1,317	38	51	24	79	23	31	21	34	292	38	–87
Finland	56	70	10	126	30	36	32 ^R	21	322	40	58	91	57
France	16 ^R	15 ^R	20 ^R	27 ^R	21 ^R	11 ^R	10	9	10 ^R	*	20	(10)	–50
Germany	2	1	2	0	1	10	5	2	1	13	1	6	500
Ireland	69	32	168	72	82	15	26	14	17	4	86	15	–83
Italy	84	40	62	59	67	311	124	44	56	27	62	111	79
Luxembourg	0	0	0	20	0	0	0	0	0	0	4	0	–100
Netherlands	2	5	11	1	6	34 ^R	2	9	6	2	5	11	120
Portugal	25	28	19	11	11	29	15	12	7	11	19	15	–21
Spain	182	121	132	295 ^R	150 ^R	370 ^R	56 ^R	306	62	58	178	164	–8
Sweden	7	0	22	0	3	0	164	4	0	1	6	34	467
EU14 average	33^R	47^R	(29^R)	48^R	(32^R)	(93^R)	(43^R)	(49^R)	(23^R)	(24)	(38)	(47)	24
Cyprus								27 ^R	*	*	*	(27)	*
Estonia								*	0	*	*	(0)	*
Latvia								0	0	0	*	(0)	*
Lithuania								0	1	0	*	(0)	*
Malta								11	9 ^R	19	*	(13)	*
Hungary				46	2	0	1	6	0	2	(24)	2	–92
Poland				7	0	0	1	0	0	3	(4)	1	–75
Slovakia				0	0	0	0	0	0	0	(0)	0	–
EU22 average								(43)	(20^R)	(21)	(37)	(41)	11
Iceland	292	557	0	368	1571	0	0	1053 ^R	*	*	571	(353)	–38
Norway	4	141	3	239	0	72	0	68	5	68	78	43	–45
Switzerland	0	7	1	1	5 ^R	5 ^R	2	10 ^R	0	2	3	4	33
Turkey	19	29	23	35	28	4	14	8	15	13	27	11	–59
Australia	77	72	89	52 ^R	43 ^R	28 ^R	46 ^R	39 ^R	24 ^R	13	65	30	–54
Canada	296	196	190	126 ^R	163 ^R	220 ^R	123 ^R	223 ^R	283 ^R	54	192	180	–6
Japan	2	2	2	1	1	0	0	0	0	*	1	(0)	–100
New Zealand	18	9	12	8	37	22 ^R	12 ^R	4	18	17	17	15	–12
United States	38	42	16	161	9	5	32	8	10	20	54	15	–72
Mexico										24	*	(24)	*
Korea										77	*	(77)	*
OECD average³	39^R	44^R	(27^R)	81^R	(23^R)	(45^R)	(33)	(31^R)	(24^R)	(24)	(43)	(31)	–23

Notes:

1 Some employee figures have been estimated.

2 Annual averages for those years within each period for which data are available, weighted for employment.

3 From 2000, the OECD average includes Hungary, Poland and Slovakia.

R Revised

* No data available

() Brackets indicate averages based on incomplete data.

Sources for working days not worked: ILO; Eurostat; National Statistics Offices

Sources for employees: OECD; National Statistics Offices

for the top ten EU countries that supplied statistics, with the UK having the fourth highest rate. Austria, Luxembourg, Latvia, Lithuania and Slovakia all had an average strike rate of zero for 2006. France, Belgium, Cyprus and Estonia did not supply figures and so have been excluded.

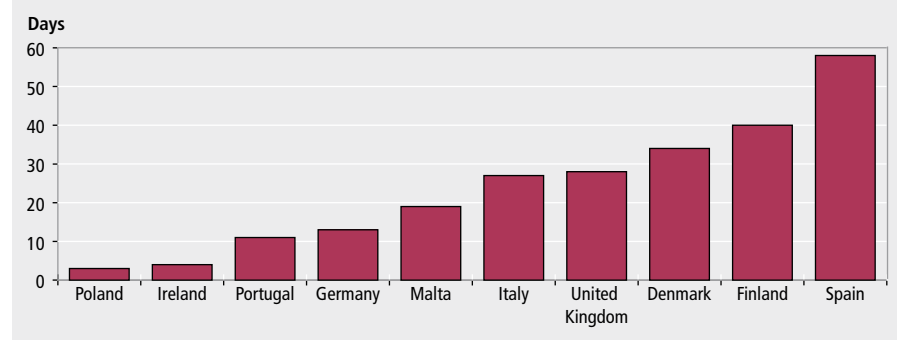
Figure 2 displays the UK strike rate against the EU average for each year from

1997 to 2006. The UK strike rate is above the EU rate for the first time since 1996. The EU strike rate has been stable for the last two years, whereas the strike rate for the UK has risen sharply. Within the EU, Germany and Luxembourg have shown low strike rates over the latest ten-year period, while Spain continues its trend of high strike rates, with an average of 58 in 2006.

Generally, it can be seen from the statistics, where available, that the strike rate for the most recent EU member countries is low.

The estimates show that the incidence of labour disputes is erratic and year-on-year comparisons should be made with caution. Norway's high 2006 strike rate of 68 days is due to this year's biennial bargaining round for pay. High figures such as those

Figure 1
EU¹ top ten strike rate, 2006²



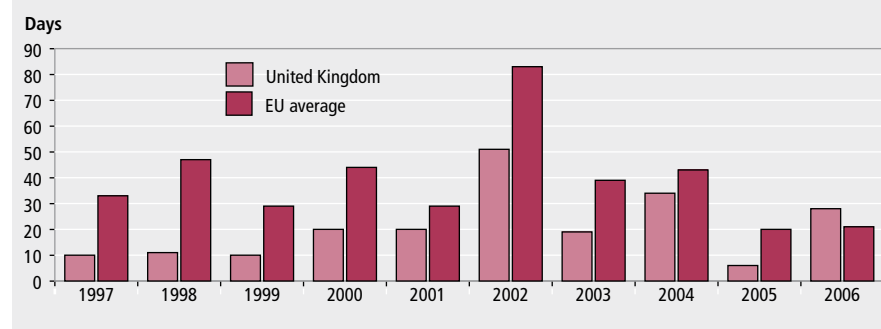
Notes:

1 Excludes France, Belgium, Cyprus and Estonia.

2 Austria, Luxembourg, Latvia, Lithuania and Slovakia have a strike rate of zero in 2006.

3 Hungary, Netherlands and Sweden have a strike rate above zero but lower than that of the top ten.

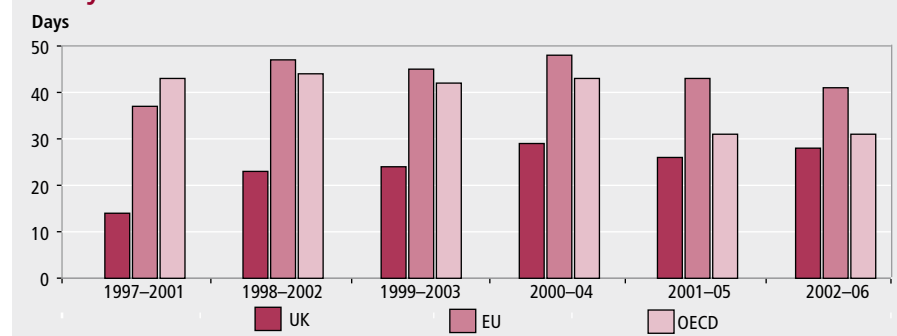
Figure 2
Annual strike rates



Note:

From 2004, ten new EU members were included.

Figure 3
Five-year strike rates



Note:

From 2000, OECD figures include Hungary, Poland and Slovakia.

for Norway are usually down to one large stoppage. An example of this is Finland's large 2005 figure, where 98 per cent of the working days lost were as a result of one stoppage in the manufacturing industry. Other examples include the public sector strike in France in 1995, the large private sector strike in Denmark in 1998, the health sector strike in Ireland in 1999, the transport, storage and communication group strike in Finland in 2000 and the

general strikes in Spain and Italy in 2002. The high level of industrial disputes in Austria in 2003 was in reaction to the Government's plans to introduce a fundamental pension reform. Eight EU countries have shown increased strike rates in 2006, six have shown a decrease and four have shown no change.

In order to lessen the effect of a single year's statistics, comparisons can be made over a number of years. **Figure 3** shows

average strike rates in the UK, the EU and the OECD over rolling five-year periods from 1997.³ The OECD and EU strike rates have remained relatively stable over this period, although both OECD and EU strike rates have fallen again this year. The UK strike rate is consistently below both the EU and OECD averages. The average rates for the periods 1997 to 2001 and 2002 to 2006 are also shown in Table 1. Over this period, excluding the ten new EU members for 2004, the average rolling five-year EU strike rate increased by 24 per cent. Across the OECD, the equivalent strike rate fell by 23 per cent for the same period. Sixteen OECD countries have shown a decrease in their strike rates.

The five-year on five-year comparisons need to be interpreted carefully, as both rises and falls may be determined by high values in single years: Denmark's public sector strike in 1998, the US's large strike in the telecommunications industry in 2000, and strikes in Austria and Finland in 2003 and 2005, respectively. Also, percentage change comparisons for countries with very low strike rates (under five days) may not be informative. Between 2002 and 2006, the average number of working days lost per thousand employees in the UK was 28, an increase of 100 per cent over the 1997 to 2001 period. Sweden has shown a sharp rise of 467 per cent during the same period. The increase of 7,900 per cent shown by Austria has been caused by the 2003 statistics, and the rise of 120 per cent shown by the Netherlands is a large percentage increase, but only from an average rate of five days between 1997 and 2001 compared with a rate of 11 days between 2002 and 2006.

Comparisons by industry

One particular characteristic of labour disputes is the variation between industries in the incidence of strikes. Some industries such as manufacturing and transport have consistently high strike rates, while others like agriculture have very low ones. The industrial composition of employment can vary quite significantly between countries and this can sometimes explain why one country has a particularly high or low ranking compared with another.

Table 2 shows working days lost per thousand employees for the production and construction industries,³ for each country where figures are available, for 1997 to 2006. Six countries saw a fall in their strike rates for these industries between 2005 and 2006 and six countries also saw a rise. Norway reported a large strike rate of 130 working days lost per thousand employees

Table 2

Labour disputes: working days not worked per thousand employees¹ in the production and construction industries

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Average ²		1997 –2006	Percentage change 1997–2001 to 2002–06
											1997	1997		
											–2001	2002–06		
United Kingdom	19	9	20	20	15	8	16	8	5 ^R	9	17	9	13	–47
Austria	0	0	0	0	0	*	*	0	0	0	(0)	(0)	(0)	0
Belgium	48	26	*	24 ^R	*	*	*	*	*	*	(32)	*	(32)	*
Denmark	99	3215	94	112	70	124	60	97	45	23	726	70	412	–90
Finland	48	37	20	280	16	107	70 ^R	43	1,185 ^R	92	81	298	189	268
France	51 ^R	44 ^R	60 ^R	84 ^R	49 ^R	25 ^R	29 ^R	24 ^R	*	*	58	(26)	(46)	–55
Germany	3	1	6	0	2	27	15	5	1	8	2	11	7	450
Ireland	45	29	81	43	41	22	8	7	9	13	48	12	29	–75
Italy	164	62	116	62	126	83	80	49 ^R	118	60	106	78	92	–26
Luxembourg	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	7	2	15	2	6	159 ^R	1	8 ^R	13 ^R	4	6	37	21	517
Portugal	56	39	20	11	15	40	18	12	12 ^R	*	27	(17)	(22)	–37
Spain	349	253	135	500 ^R	345 ^R	59 ^R	103	174	71	108	323	103	201	–68
Sweden	2	2	2	0	9	1	26	17	0	0	3	9	6	200
EU14 average	(69)	(97)	(47 ^R)	(83 ^R)	(69)	(44 ^R)	(40 ^R)	(40)	(58 ^R)	(35)	(73)	(43)	(59)	–41
Cyprus								123	*	*	*	(123)	(123)	*
Estonia								*	*	*	*	*	*	*
Latvia								0	0	*	*	(0)	(0)	*
Lithuania								0	0	*	*	(0)	(0)	*
Malta								2 ^R	3	*	*	(3)	(3)	*
Hungary				0	2	0	1	0	1	1	1	1	1	0
Poland				3	0	0	2	0	0	5	1	1	1	0
Slovakia				0	0	0	0	0	0	0	0	0	0	0
EU22 average								(34)	(48 ^R)	(30)	(69)	(37)	(53)	–46
Iceland	*	*	*	*	*	*	*	*	0	*	*	(0)	(0)	*
Norway	13	12	8	842	0	129 ^R	1	241	25	130	173	105	140	–39
Switzerland	*	*	*	*	*	*	*	12	1	*	*	(10)	(10)	*
Turkey	39	31	53	55	68 ^R	6	35 ^R	21	35	34	49	27	38	–45
Australia	237	235	250	186	220 ^R	127 ^R	164 ^R	109 ^R	93	*	225	(123)	(178)	–45
Canada	319	336	272	187 ^R	229 ^R	199 ^R	239 ^R	225 ^R	176 ^R	116	268	191	228	–29
Japan	1	1	1	1	0	0	0	0	0	*	1	(0)	(0)	–100
New Zealand	42	7	7	27	66 ^R	14 ^R	51 ^R	5	12	*	30	(20)	(26)	–33
United States	78	137	62	54	14	11	4	4	37	*	69	(13)	(46)	–81
Mexico										77	*	(77)	(77)	*
Korea										*	*	*	*	*
OECD average ³	(67)	(97)	(53 ^R)	(62)	(44)	(30)	(29)	(28)	(41 ^R)	(44)	(65)	(33)	(50)	–49

Notes:

1 Some employee figures have been estimated.

2 Annual averages for those years within each period for which data are available, weighted for employment.

3 From 2000, the OECD average includes Hungary, Poland and Slovakia.

R Revised

* No data available

() Brackets indicate averages based on incomplete data.

Sources for working days not worked: ILO; Eurostat; National Statistics Offices

Sources for employees: OECD; National Statistics Offices

in this sector for 2006. **Table 3** shows the equivalent for the service industries.⁴ Between 2005 and 2006, within the service industry group, five countries saw a fall in their strike rates and seven saw a rise, with Norway experiencing the most significant rise and Canada the most notable fall. In fact, the strike rate for Canada in this sector

dropped from a rate of 322 working days lost per thousand employees in 2005 to just 34 in 2006.

Over the average ten-year period from 1997 to 2006, the EU14 strike rates in the production and construction industries were almost three times those of the service industries. Over the same period, OECD

countries also showed a consistently higher strike rate in production and construction than services, with 22 more working days lost per thousand, though the production and construction industries rate in the UK was 43 per cent lower than the service sector rate. Between 1997 and 2006, 17 of the 26 OECD countries, where figures were

Table 3

Labour disputes: working days not worked per thousand employees¹ in the service industries

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Average ²		1997 –2006	Percentage change 1997–2001 to 2002–06
											1997 –2001	2002–06		
United Kingdom	7	12	7	20	22	62	20	40	6	31	14	32	23	129
Austria	9	0	0	1	0	*	*	0	0	0	2	(0)	(2)	200
Belgium	0	30	*	1	*	*	*	*	*	*	(10)	*	(10)	*
Denmark	20	494	5	14	5	9	3	6	4	4	106	5	54	–95
Finland	62	75	5	51R	36	9	11	13	9	22	46	13	28	–72
France	4 ^R	5 ^R	7 ^R	8 ^R	10 ^R	5 ^R	3 ^R	4	*	*	7	(4)	(6)	–43
Germany	1	0	1	0	0	1	0	0	0	16	1	4	2	300
Ireland	85	34	214	88 ^R	103 ^R	12	33	17 ^R	20 ^R	1	106	16	56	–85
Italy	33	22	33	57	35	43	37	42 ^R	24 ^R	10	36	31	33	–14
Luxembourg	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	1	6	11	1	7	4	2	0	1	2	5	2	3	–60
Portugal	8	21R	10	11	9	20	13	13	5	*	12	(13)	(12)	8
Spain	116	39	61	185 ^R	37	48 ^R	25	46 ^R	56 ^R	37	89	43	62	–52
Sweden	9	0	29	0	1	0	208	0	0	0	8	41	25	413
EU14 average (17^a)	(22^b)	(15^b)	(29^b)	(16^b)	(26^b)	(19^b)	(20)	(13^b)	(21)	(20)	(20)	(20)	(20)	0
Cyprus								8	*	*		(8)	(8)	*
Estonia								*	*	*		*	*	*
Latvia								0	0	*		(0)	(0)	*
Lithuania								0	1	*		(1)	(1)	*
Malta								16	2R	*		(5)	(5)	*
Hungary				78	3	0	1	9	0	3	40	3	13	–93
Poland				10	1	0	0	0	0	2	5	0	2	–100
Slovakia				0	0	0	0	0	0	0	0	0	0	*
EU22 average							(18)	(11^b)	(18)	(20)	(18)	(19)	(19)	–10
Iceland	*	*	*	*	*	*	*	*	0	*	*	(0)	(0)	*
Norway	0	185	2	67	0	57R	0	22	0	53	51	26	38	–49
Switzerland	*	*	*	*	*	*	*	11	0	*	*	(6)	(6)	*
Turkey	4	30	2	24R	3	3	1	1	3	1	13	2	7	–85
Australia	32	28	47	28	8	9	27	30 ^R	10 ^R	*	28	(19)	(24)	–32
Canada	294	102	158	97 ^R	145 ^R	228 ^R	83 ^R	227 ^R	322 ^R	34	158	178	169	13
Japan	3	3	2	1	1	0	0	0	0 ^R	*	2	(0)	(1)	–100
New Zealand	9	9	13	2	29R	25R	0	3	14	*	12	(10)	(11)	–17
United States	25	12	2	198	8	4	41	9	6	*	50	(15)	(34)	–70
Mexico										1	*	(1)	(1)	*
Korea										*	*	*	*	*
OECD average³ (29^a)	(20^b)	(14^b)	(91^b)	(15^b)	(20^b)	(27)	(21)	(21^b)	(17)	(34)	(22)	(28)	(28)	–35

Notes:

1 Some employee figures have been estimated.

2 Annual averages for those years within each period for which data are available, weighted for employment.

3 From 2000, the OECD average includes Hungary, Poland and Slovakia.

R Revised

* No data available

() Brackets indicate averages based on incomplete data.

Sources for working days not worked: ILO; Eurostat; National Statistics Offices

Sources for employees: OECD; National Statistics Offices

available, had a higher average rate in the production and construction industries than in the service industries.

Figure 4 and Figure 5 show, respectively, the UK strike rates in the two industry groups for each year from 1997 to 2006 and the equivalent figures for the OECD. In the UK, the strike rates in the production and construction industries have been fairly

consistent, but in the service sector there were three noticeable increases, in 2002, 2004 and 2006. In the production and construction industries, the UK rate has been substantially below the OECD average since the early 1990s. In the OECD, the strike rate in this sector has been higher than that for the service sector since 1996, with the exception of 2000. This was due

to the US's high strike rate, resulting from action in the renting, real estate and other business activities sector.

Table 2 and Table 3 also show average rates by industry for the five-year periods 1997 to 2001 and 2002 to 2006. Between these periods, the OECD saw a 49 per cent reduction in the production and construction industries rate. The EU14

Figure 4
Strike rates, United Kingdom

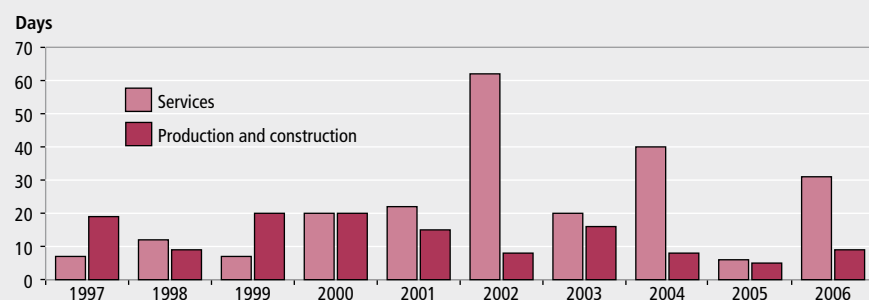
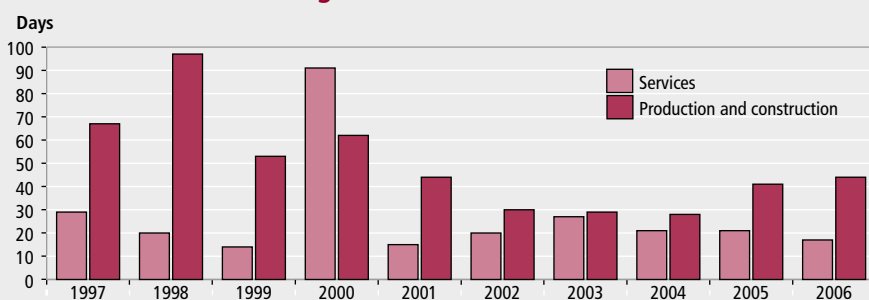


Figure 5
Strike rates, OECD average



estimates for production and construction also show a fall, but in services there was no change. Over the same period, the UK saw a fall of 47 per cent in the production and construction industries and a rise of 129 per cent in the service sector. The Netherlands showed the greatest proportionate rise (517 per cent) in its production and construction industries rate over the period, while Denmark showed the biggest fall (90 per cent). Four countries in addition to the UK saw a rise in their service sector rates: Germany, Portugal, Sweden and Canada.

Coverage and comparability

Because of the differences in coverage and definitions, international comparisons of labour dispute statistics need to be made with care. In particular, differences in rates in Tables 1 to 3 may not be significant when coverage is taken into account. Most countries rely on voluntary notification of disputes to a national or local government department, backed up by media reports.

None of the 33 countries mentioned in this article aim to record the full effects of stoppages of work. For example, most countries do not measure working time lost at establishments whose employees are not involved in the dispute, but are unable to work because of shortages of materials supplied by establishments that are on strike. Similarly, other forms of industrial action, such as go-slows, work-to-rule and

overtime bans, are not generally reported.

There are significant differences between countries in the criteria that exist to determine whether a particular stoppage will be entered in the official records. Most countries exclude small stoppages from the statistics, the threshold being defined in terms of workers involved, the length of the dispute, the number of working days lost, or a combination of all or some of these. These are summarised in the Technical Note. The UK, for example, excludes disputes involving fewer than ten workers or lasting less than one day, unless the aggregate number of days lost exceeds 100. Germany, for example, adopts the same criteria but has other exclusions that make direct comparisons with the UK difficult. A number of other countries' thresholds are similar, but any differences in thresholds affect the number of working days lost that are recorded.

There are two countries where the thresholds used are particularly high: the US and Denmark. The US includes only those disputes involving more than 1,000 workers. In Denmark, the threshold used is 100 working days lost. Hence, the strike rates for the US and Denmark are clearly not directly comparable with those for the UK, Germany and other countries with similar thresholds.

There are a number of other important differences that may be significant when making international comparisons. Some

countries exclude the effects of disputes in certain industrial sectors. For example, Portugal omits public sector strikes and general strikes and Japan excludes days lost in unofficial disputes. Political stoppages are not included for the UK, Turkey, Hungary, Cyprus, Malta and the US. In the UK this is insignificant. The last identified political strike in the UK was in 1986, with fewer than 1,000 working days being lost.

The inclusion or omission of those workers indirectly involved in a stoppage (those unable to work because others at their workplace are on strike) varies between countries. Almost half of the countries listed in the Technical Note, including the UK, France, Belgium, the Netherlands, Australia, New Zealand and the US, attempt to include them. Germany, Canada, Italy and Japan are among the countries that exclude them. This causes these countries to record a lower number of working days lost than countries that include indirectly affected workers in their statistics. Consequently, even though Germany, for example, has a similar threshold for inclusion of disputes to that used in the UK, comparisons between the two countries' records should be made with care. It is worth noting, however, that evidence from the UK suggests that few working days are lost by workers indirectly affected by strikes. From the total number of working days lost in 2005, less than 1 per cent were lost by workers indirectly involved in strike action; in 2006 the equivalent figure was around 3 per cent.

Notes

- 1 OECD averages include statistics (where available) only from member countries presented in the tables.
- 2 From 2000, OECD figures include the Hungary, Poland and Slovakia. EU figures from 2004 onwards include ten new EU members. Also, from 2006, the OECD average now includes Korea and Mexico.
- 3 Production and construction industries include mining and quarrying; energy and water supply; manufacturing; and construction.
- 4 Service industries include retail sales; wholesale; hotels and catering; transport, storage and communication; finance; business services; education; health; social services; and public administration.

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TECHNICAL NOTE

Labour disputes: comparisons of coverage and methodology

	Minimum criteria for inclusion in statistics	Are political stoppages included?	Are indirectly affected workers included?	Sources and notes
United Kingdom	Ten workers involved and of one day duration unless 100 workdays not worked	No	Yes	Office for National Statistics collects information initially from press reports, and then contacts employers and trade unions directly
Australia	Ten workdays not worked	Yes	Yes	Information gathered from Industrial Relations Department, employers, unions and press
Austria	No restrictions on size	Yes	No	Trade unions provide information
Belgium	No restrictions on size; excluding public sector stoppages	Yes	No	Questionnaires to employers following police or media coverage
Canada	Half a day duration plus 10 workdays not worked	Yes	No	Reports from Canada Manpower Centres, provincial Labour Departments, conciliation services and press
Cyprus	Three-quarters of a day duration	No	Yes	Private sector – voluntary reports from employers, Industrial Relations mediators and trade unions; public sector – compulsory report to the Department of Labour
Denmark	100 workdays not worked	Yes	Yes	Voluntary reports submitted annually by employers' organisations
Estonia	Not known	Not known	Not known	No information
Finland	One hour duration	Yes	Yes	Principally, returns from employers (+90%) some reports from employees and press
France	One workday not worked; excluding agriculture	Yes	Yes	Labour inspectors' reports
Germany	Ten workers involved and of one day duration	Yes	No	Compulsory notification by employers to local employment offices unless 100 workdays not worked; excluding public administration; from 1993, data cover the entire FRG – earlier data represented West Germany only
Hungary	Ten workers involved	No	No	Compulsory questionnaires to employers following media coverage
Iceland	Restrictions on size	Not known	No	No information
Ireland	Ten workdays not worked or one day duration	Yes	Yes	Reports from Department of Enterprise and Employment, Department of Social Welfare and press
Italy	No restrictions on size	Yes	No	No information
Japan	Half a day duration; excluding unofficial disputes	Yes	No	Legal requirement to report to Labour Relations Commission
Latvia	Not known	Not known	Not known	No information
Lithuania	Not known	Not known	Not known	No information
Luxembourg	No information	Not known	Not known	No information
Malta	No restrictions on size	No	No	Questionnaires to employers following media coverage
Netherlands	No restrictions on size	Yes	Yes	Questionnaires to employers following a strike; National Dutch Press Bureau collects relevant news items on a contractual basis for Statistics Netherlands
New Zealand	Ten workdays not worked; prior to 1988 excluding public sector stoppages	Yes	Yes	Information initially from press reports, employee and employer organisations, and labour inspectors, and subsequently from employer report forms

TECHNICAL NOTE continued

Labour disputes: comparisons of coverage and methodology

	Minimum criteria for inclusion in statistics	Are political stoppages included?	Are indirectly affected workers included?	Sources and notes
Norway	One day duration	Yes	No	Employers' reports to the Ministry of Labour and Government Administration, and press
Poland	Duration of at least one hour	Yes	Yes	Compulsory report from employers
Portugal	Strikes only; no restriction on size; excluding general strikes at the national level; excluding public administration	Yes	No	Legal obligation on trade unions to notify Ministry of Labour and Social Security
Slovakia	No restriction on size	Yes	Yes	Compulsory report from employers
Spain	Strikes only prior to 1990; one hour duration; prior to 1989, excluding the civil service	Yes	No	Legal obligation on party instigating strike to notify competent labour authority
Sweden	Eight hours not worked	Yes	No	Information gathered following press reports
Switzerland	One day duration	Yes	Yes	Federal Office for Industry, Crafts, Occupations and Employment requests returns from employers and unions following press reports
Turkey	No restriction on size; excluding energy services and most public services; excluding general strikes	No	Yes	Legal obligation on the part of trade unions to notify Regional Directorates of Labour
United States	One day or one shift duration and one thousand workers involved	No	Yes	Reports from press, employers, unions and agencies

Source: ILO sources and methods: *Labour Statistics, Vol 7. Strikes and lockouts* (Geneva, 1993) and ILO's Statistical web site: LABORSTA.ilo.org

FEATURE

Teresa Sbano

PGAM Economic Research

New historical data for assets and liabilities in the UK

SUMMARY

This article presents the full series of UK financial accounts since 1979 for all sectors and since 1957 for households. The definition of new standards for financial accounts, and specifically SNA 93, had entailed an interruption in official time series. The article highlights the methodology used to ensure consistency in the connection between the old and the new series.

A first historical analysis of the UK data and a set of international comparisons for two of the countries (the United States and Italy) for which long-term consistent statistics are available is also provided.

The main scope of this article¹ is to present a reconstruction of historic financial accounts for the UK, to explore their structure and compare them with those of other selected countries.

This reconstruction has been conducted jointly with the Office for National Statistics (ONS) and the Bank of England, and is part of a broader Organisation for Economic Co-operation and Development (OECD) project to extend back the currently available time series for financial accounts for a group of OECD countries: Canada, France, Germany, Italy, Japan, Spain, the UK and the US.

Financial balance sheets were published by the Central Statistical Office (CSO)² and the Bank of England prior to 1987, but they were based on a different classification. These data have never been correlated with more recent time series; this project aims to fill that gap.

Although as an initial step the OECD project focused on household and non-financial corporations, in the case of the UK it was decided to analyse all institutional sectors to obtain a broader picture of the UK National Accounts. The emphasis is on stocks and their impact on assets and liabilities from 1979 onwards, and on the household sector from the 1950s.

Historical data are critical for understanding macroeconomic behaviour. Longer time series allow a closer analysis of several important issues such as the evolution of financial wealth over time, trends in debt, relationships between the institutional sectors and the correlation or convergence between different countries.

The article is organised as follows.

The first section presents the general methodology and the sources of financial accounts used to reconstruct UK balance sheets for all institutional sectors. In the next section, a preliminary analysis of the evolution of household financial assets and liabilities in the UK from 1957 onwards is outlined. The following section compares the UK financial structure with that of other countries and the final section presents a summary of first conclusions. A statistical annex (available in the web version of this article at www.statistics.gov.uk/cc/ article.asp?id=1613) tabulates provisional data by sector for financial instrument assets and liabilities in the UK, from 1979 to 2006.

Sources and methodology

For reconstruction purposes, the currently available time series from ONS (based on the SNA 93 classification), which covers the period 1987 to 2007, was used. Financial balance sheet³ figures were obtained for the period 1975 to 1987 from the *Blue Book* annual National Accounts.

A similar exercise was attempted for the other countries included in the OECD project, extending the time series back from 1979 for stocks (asset and liabilities) and for the following financial instruments (F):

F	total financial assets and liabilities
F2	currency and deposits
F3	securities other than shares
F4	loans
F5	shares and other equity
F6	insurance technical reserves
F7	others

As mentioned above, while the OECD project concentrated exclusively on the household and non-financial corporation sectors, in order to get a complete picture of UK national wealth, the reconstruction exercise included all the main institutional sectors: households, non-financial corporations, financial corporations, government and the rest of the world.

By superimposing data from the old and new time series for a number of years (1987 to 1996), it was possible to check the consistency of the reconstruction. The next section presents the outcome of this analysis.

SNA 93 versus the old CSO time series

The introduction of SNA 93 in the 1990s with its new classifications made it necessary to reconcile past data with the more recent time series. The changes concerned the definition of the sectors, the breakdown of financial instruments and the method used for valuation of the various instruments.

No significant differences were found regarding the sectors or the valuation method. The main impact of the new classification concerns the breakdown of securities.

In order to match the data from the two sources, a conversion table was constructed (see **Appendix**) which provides a good degree of correspondence of financial assets and liabilities over time.

However, unambiguous correspondence between the two classifications is impossible to achieve. For instance, it is difficult to find a clean split between 'securities other than shares' and 'shares and other equity', or between 'loans' and 'securities other than shares'.

To try and arrive at an accurate breakdown of the instruments under the new classification, reference was made to the overlapping period between the two series, consistent with the long term trends. When these assumptions were insufficient to obtain the desired split, the strong assumption was made that the asset mix was the same as that observed in 1987. This approach follows that used by the Bank of Italy in reconstructing Italian financial balance sheets, where a specific breakdown of instruments is not available.

The reconstruction of the institutional sectors gave good results for all of them as regards total assets and liabilities. This is consistent with the hypothesis that there are no important changes in intra-sector classifications. However, when looking

in more detail at the individual sectors, significant discrepancies between the two time series were found.

Households⁴

In the special case of the household sector, given the minor role that 'loans' and 'securities other than shares' play in the household portfolio, the strong assumption was made that all unambiguous items could be attributed to 'shares and other equity' under the new classification. This assumption was tested in the overlapping period and obtained a high degree of accuracy, confirmed by the perfect match between the old and new time series for assets and liabilities for each item. In the reconstruction, the long-term trend was managed to be maintained, allowing analysis of this and the asset mix over time.

Non-financial corporations

In order to preserve the same sector definition, public non-financial corporations were included under non-financial corporations as required by SNA 93, and not under government as in the previous classification.

Asset allocations in the old and new time series were then looked at. In the case of non-financial corporations, the two classifications presented discrepancies between 'loans' and 'shares and other equities'. This problem was overcome by trying to reallocate the unambiguous items for the period 1979 to 1987 in the same proportions as observed in 1987.

With regard to instruments, it is worth noting that the item 'insurance and pension technical reserves' does not appear in the old *Blue Book* time series for the sector S11. The amount, albeit negligible, is present in the new ONS time series.

Financial corporations

This sector includes banks, building societies, pension funds, life insurance companies and other financial institutions. In the reconstruction exercise, the main problem encountered was that the amount for 'currency and deposits' was underestimated. The unambiguous 'miscellaneous instruments' was therefore attributed to this class.

The biggest discrepancies were found in liabilities after attributing all unambiguous assets to 'securities other than shares'.

A gap was also found in 'loans', which appear to be overestimated in the old classification as compared with the new.

Government

As seen above, to preserve the SNA 93 sector definitions, public non-financial corporations were moved to non-financial corporations.

Significant discrepancies appeared in assets and liabilities once all unambiguous assets had been attributed to 'loans', to match long-term trends in the financial asset mix for the sector.

Rest of the world

In the overseas sector, a good degree of continuity was found for all instruments, with one overestimation in the case of 'shares and other equity'.

In the case of overseas liabilities, after the matching exercise, a key difference was noticed in the items 'currency and deposits and loans'. Once again it was decided to adjust the discrepancy by maintaining the same proportion between the two items as observed during the overlapping period.

As hinted above, the main focus in this project is the household sector. Given the fair degree of continuity in household data, it was decided to extend the time series back to 1957. The following section presents the trend in assets and liabilities and the asset mix over the last 50 years.

Household wealth in the last 50 years

Previous work

Pioneering work on UK balance sheets was presented in a book by Professor Jack Revell. This work was later extended by Revell and Roe, with the support of CSO and the Bank of England, to include annual estimates for the period 1957 to 1966, and a summary was published in *Economic Trends* in 1971. Balance sheet estimates for the household sector for 1966 to 1975 were published by CSO in January 1978 and subsequently updated to 1978. *Economic Trends* in 1980 included a further reconstruction of household sector data.

To get a complete picture of behaviour over the entire 50 years, these statistics were matched with the estimates described in the previous section. Matching the series for 1957 to 1978 to those for 1979 to 2006 presented none of the problems mentioned earlier, since the classifications adopted by CSO for 1966 to 1978 and by the Department of Applied Economics, Cambridge, for 1957 to 1966 were identical to those of SNA 93. No discrepancies were found between the different time series either for the asset mix or in the absolute amounts.

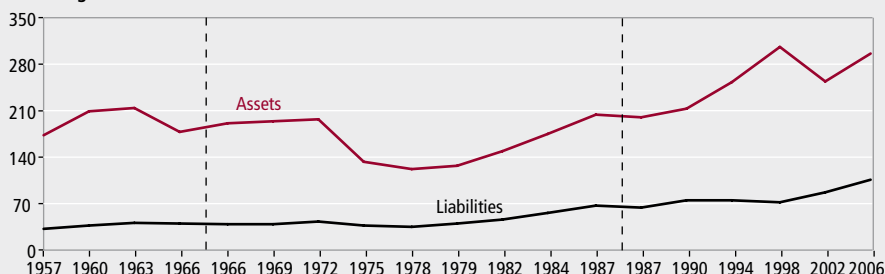
Table 1
Trends in financial wealth and its distribution

	£ million																		
	CSO estimates								OECD estimation			Current ONS data							
	1957	1960	1963	1966	1969	1972	1975	1978	1979	1982	1984	1987	1990	1993	1996	1999	2002	2005	2006
Total financial assets	43	58	70	73	91	127	140	205	251	413	568	840	1,191	1,755	2,078	3,126	2,681	3,591	3,846
Currency and deposits	14	17	19	25	30	41	58	85	99	149	188	250	360	423	494	601	731	921	997
Securities other than shares	4	4	5	5	5	7	8	12	18	25	25	24	21	33	41	47	46	43	35
Shares and other equities	11	20	23	21	29	42	27	33	33	50	73	135	221	335	401	733	393	586	590
Insurance technical reserves	10	13	16	15	20	29	34	61	82	162	246	389	530	896	1,069	1,663	1,419	1,932	2,111
Other accounts receivable and loans	4	5	5	7	8	9	13	15	20	26	36	42	59	68	73	83	91	109	113
Total financial liabilities	7	10	12	15	18	28	39	59	79	127	180	270	419	485	550	675	923	1,249	1,371

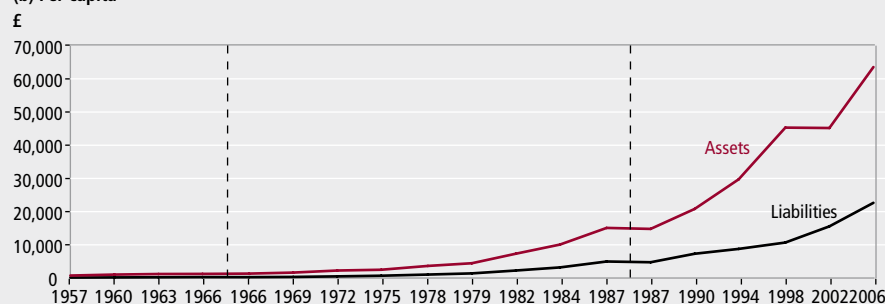
Figure 1
Financial assets and liabilities as a percentage of GDP and in per capita terms

(a) As a percentage of GDP

Percentages



(b) Per capita



cent. Liabilities grew by an annual 11 per cent, peaking at 17 per cent over the 1979 to 1987 period. Financial wealth as a percentage of gross domestic product (GDP) increased over the entire period, though not uniformly so (**Figure 1**). Three main phases can be identified:

- during the first 20 years, the ratio of financial assets to GDP remained fairly steady, averaging around 200 per cent
- during the second period, from 1972 to 1979, a strong rise in nominal GDP not matched by a comparable increase in household assets as seen. The ratio reached a low of 122 per cent in 1979
- since the 1980s, the ratio has risen increasingly rapidly, with the sole exception of 2001

Financial wealth also increased throughout the entire period in per capita terms, though again not uniformly.

Up to the 1980s, the rising trend in financial assets remained rather stable, turning upwards more steeply only in the early 1990s, presumably as a result of the strengthening of the financial system and the liberalisation of capital movements.

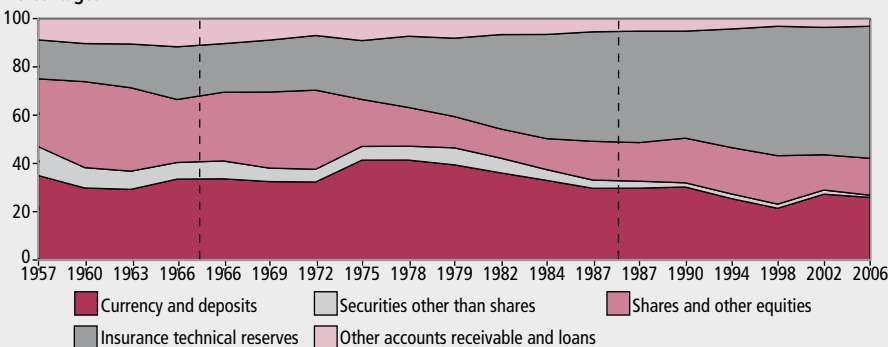
As liabilities grew at around the same pace as assets, the trend for net financial wealth was similar.

The household asset mix saw considerable change during the period under review.

As can be seen in **Figure 2**, UK households in the 1950s had a well-diversified portfolio, though 'currency and deposits' and 'shares and other equity' clearly play the dominant role. In both cases, however, the absolute amounts were negligible. By the end of the 1960s, the most striking feature is the reduction in the weight of 'shares and other equity', a trend which was to continue further in following years. Beginning in the 1980s, a rise in 'insurance and technical reserves' started to be witnessed, which continued to grow over

Figure 2
Household sector asset mix

Percentages



Trends in financial wealth and its distribution

Longer time series give a better insight into wealth, its allocation and dynamics within the economy (**Table 1**).

Important developments in the

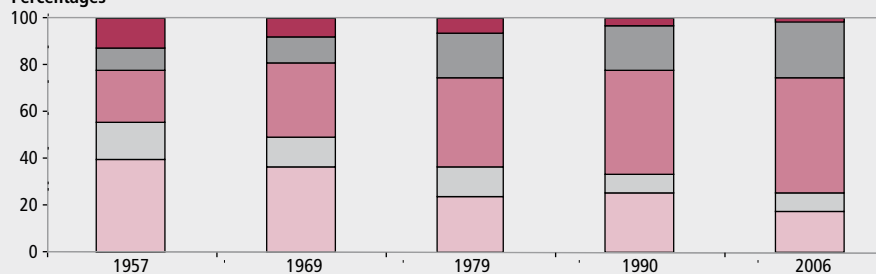
household sector can be seen over the past 50 years, both in absolute values and in the asset mix.

Household assets grew from £38 million in 1957 to around £3,800 million in 2006, a compound annual growth rate of 10 per

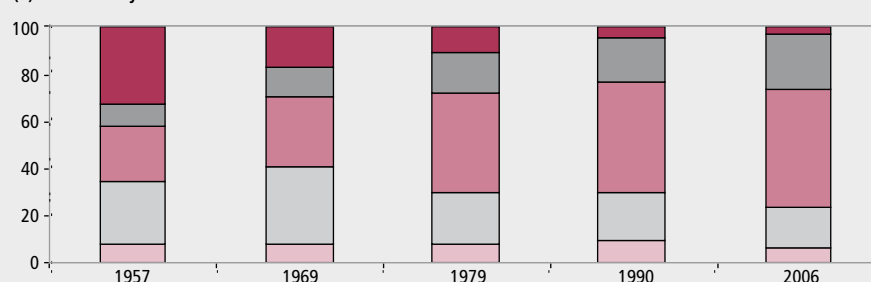
Figure 3
The household sector versus other institutional sectors

(a) Financial assets by sector

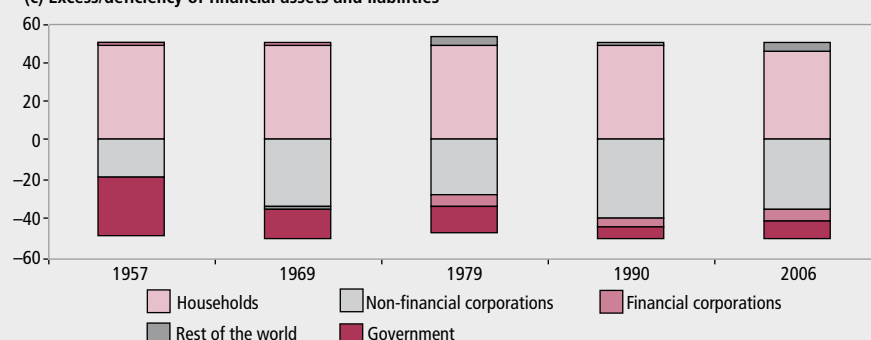
Percentages



(b) Liabilities by sector



(c) Excess/deficiency of financial assets and liabilities



the household portfolio shrank over the period from 32 per cent in 1979 to 15 per cent in 2006, while 'securities other than shares' fell from 12 per cent to 1 per cent.

Thus, the macro-trends in the asset mix can be summed up as follows:

- a rapid increase in the weight of life insurance and pension funds
- a substantial decrease in the direct holding of shares and securities
- a substantial fall in the share of safe assets (currency and deposits)

Positive net financial flows for the household sector

Figure 3 shows the trends in the distribution of national financial assets and liabilities over time.

Examination of national financial wealth by sector reveals a clear fall in the relative size of the household sector for both assets and liabilities, in favour of the overseas sector and financial corporations. At the same time, however, huge net financial flows mainly towards households can be seen. The majority of the corporate sector's liabilities are to the personal sector. The net financial position of the overseas sector is negative in the first decade, implying that UK holdings of overseas assets exceeded overseas holdings of UK assets, whereas the last 25 years have seen this trend reverse.

International comparisons

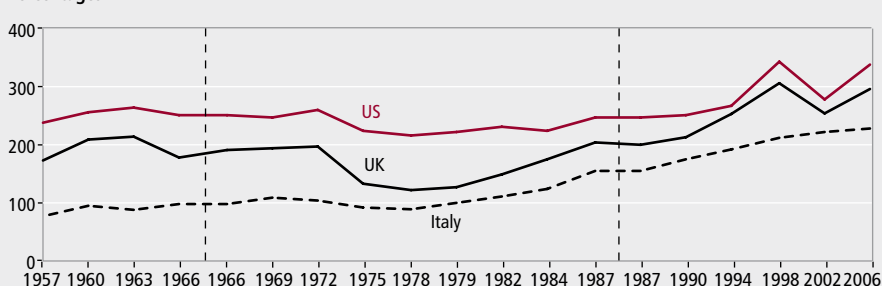
The peculiarities of the UK financial structure become evident when compared with other economies. In this section, the macro-trends in household financial wealth for the UK, the US and Italy are illustrated, using the UK data presented above and data provided by the OECD.stat data set for the US. For Italy, data published by the Bank of Italy (Bonci and Coletta 2005) are used.

Trends in household financial assets: UK versus US and Italy

The trends in household wealth over the last 50 years are examined first (**Figure 4**). Total financial assets as a percentage of GDP appear to have increased only moderately between 1960 and 1970. The trend began to rise during the period 1970 to 1980, but the first signs of faster growth become evident only from 1995, and mainly in the UK and US. Most assets in this period benefited from the stock market boom, but were hit by the slowdown that followed before regaining strength with the recent positive performance of the markets.

Figure 4
Household financial assets as a percentage of GDP

Percentages



subsequent decades to become the biggest component of the mix, from around 33 per cent in the 1980s to more than half of household portfolios in 2006.

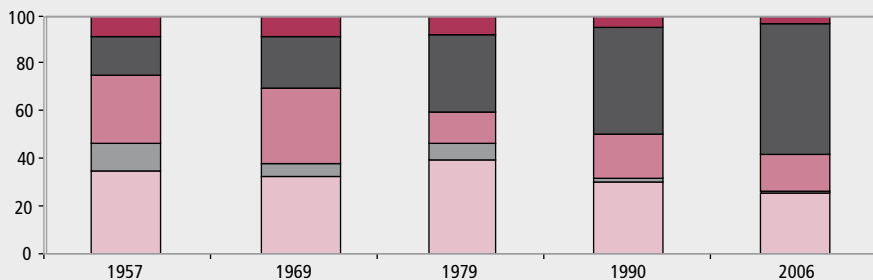
This reflects the growth in life insurance and private pension funds complementary to social security schemes. This dominance of long-term instruments is the main peculiarity of the UK household portfolio

compared with the structure of financial assets in the major continental Europe countries, where the importance of the welfare system is more pronounced.

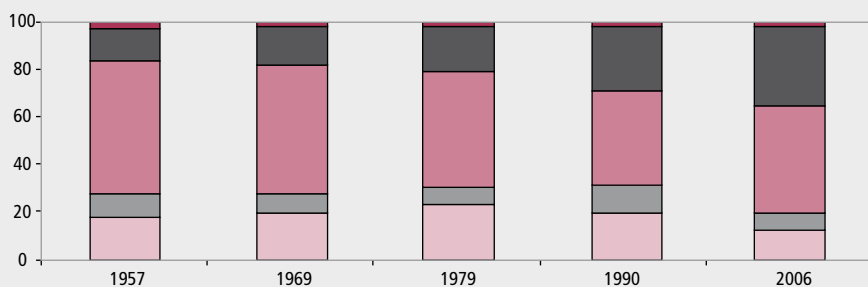
Despite a rise in direct ownership of shares and securities in absolute terms, relatively speaking, these have been replaced by life insurance and pensions. The weight of 'shares and other equity' in

Figure 5
Household financial asset mix

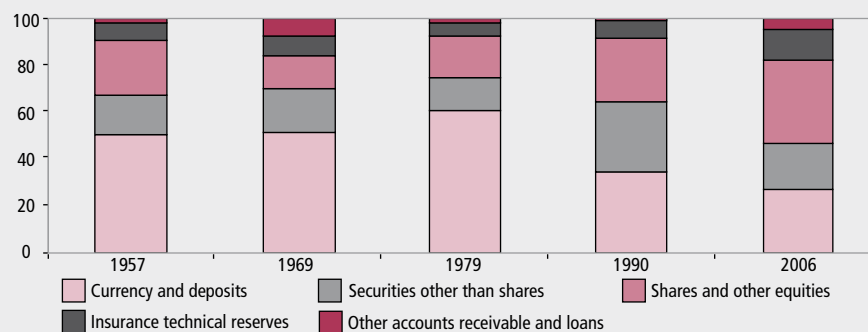
Percentages
(a) UK



(b) US



(c) Italy



stable in percentage terms

- safe instruments are less important than they were in the 1980s

Still, significant differences between the countries persist in the mix of financial instruments. Despite the common trend away from safety towards managed and long-term assets, there are important structural differences between the three countries:

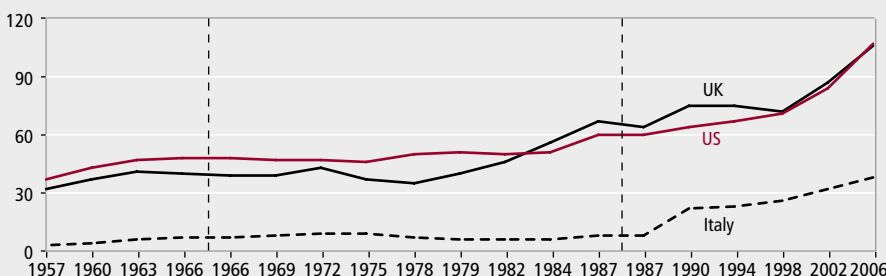
- the UK presents the highest level of long-term investment (life insurance and pensions)
- the US is characterised by the importance of direct investment in shares and other equity
- safe instruments still make up around 40 per cent of household financial wealth in Italy; as expected, they are less important in the US and the UK
- Italy stands out for the importance of fixed income securities and a well below average share of long-term products

The main peculiarities of the UK financial structure can be summed up as follows:

- a lower portion of safe assets (currency, deposits, bonds) compared with the Italian asset mix, but higher than the US
- the UK presents a lower share of equities
- a large share of long-term investments such as pension funds and life insurance

Figure 6
Household financial liabilities as a percentage of GDP

Percentages



Trends in liabilities: a massive rise in debt since the 1980s

Figure 6 shows household financial liabilities as a percentage of GDP in the countries under analysis. The ratio for both the US and UK began at 30 per cent and rose steadily through the 1980s, quickening pace from the 1990s to reach GDP levels in 2006.

Such rapid growth in debt, accelerating especially in recent years in all three countries, should be viewed in the context of historically low interest rates which created an incentive for households to borrow, driving mortgages as well as consumer credit.

Despite the recent increases, Italian households still have low levels of debt (38 per cent of GDP), showing a stable and low ratio throughout the period (averaging 10 per cent).

Important structural differences between the three countries

The graphs in **Figure 5** highlight the very dynamic financial structures in all the countries under analysis. In the UK, US and Italy, the last 50 years have witnessed the following common trends:

- a strong increase in the holding of

equities and long-term instruments, such as life insurance and pension funds, at the expenses of deposits

- indirect participation in the financial markets via mutual funds and retirement products has increased significantly
- in spite of this revolution, the direct holding of shares has remained fairly

Conclusion

The methodology for reconstructing long-term time series for UK financial accounts was outlined.

During the reconstruction, good results were obtained regarding the sector breakdown of national wealth. As regards the instrumental breakdown, a good correspondence between the old and new time series for currency and deposits, mutual funds, life insurance and pension funds was found, but some problems emerged with miscellaneous instruments which have come to include shares, securities and loans.

Given the fair degree of continuity for the household sector, it was decided to extend the time series back to 1957 using earlier CSO figures for the period 1957 to 1978.

It is hoped new prospects for empirical research have been opened.

From the preliminary findings many interesting questions concerning financial accounts time series remain to be explained:

- which are the main determinants of financial asset growth?
- compared with other countries, UK households are more oriented towards longer-term assets. Are the other EU countries going to converge towards an Anglo-Saxon structure?
- a massive increase in debt has been witnessed since the 1980s, but in the light of the latest events, what could be the future trend in the liabilities side?

Notes

- 1 This work is part of a joint project between the OECD, Pioneer Investments Economic Research, ONS and the Bank of England.
- 2 CSO was a British government department charged with the collection and publication of economic statistics for the UK. It preceded ONS.
- 3 The financial balance sheet shows the financial assets held and the liabilities outstanding at a particular point in time. The balancing item of the financial balance sheet is net financial assets. Net financial assets is the result of cumulative revaluation, other changes in volume of financial assets and net lending/net borrowing (Manual on Sources and Methods for the Compilation of ESA95 Financial Accounts, Eurostat 2002).
- 4 The household sector is similar to, but not identical to, the previous personal sector. Sole traders as unincorporated

businesses continue to be recorded here since their accounts are not separable from those of households. Partnerships are now classified to non-financial corporations (S11) or financial corporations (S12). Life insurance assurance and pension funds' income and expenditure were previously recorded in the personal sector. They are now recorded with the insurance corporations and pension funds' subsector (S125).

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APPENDIX

In the conversion table, an attempt has been made to illustrate the correspondence of instruments between the new and the old classification.

An unequivocal correspondence between the two classifications cannot be obtained. In particular, it was difficult to arrive at a clean split between 'securities other than shares' and 'shares and other equity' and between 'loans' and 'securities other than shares'. The main problems concern the following unambiguous items of the previous classification:

- miscellaneous domestic instruments including domestic securities, loans, mutual funds and trade credits
- overseas direct and other investments in securities, and miscellaneous overseas instruments including currency and deposits, securities other than shares, loans and mutual funds
- miscellaneous instruments including currency and deposits, securities, loans and trade credits
- UK company securities, primarily made up of securities and mutual funds
- overseas securities including securities and loans
- public corporation debt and local authority debt including loans and securities

To answer these problems, a specific approach for each sector and instrument was taken.

Table A1

The conversion table

	New classification
Financial assets	F
Notes and coins	F2
Sterling treasury bills	F3
British government securities	F3
National savings	F2
Tax instruments	F2
Net government indebtedness banking department	F4
Northern Ireland central government debt	F3–F4 (F4)
Government liabilities under exchange cover scheme	F4
Other public sector financing:	
Non-marketable debt	F4
Short term assets	F4
Issue department's transactions in bills	F3
Government foreign currency debt	F3–F4
Other government overseas financing	F4
Official reserves	F1
Local authority debt	F3–F4
Public corporation debt	
Foreign currency	F3–F4
Sterling	F3–F4
Deposits with banks	
Sterling other	F2
Sterling	F2
Deposits with building societies	F2
Deposits with other financial institutions	F2
Bank lending (excluding public sector)	
Foreign currency	F4
Sterling	F4
Credit extended by retailers	F4
Identified trade credit	
Domestic	F7
Import export	F7
Loans for house purchase:	
Building societies	F4
Other	F4
Other public sector lending	F4 F3
Other lending by financial institutions	F4
Unit trust	F5
UK company securities	F5 F3
Overseas securities	F5 F4
Life insurance and pension funds	F6
Miscellaneous domestic instrument abroad	F3 F4 F5 F7
Overseas direct and other investment in UK	F2 F3 F4 F4
Miscellaneous overseas instruments	F2 F3 F4 F5
Miscellaneous instruments	F2 F3 F4 F6
Direct and other investment abroad	F2 F3 F4 F7
Accruals adjustments	F7

FEATURE

Stephanie Robson and Greg Haigh
**Department for Innovation,
 Universities and Skills**

First findings from the UK Innovation Survey 2007

SUMMARY

This article presents the initial analysis of the 2007 UK Innovation Survey. It begins with patterns of innovation activity, looks at which markets innovative UK businesses are operating in, and then discusses collaborations and sources of information, the barriers to innovation and the methods used by firms to protect the value of innovations. A broader range of innovations in business practices and organisational structures, such as the introduction of new management techniques, is then considered. The article includes a few highlights from analysis of the panel (overlap) between the 2007 survey and its predecessor from 2005 and concludes with a comparison of the last three surveys from 2007, 2005 and 2001.

This article presents the first findings from the UK Innovation Survey 2007, covering the three-year period from 2004 to 2006. This is the UK contribution to a Europe-wide Community Innovation Survey (CIS). The 2007 survey is the first one run on a new, biennial cycle. Previously, the survey was commissioned every four years.

The 2007 survey was sent to 28,000 UK enterprises with ten or more employees across manufacturing and services sectors, and achieved a 53 per cent response rate. The latest data also provide a significant panel (respondents common to both 2007 and 2005 surveys) of over 7,000 businesses, making it an even more valuable resource for both government and academic users. The Department for Innovation, Universities and Skills (DIUS) would like to thank all those businesses that completed the survey form.

The importance of innovation in business and in national economic performance is reflected in one of the Department's strategic objectives to 'accelerate the commercial exploitation of creativity and knowledge, through innovation and research, to create wealth, grow the economy, build successful businesses and improve quality of life'. Measuring the level of, and trends in, innovation activity in the UK and thus identifying where there may be shortfalls or gaps in the functioning of the innovation system, helps to show where policy measures might be required that could have some impact, and contributes to

this mission. The UK Innovation Survey complements other indicators of innovation by providing a periodic snapshot of the spectrum of innovation inputs and outputs and the constraints faced by UK businesses in their innovation efforts, across the entire range of UK industries and business enterprises. It has the additional benefit of providing the basis for some comparisons with other countries.

The majority of the survey is concerned with innovation through new and improved products and processes and with the investments that develop and implement them. It also asks businesses about the drivers to innovate, as well as their perception of barriers to innovation. The markets businesses operate in, exports, changes in businesses structures and management practices, and the roles of knowledge are also covered.

Innovation activity

Innovation takes place through a wide variety of business practices, and a range of indicators can be used to measure its level within the enterprise or in the economy as a whole. These include the levels of effort employed (measured through resources allocated to innovation) and of achievement (the introduction of new or improved products and processes). This section reports on the types and levels of innovation activity over the three-year period 2004 to 2006¹ and makes some general comparisons with the results obtained from the previous survey in 2005.²

Table 1
Innovation-active enterprises: by type of activity, 2004 to 2006

	Percentage of all respondents		
	Size of enterprise (employees)		All
	10–250	250+	
Innovation-active	63	74	64
Product innovator	22	30	22
of which (share with new-to-market products)	34	46	34
Process innovator	11	22	12
of which (share with new-to-industry processes)	26	25	26
Abandoned activities	5	12	6
On-going activities	8	15	8
Innovation-related expenditure	54	65	55
Both product and process innovator	8	16	9
Either product and process innovator	25	36	26

Figure 1
Breakdown of activities (all enterprises)

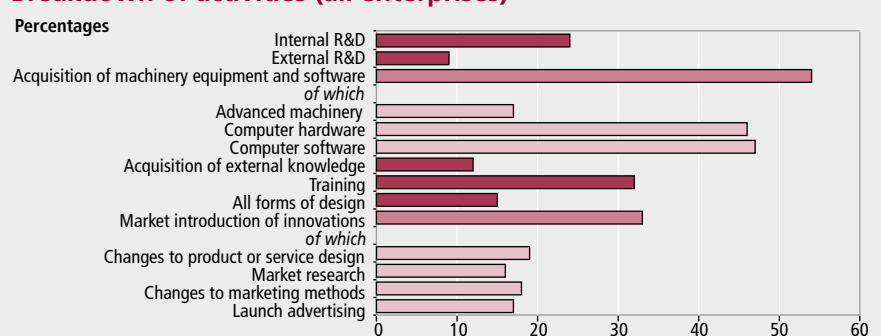
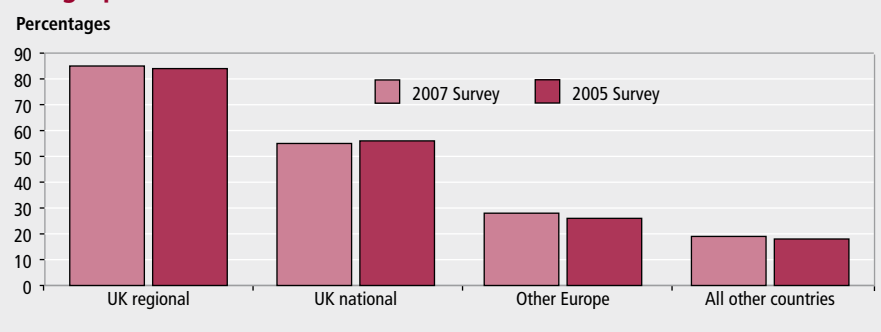


Figure 2
Geographical markets



Innovation activity³ is defined here as where enterprises were engaged in any of the following:

- introduction of a new or significantly improved product (goods or service) or process
- engagement in innovation projects not yet complete or abandoned
- expenditure in areas such as internal research and development, training, acquisition of external knowledge, or machinery and equipment linked to innovation activities

From **Table 1**, overall, 64 per cent of enterprises were classed as being innovation-active during this period. Large enterprises (with 250 or more employees)

were more likely to engage in some sort of innovation activity, with three-quarters of firms innovation-active, compared with nearly two-thirds of smaller enterprises.

In total, 22 per cent of enterprises had introduced new or significantly improved goods or services in the sample period, of which 34 per cent were new to market, and 12 per cent had introduced a new or improved process for production or delivery, with over a quarter of these processes being new to the industry in question. The share with product (goods and services) and process innovation is considerably greater in larger enterprises.

A new feature of the 2007 survey is the ability to distinguish between ongoing and abandoned innovation activities, previously combined into one question. Around a

tenth of firms have projects ongoing and 6 per cent of enterprises report abandoned projects.

The proportion of enterprises having participated in some innovation-related activity (55 per cent) shows that firms recognise the need to assign resources to innovation. The 2007 survey disaggregated the combined activities question into 'acquisition of machinery, equipment and software' and 'marketing', as shown in **Figure 1**. The most commonly reported activities were in acquisition of computer software and hardware, followed by a considerable investment in training. While the single most frequent marketing-related activity is changes to product or service design, most respondents reported more than one of these activities.

Summing up, these early results seem to suggest that a larger share of enterprises is participating in just one mode of innovation behaviour, such as expenditure in an innovation-related activity. In contrast, results from the previous survey found more businesses were participating in several modes of innovation, such as combining product innovation and expenditure.

Markets and exports

The businesses surveyed were asked which markets they operated in. **Figure 2** shows that over half of UK enterprises operate at a national level, nearly a third at European level and just under a fifth worldwide. Overall, higher proportions of businesses surveyed in 2007 operated in markets outside the UK (particularly Europe) than those surveyed in 2005.

Just under a quarter (23 per cent) of businesses reported any exports for the year 2006. The estimated average value of exports for these businesses was in excess of £7 million.

Co-operation agreements and sources of information

Ten per cent of all enterprises had co-operation arrangements on innovation activities and, of these, 70 per cent had agreements that operated at a national level. The most frequent partners for co-operation were clients or customers (68 per cent of enterprises with co-operation agreements) and suppliers (also at 68 per cent). Around 30 per cent of collaborators included universities amongst their partners. Innovation-active enterprises were more likely to collaborate (15 per cent). **Figure 3** shows the proportions collaborating.

Figure 3

Co-operation partners (innovation-active, collaborative firms only)

Percentages

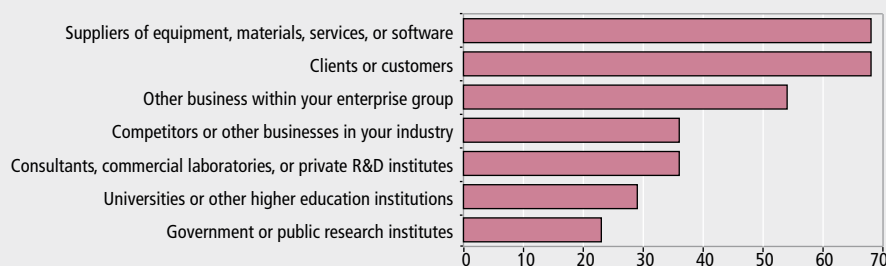


Table 2

Sources of information: firms rating 'high'

	Percentage of all respondents		
	Size of enterprise (employees)		
	10–250	250+	All
Internal			
Within your enterprise group	18	33	19
Market			
Clients or customers	27	37	27
Suppliers of equipment	14	18	14
Competitors or other enterprises within your industry	10	17	10
Consultants, commercial labs or private R&D institutes	2	4	2
Institutional			
Universities or other higher education institutes	1	3	1
Government or public research institutes	1	2	1
Other sources			
Technical, industry or service standards	6	12	6
Conferences, trade fairs, exhibitions	4	6	5
Scientific journals and trade/technical publications	3	4	3
Professional and industry associations	0	1	0

Figure 4

Innovative businesses: by industry

Percentages

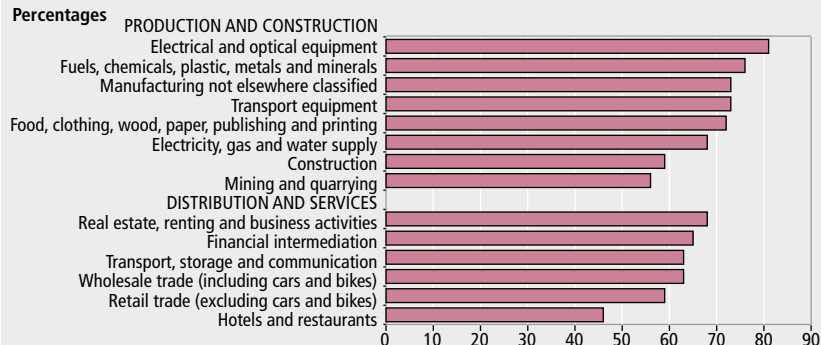
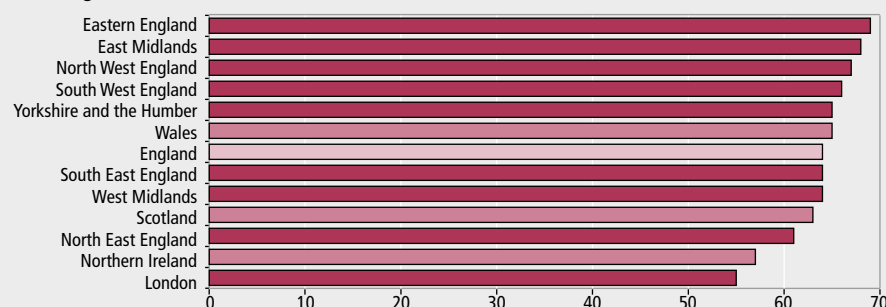


Figure 5

Shares of innovation-active businesses: by region

Percentages

**Sources of information**

It is important to know how far enterprises engage with external sources of technology and other innovation-related knowledge and information, as innovation is increasingly complex, requiring the co-ordination of multiple inputs. Firms can gain guidance, advice or even inspiration for their prospective innovation projects from a variety of both public and private sources.

Respondents were asked to rank a number of potential information sources on a scale from 'no relationship' to 'high importance'. The proportion who answered 'high' in each category is shown in Table 2. These sources are:

- internal – from within the enterprise itself or other enterprises within the enterprise group
- market – from suppliers, customers, clients, consultants, competitors, commercial laboratories or research and development enterprises
- institutional – from the public sector such as government research organisations and universities or private research institutes, and
- other – from conferences, trade fairs and exhibitions; scientific journals, trade/technical publications; professional and industry associations; technical industry or service standards

Both larger and smaller enterprises reported market and internal sources as most important for information on innovation. This suggests that enterprises tend to rely on their own experience and knowledge coupled with information from suppliers, customers and clients. The least frequently cited sources were institutional sources. Technical, industry or service standards were also a highly important source for 12 per cent of large firms.

Industrial and regional variation

The percentage of firms reported to be innovation-active varied considerably across industrial and commercial sectors (Figure 4). In the production and construction sector, 81 per cent of electrical and precision engineering enterprises were innovation-active, against 56 per cent of enterprises in mining and quarrying. In distribution and services, real estate, renting and business activities (which include the R&D services sector) had the highest share of innovation-active businesses (68 per cent), against only 46 per cent for hotels and restaurants.

Figure 5 shows the shares of innovation-active businesses across the countries and regions of the UK. The 2007 data exhibit greater regional variation in the proportions than did the 2005 survey, ranging from almost 70 per cent in Eastern England, the region in 2005 that recorded the lowest levels of innovation activity, to 55 per cent in London. Regional data reflect greater industrial variation and industries follow their own business cycles which could explain these differences. At country level, England, Wales and Scotland all performed similarly, with Northern Ireland slightly lower (around 6 percentage points less).

Factors driving innovation

On this occasion, the survey sought information about motivation factors for innovation (whereas previous surveys have asked about the effects of innovation). Respondents were asked to rank a number of drivers for innovating on a scale from no impact, through low, medium or high. Looking at the proportion of innovation-

active respondents who answered high in each category points towards product-related factors over process (cost) factors, with quality enhancements most commonly reported, mirroring the results found from UK IS 2005 and verifying a strong customer-focused approach to innovation. Again, the objectives of increasing value-added in the business and meeting regulatory requirements were also widely reported.

Barriers to innovation

Successful and evidence-based policy interventions require an understanding of the barriers to business innovation. These barriers can be internal obstacles that the enterprise encounters while carrying out innovation activities as well as external factors preventing innovation.

The survey asked about a range of constraining factors and their effect on the ability to innovate. Table 3 shows the proportions of respondents who gave a high rating to each category of constraint.

The 2007 data show an overall fall in the perception of barriers to innovate. However, relative to the other barriers, and as noted in the previous survey, cost factors were most commonly regarded as the most significant barriers to innovation, including the direct resource costs of innovation activities, their perceived economic risk and the costs of acquiring finance. The impact of UK and EU regulations was also identified as a barrier to innovation, independent of enterprise size. Again, relatively few enterprises felt constrained by a lack of knowledge, while a lack of qualified personnel was viewed as one of the more important constraining factors. Larger enterprises also expressed some concerns regarding market factors.

It is striking that, across most categories, those enterprises engaged in innovation activity were, on average, more than twice as likely to perceive barriers as businesses who did not attempt to innovate (Figure 6). Exceptions are knowledge factors. Neither technology nor market knowledge are widely cited as constraints on effective innovation. These results suggest that businesses learn about barriers to innovation as a result of their attempts to innovate.

Non-innovators

The survey also attempts to gain an appreciation of the possible reasons why businesses were not involved in innovation activity during the period 2004 to 2006. The majority of non-innovators reported it was not necessary due to market-related conditions (Figure 7), although a quarter of non-innovators reported that particular constraints were sufficiently binding to prevent innovation.

Methods to protect the value of innovations

Successful innovations often generate intellectual property that businesses will try to protect. This can be done in numerous ways depending upon the knowledge generated and the business and market context. This may involve attempts to exercise formal intellectual property rights, but 'strategic' ways of preventing emulation are important for many firms.

The survey collected data on business perceptions of the relative importance of different means of protecting intellectual property, reported in Table 4. These included formal intellectual property rights as well as strategic mechanisms such as being first to market. The data show that similar proportions of enterprises rated

Table 3

Enterprises regarding potential barriers to innovation as 'high'

	Percentage of all respondents		
	Size of enterprise (employees)		
	10–250	250+	All
Costs factors			
Direct innovation costs too high	10	12	10
Excessive perceived economic risk	8	10	8
Cost of finance	9	7	9
Availability of finance	7	6	7
Knowledge factors			
Lack of qualified personnel	6	4	6
Lack of information on markets	2	3	2
Lack of information on technology	2	2	2
Market factors			
Dominated by established enterprises	6	7	6
Uncertain demand	5	6	5
Other factors			
UK regulations	7	7	7
EU regulations	6	5	6

Figure 6

Perception of barriers – comparison of innovators and non-innovators rating 'high'

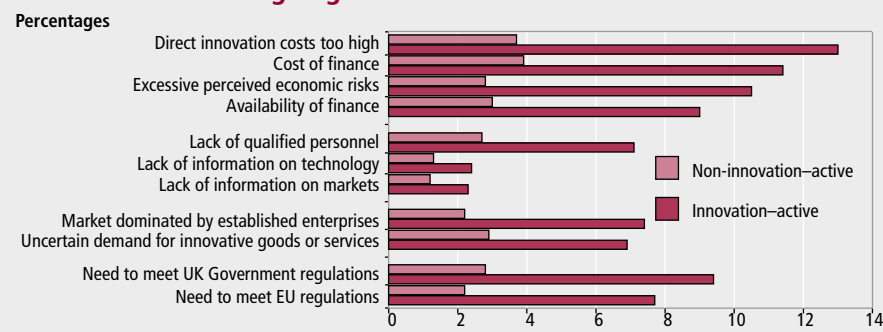


Figure 7

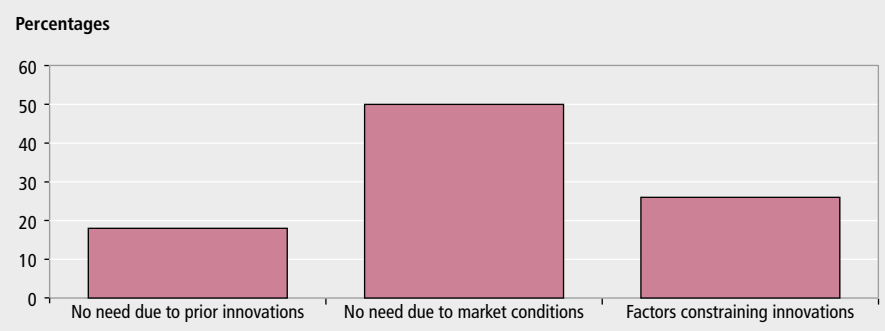
Reasons why enterprises did not innovate (non-innovative enterprises only), 2004 to 2006

Table 4

Enterprises rating different methods for protecting innovation as of 'high' importance

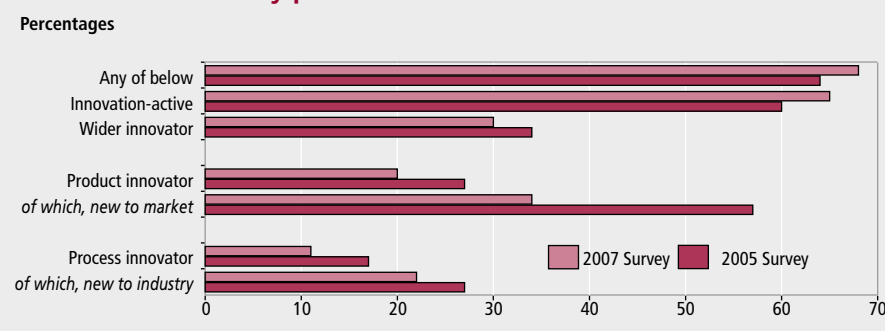
	Percentage of all respondents		
	Size of enterprise (employees)		
	10–250	250+	All
Formal			
Confidentiality agreements	12	26	13
Trademarks	8	19	8
Copyright	8	14	8
Patents	6	15	6
Registration of design	5	14	6
Strategic			
Lead-time advantage on competitors	10	17	10
Secrecy	8	17	9
Complexity of design	4	9	5

Table 5

Enterprises that introduced wider forms of innovation

	Percentage of all respondents		
	Size of enterprise (employees)		
	10–250	250+	All
Wider innovator	30	50	31
New organisational structures	19	37	20
Change in marketing strategy	18	26	18
Change in corporate strategy	15	26	15
Advanced management techniques	11	25	12

Figure 8

UK Innovation Survey panel

strategic and formal methods as being of high importance, with the exception of confidentiality agreements, which were rated highly important by over a quarter of large firms. In fact, larger enterprises attached greater importance than smaller enterprises to all methods for protecting intellectual property, in the ratio of 2:1. It is not possible to determine from this survey if this is because large businesses have more intellectual property to protect or whether it is because large businesses have a greater awareness of intellectual property issues.

The Intellectual Property Office, along with the Gowers Review of Intellectual Property,⁴ have raised awareness of protection methods and, in general, the proportion of enterprises marking all methods as of 'high' importance, especially those classed as 'formal' protection methods, has increased on that recorded in the 2005 survey.

Wider forms of innovation

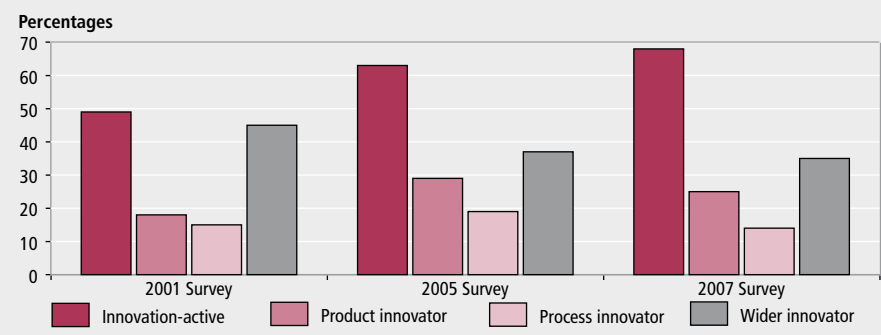
Innovation is not wholly about the development or use of technology or other forms of product (goods and services) and process change. Enterprises can also change their behaviour or business strategies to make themselves more competitive, often in conjunction with product or process innovation, but also as independent means of improving competitiveness.

Enterprises were asked whether they had made major changes to their business structure and practices in the three-year period 2004 to 2006. Some of the findings are summarised in **Table 5**. As would be expected, and as reported in 2005, a far greater proportion of large firms engaged in one or more of these changes. Implementing new organisational structures was most commonly reported, with the introduction of advanced management techniques being least frequent. Small enterprises were half as likely to have introduced a major organisational change as large enterprises.

Comparisons with the 2005 UK Innovation Survey panel

The number of businesses responding to both the 2007 and 2005 surveys enables some direct comparison of their innovation activities and outturns. Of the 7,000 businesses in the 2007 survey panel, around half are small enterprises, with medium and large enterprises accounting for the other half in equal proportions. **Figure 8** shows the innovation characteristics of the panel. A comparison with Table 1 shows that the 2007 panel results are broadly similar,

Figure 9

Main results of UK Innovation Survey (restricted to 2001 sectoral coverage)

indicating that the panel is representative of the survey as a whole.

Comparisons with the 2001 and 2005 UK Innovation Surveys

There are now three broadly similar surveys enabling some time series analysis.

Figure 9 compares the main results for the three surveys based on the common sectoral coverage.⁵ Wider innovation activities were extensively reported in 2001, with increased product and process innovation being reported in 2005. The 2007 survey reports higher shares of enterprises with preparatory expenditure on innovation. Results may also be affected by increased understanding by respondents of the survey. Respondents indicate that market conditions dominate their propensity to innovate. Increased investment reported in this survey may point to an upward trend in future levels of product and process innovations, to be captured in the next full survey to be conducted in 2009.

Conclusions and next steps

This short article has reported just a few of the results of the latest UK Innovation Survey and on some dimensions of the changes in innovation behaviour in the UK relative to the previous survey in 2005.

DIUS will publish more extensive detailed survey results over the next few months, as well as applying the innovation indicators to policy analysis and monitoring purposes.

The reports will include industrial and regional analyses that will enable the business community to benchmark their own innovation performance.

The survey represents a major source of data for the research community. As with previous surveys, a substantial body of further research is expected, using the survey results to be undertaken and published in various forms over the next

few years.

Notes

- 1 All results are grossed up to the business population.
- 2 General comparisons refer to overall survey results. Other differences between the survey, such as the inclusion of SIC (2003) 92.1/2, variations in question wording and the overlap of the reference period (2006) in question, are not accounted for.
- 3 The UK definition used differs from that adopted by Eurostat. The EU-wide definition of innovation-active is as follows: introduction of a new or significantly improved product (goods or service) or process; engagement in innovation projects not yet complete or abandoned. It excludes expenditure in areas linked to innovation activities.
- 4 The Gowers Review can be found at www.hm-treasury.gov.uk/media/6/E/pbr06_gowers_report_755.pdf
- 5 Sectors covered in CIS3 were SIC (92) 10–14, 15–37, 40–41, 45, 50–51, 60–64, 65–67, 70, 71, 72, 73, 74.2 and 74.3.

CONTACT

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APPENDIX**Methodology**

The UK Innovation Survey is funded by the Department for Innovation, Universities and Skills (DIUS). The survey was conducted on behalf of DIUS by the Office for National Statistics (ONS), with assistance from the Northern Ireland Department of Enterprise, Trade and Investment (DETI).

The UK Innovation Survey is part of a wider Community Innovation Survey (CIS) covering EU countries. The survey is based on a core questionnaire developed by the European Commission (Eurostat) and Member States. This is the fifth iteration of the survey (CIS 5) – CIS 4, covering the period 2002 to 2004, was carried out in 2005 and the results form part of various EU benchmarking exercises (see www.cordis.lu/innovation-smes/scoreboard/home.htm).

The UK Innovation Survey 2007 sampled over 28,000 UK enterprises. The survey was voluntary and conducted by means of a postal questionnaire. A copy of the questionnaire used can be found at www.berr.gov.uk/files/file44938.pdf

Coverage and sampling

The survey covered enterprises with ten or more employees in sections C to K of the Standard Industrial Classification (SIC) 2003. The 2007 survey included additional sectors (SIC 92.1/2).

The sample was drawn from the ONS Inter-Departmental Business Register in January 2007.

Response and weighting

The questionnaires from the initial survey were distributed on 31 March 2007.

Valid responses were received from 14,872 enterprises, to give a response rate of 53 per cent.

The results in this article are based on weighted data in order to be representative of the population of firms. The responses were weighted back to the population using the inverse sampling proportion in each stratum, that is, the weight attributed to each enterprise was the number of enterprises in the population divided by the number of responses in that stratum. On average, each respondent represents 12 enterprises in the population.

FEATURE

Ian Richardson
Office for National Statistics

Services producer price index (experimental) – fourth quarter 2007

SUMMARY

The experimental services producer price index (SPPI) measures movements in prices charged for services supplied by businesses to other businesses, and to local and national government. This article shows the effects some industries are having on the top-level SPPI. It continues the quarterly feature previously published in *Economic Trends*. 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. 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 rose by 2.9 per cent in the year to the fourth quarter of 2007. This is based on a comparison of the change in the top-level services producer price index (SPPI) on a net sector basis.

Figure 1 shows how the percentage change for the top-level SPPI (net sector) compares with the retail prices index (RPI) all services sector, and the producer price index (PPI) for all manufactured goods (net sector).

The top-level results, on both gross and net sector bases, are shown in Table 1. In 2007 Q4, the top-level SPPI (net sector) rose by 0.6 per cent compared with the previous quarter.

Figure 2 depicts the SPPI annual growths for both the net and gross sector time series. The annual growth for the SPPI net sector rose to 2.9 per cent in 2007 Q4, unchanged from 2007 Q3. The gross SPPI growth of 0.4 per cent in 2007 Q4 was unchanged from

the previous quarter. The difference in the annual growth between the gross and net sector SPPI was 0.3 percentage points this quarter.

Industry-specific indices

Tables available on the National Statistics website contain the data for the 33 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. Comparing Q4 2007 with Q4 2006, some key points to note are:

- property rentals rose 4.2 per cent, due to sustained growth within the sector as reported by the Investment Property Databank
- sewerage services prices rose by 6.5 per cent, following rises reported by OFWAT; these are updated on an annual basis in Q2

Figure 1
Experimental top-level SPPI compared with the RPI and PPI

Percentage change, quarter on same quarter a year earlier

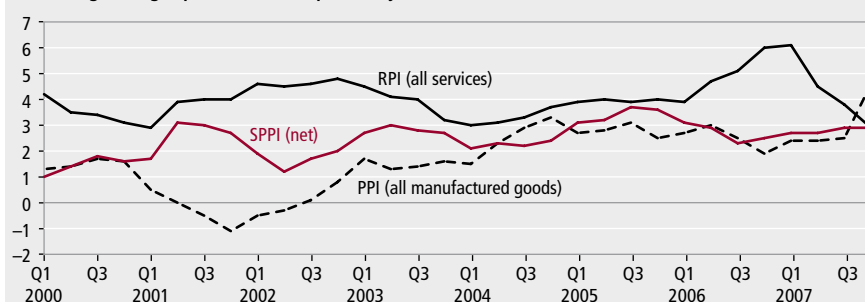


Table 1
Top-level SPPI results

	SPPI quarterly index values, 2000=100		Percentage change, quarter on same quarter a year earlier	
	Gross sector	Net sector	Gross sector	Net sector
2000 Q1	100.1	99.7	-0.8	1.0
2000 Q2	99.9	99.8	-0.1	1.4
2000 Q3	99.9	100.1	0.4	1.8
2000 Q4	100.1	100.5	0.5	1.6
2001 Q1	100.6	101.3	0.5	1.7
2001 Q2	102.3	102.9	2.4	3.1
2001 Q3	102.7	103.1	2.7	3.0
2001 Q4	102.9	103.2	2.9	2.7
2002 Q1	103.1	103.2	2.4	1.9
2002 Q2	104.1	104.2	1.7	1.2
2002 Q3	104.8	104.8	2.0	1.7
2002 Q4	105.0	105.3	2.0	2.0
2003 Q1	105.3	106.0	2.2	2.7
2003 Q2	106.5	107.3	2.3	3.0
2003 Q3	106.9	107.8	2.1	2.8
2003 Q4	107.3	108.2	2.2	2.7
2004 Q1	107.1	108.2	1.7	2.1
2004 Q2	108.7	109.8	2.1	2.3
2004 Q3	108.9	110.1	1.8	2.2
2004 Q4	109.4	110.8	2.0	2.4
2005 Q1	110.1	111.6	2.8	3.1
2005 Q2	111.3	113.3	2.4	3.2
2005 Q3	112.2	114.3	3.1	3.7
2005 Q4	112.8	114.8	3.1	3.6
2006 Q1	113.1	115.1	2.7	3.1
2006 Q2	114.4	116.6	2.8	2.9
2006 Q3	114.7	116.9	2.2	2.3
2006 Q4	115.5	117.7	2.4	2.5
2007 Q1	116.2	118.2	2.7	2.7
2007 Q2	117.6	119.7	2.8	2.7
2007 Q3	118.1	120.3	3.0	2.9
2007 Q4	118.5	121.1	2.6	2.9

- freight transport by road rose by 2.4 per cent, due to annual increases taking into account the rising costs of overheads, for example, the cost of fuel
- canteens and catering rose by 7.3 per cent, partly due to increases in food costs

Next results

The next set of SPPI results will be issued on 28 May 2008 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 redevelopment 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

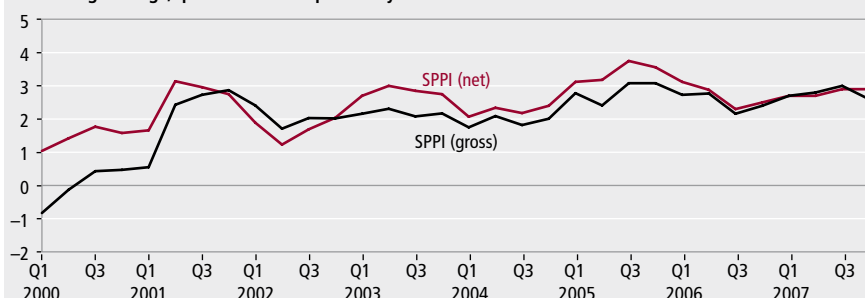
www.statistics.gov.uk/about/data/methodology/quality/information_business_statistics.asp

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Figure 2
Experimental top-level SPPI

Percentage change, quarter on same quarter a year earlier



TECHNICAL NOTE

- 1 The experimental services producer price index (SPPI) replaces the former corporate services price index (CSPI). It measures movements in prices charged for services supplied by businesses to other businesses, local and national government. It is not classified as a National Statistic.
- 2 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 National Statistics website also contain gross sector indices, which include transactions within the corporate services sector.
- 3 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.
- 4 SPPI inflation is the percentage change in the net sector index for the latest quarter compared with the corresponding quarter in the previous year.
- 5 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.
- 6 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
Parcelforce – national post parcels
Office of Rail Regulation (ORR) – business rail fares

Key time series

National accounts aggregates

Last updated: 28/03/08

Seasonally adjusted

	£ million		Indices (2003 = 100)						
	At current prices		Value indices at current prices		Chained volume indices			Implied deflators ³	
	Gross domestic product (GDP) at market prices	Gross value added (GVA) at basic prices	GDP at market prices ¹	GVA at basic prices	Gross national disposable income at market prices ²	GDP at market prices	GVA at basic prices	GDP at market prices	GVA at basic prices
	YBHA	ABML	YBEU	YBEX	YBFP	YBEZ	CGCE	YBGB	CGBV
2002	1,055,793	937,323	94.4	94.3	97.1	97.3	97.3	97.0	97.0
2003	1,118,245	993,507	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2004	1,184,296	1,051,934	105.9	105.9	103.4	103.3	103.3	102.6	102.5
2005	1,233,976	1,096,629	110.3	110.4	104.2	105.2	105.2	104.9	104.9
2006	1,303,915	1,159,257	116.6	116.7	105.7	108.2	108.4	107.7	107.7
2007	1,384,823	1,231,992	123.8	124.0	109.1	111.5	111.5	111.1	111.2
2002 Q1	259,054	229,737	92.7	92.5	95.9	96.4	96.5	96.1	95.9
2002 Q2	262,774	233,372	94.0	94.0	96.2	97.0	96.9	96.9	97.0
2002 Q3	265,836	236,103	95.1	95.1	98.3	97.7	97.6	97.4	97.4
2002 Q4	268,129	238,111	95.9	95.9	98.2	98.2	98.1	97.7	97.7
2003 Q1	272,953	242,612	97.6	97.7	99.4	98.8	98.8	98.9	98.9
2003 Q2	277,119	246,427	99.1	99.2	98.9	99.3	99.3	99.8	99.9
2003 Q3	281,996	250,492	100.9	100.9	100.0	100.4	100.4	100.4	100.5
2003 Q4	286,177	253,976	102.4	102.3	101.7	101.5	101.6	100.9	100.7
2004 Q1	288,912	256,106	103.3	103.1	101.9	102.2	102.2	101.1	100.9
2004 Q2	295,066	262,094	105.5	105.5	103.2	103.1	103.2	102.3	102.3
2004 Q3	297,941	264,732	106.6	106.6	103.0	103.5	103.5	102.9	103.0
2004 Q4	302,377	269,002	108.2	108.3	105.4	104.1	104.2	103.9	104.0
2005 Q1	303,996	270,082	108.7	108.7	104.2	104.4	104.4	104.2	104.1
2005 Q2	307,306	273,158	109.9	110.0	105.3	104.8	104.9	104.9	104.8
2005 Q3	308,515	273,676	110.4	110.2	103.4	105.4	105.4	104.7	104.5
2005 Q4	314,159	279,713	112.4	112.6	104.1	106.1	106.2	106.0	106.1
2006 Q1	319,265	284,197	114.2	114.4	104.6	107.1	107.2	106.7	106.7
2006 Q2	322,340	286,413	115.3	115.3	105.8	107.8	107.9	107.0	106.8
2006 Q3	329,094	292,535	117.7	117.8	106.2	108.6	108.7	108.4	108.4
2006 Q4	333,216	296,112	119.2	119.2	106.4	109.5	109.6	108.9	108.8
2007 Q1	337,717	299,676	120.8	120.7	106.8	110.3	110.3	109.6	109.4
2007 Q2	345,275	306,942	123.5	123.6	108.6	111.2	111.2	111.1	111.1
2007 Q3	348,812	310,385	124.8	125.0	108.4	111.9	111.9	111.5	111.6
2007 Q4	353,019	314,989	126.3	126.8	112.4	112.6	112.6	112.1	112.6

Percentage change, quarter on corresponding quarter of previous year⁴

2002 Q1	4.5	4.6	4.5	4.6	3.0	1.6	1.3	2.8	3.5
2002 Q2	5.3	5.6	5.3	5.7	3.0	2.1	1.7	3.1	4.0
2002 Q3	5.9	6.1	5.9	6.1	4.1	2.2	1.9	3.6	4.1
2002 Q4	5.2	5.3	5.3	5.4	4.4	2.4	2.2	2.8	3.0
2003 Q1	5.4	5.6	5.3	5.6	3.6	2.5	2.4	2.9	3.1
2003 Q2	5.5	5.6	5.4	5.5	2.8	2.4	2.5	3.0	3.0
2003 Q3	6.1	6.1	6.1	6.1	1.7	2.8	2.9	3.1	3.2
2003 Q4	6.7	6.7	6.8	6.7	3.6	3.4	3.6	3.3	3.1
2004 Q1	5.8	5.6	5.8	5.5	2.5	3.4	3.4	2.2	2.0
2004 Q2	6.5	6.4	6.5	6.4	4.3	3.8	3.9	2.5	2.4
2004 Q3	5.7	5.7	5.6	5.6	3.0	3.1	3.1	2.5	2.5
2004 Q4	5.7	5.9	5.7	5.9	3.6	2.6	2.6	3.0	3.3
2005 Q1	5.2	5.5	5.2	5.4	2.3	2.2	2.2	3.1	3.2
2005 Q2	4.1	4.2	4.2	4.3	2.0	1.6	1.6	2.5	2.4
2005 Q3	3.5	3.4	3.6	3.4	0.4	1.8	1.8	1.7	1.5
2005 Q4	3.9	4.0	3.9	4.0	-1.2	1.9	1.9	2.0	2.0
2006 Q1	5.0	5.2	5.1	5.2	0.4	2.6	2.7	2.4	2.5
2006 Q2	4.9	4.9	4.9	4.8	0.5	2.9	2.9	2.0	1.9
2006 Q3	6.7	6.9	6.6	6.9	2.7	3.0	3.1	3.5	3.7
2006 Q4	6.1	5.9	6.0	5.9	2.2	3.2	3.2	2.7	2.5
2007 Q1	5.8	5.4	5.8	5.5	2.1	3.0	2.9	2.7	2.5
2007 Q2	7.1	7.2	7.1	7.2	2.6	3.2	3.1	3.8	4.0
2007 Q3	6.0	6.1	6.0	6.1	2.1	3.0	2.9	2.9	3.0
2007 Q4	5.9	6.4	6.0	6.4	5.6	2.8	2.7	2.9	3.5

Notes:

1 "Money GDP".

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

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

4 For index number series, these are derived from the rounded figures shown in the table.

Source: Office for National Statistics

Gross domestic product: by category of expenditure

Last updated: 28/03/08

£ million, chained volume measures, reference year 2003, 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 product at market prices
	ABJR	HAYO	NMRY	NPQT	CAFU	NPJR	YBIM	IKBK	ABMG	IKBL	GIXS	ABMI
2002	676,833	27,130	224,868	184,701	2,289	183	1,116,239	280,593	1,396,862	308,706	0	1,088,108
2003	697,160	27,185	232,699	186,700	3,983	-37	1,147,690	285,397	1,433,087	314,842	0	1,118,245
2004	721,434	27,327	240,129	197,655	4,597	-42	1,191,099	299,289	1,490,388	335,703	0	1,154,685
2005	732,005	28,167	246,527	200,654	3,611	-354	1,210,610	323,749	1,534,359	359,626	1,183	1,175,916
2006	745,737	29,858	250,630	215,985	2,416	290	1,244,916	358,356	1,603,272	394,789	1,805	1,210,288
2007	768,397	31,079	255,315	229,423	6,522	525	1,291,262	339,434	1,630,697	383,162	-639	1,246,895
2002 Q1	167,588	6,762	55,756	44,562	1,059	66	275,814	69,440	345,256	75,709	0	269,595
2002 Q2	168,803	6,756	56,288	45,610	409	48	277,926	71,533	349,504	78,367	0	271,044
2002 Q3	169,715	6,793	56,429	46,422	520	62	280,004	71,056	351,089	78,006	0	273,034
2002 Q4	170,727	6,819	56,395	48,107	301	7	282,495	68,564	351,013	76,624	0	274,435
2003 Q1	171,828	6,843	57,099	46,805	-477	-8	282,249	72,662	354,921	78,836	0	276,082
2003 Q2	174,146	6,779	57,684	46,131	-635	94	284,342	70,610	354,945	77,283	0	277,686
2003 Q3	175,140	6,790	58,445	45,964	2,223	-68	288,498	70,334	358,825	78,089	0	280,743
2003 Q4	176,046	6,773	59,471	47,800	2,872	-55	292,601	71,791	364,396	80,634	0	283,734
2004 Q1	178,197	6,830	59,969	49,353	-439	112	294,023	73,389	367,412	81,648	0	285,764
2004 Q2	180,362	6,805	59,530	49,159	1,042	-90	296,808	74,861	371,670	83,313	0	288,357
2004 Q3	181,032	6,826	60,002	49,832	1,047	-96	298,644	75,097	373,741	84,300	0	289,441
2004 Q4	181,843	6,866	60,628	49,311	2,947	32	301,624	75,942	377,565	86,442	0	291,123
2005 Q1	182,466	7,005	60,858	49,393	1,894	-158	301,458	75,952	377,410	85,898	253	291,764
2005 Q2	182,306	6,987	61,613	49,334	797	86	301,122	79,576	380,698	87,920	300	293,078
2005 Q3	183,174	7,042	61,885	50,642	853	-201	303,394	82,357	385,751	91,483	320	294,588
2005 Q4	184,059	7,133	62,171	51,285	67	-81	304,636	85,864	390,500	94,325	310	296,486
2006 Q1	183,985	7,347	62,511	52,156	1,202	101	307,301	93,512	400,814	102,028	515	299,301
2006 Q2	186,369	7,428	62,342	52,872	564	229	309,804	95,747	405,551	104,683	503	301,371
2006 Q3	186,487	7,507	62,734	54,737	1,396	-28	312,833	84,334	397,167	94,116	445	303,495
2006 Q4	188,896	7,576	63,043	56,220	-746	-12	314,978	84,763	399,740	93,962	342	306,121
2007 Q1	190,336	7,651	63,476	57,023	320	67	318,873	83,940	402,813	94,520	-21	308,272
2007 Q2	191,607	7,738	63,791	56,331	600	321	320,388	84,512	404,900	93,872	-140	310,888
2007 Q3	193,086	7,804	64,175	57,517	2,660	48	325,290	85,701	410,991	97,869	-219	312,902
2007 Q4	193,368	7,886	63,873	58,552	2,942	89	326,711	85,281	411,993	96,901	-259	314,833

Percentage change, quarter on corresponding quarter of previous year

2002 Q1	4.0	-1.6	4.0	0.9			3.1	-2.6	1.8	2.5		1.6
2002 Q2	4.0	-0.5	4.4	1.6			2.9	3.2	3.0	6.0		2.1
2002 Q3	3.3	0.5	3.3	3.1			2.8	4.6	3.2	6.4		2.2
2002 Q4	3.1	1.3	2.1	9.0			3.8	-0.8	2.8	4.5		2.3
2003 Q1	2.5	1.2	2.4	5.0			2.3	4.6	2.8	4.1		2.4
2003 Q2	3.2	0.3	2.5	1.1			2.3	-1.3	1.6	-1.4		2.5
2003 Q3	3.2	0.0	3.6	-1.0			3.0	-1.0	2.2	0.1		2.8
2003 Q4	3.1	-0.7	5.5	-0.6			3.6	4.7	3.8	5.2		3.4
2004 Q1	3.7	-0.2	5.0	5.4			4.2	1.0	3.5	3.6		3.5
2004 Q2	3.6	0.4	3.2	6.6			4.4	6.0	4.7	7.8		3.8
2004 Q3	3.4	0.5	2.7	8.4			3.5	6.8	4.2	8.0		3.1
2004 Q4	3.3	1.4	1.9	3.2			3.1	5.8	3.6	7.2		2.6
2005 Q1	2.4	2.6	1.5	0.1			2.5	3.5	2.7	5.2		2.1
2005 Q2	1.1	2.7	3.5	0.4			1.5	6.3	2.4	5.5		1.6
2005 Q3	1.2	3.2	3.1	1.6			1.6	9.7	3.2	8.5		1.8
2005 Q4	1.2	3.9	2.5	4.0			1.0	13.1	3.4	9.1		1.8
2006 Q1	0.8	4.9	2.7	5.6			1.9	23.1	6.2	18.8		2.6
2006 Q2	2.2	6.3	1.2	7.2			2.9	20.3	6.5	19.1		2.8
2006 Q3	1.8	6.6	1.4	8.1			3.1	2.4	3.0	2.9		3.0
2006 Q4	2.6	6.2	1.4	9.6			3.4	-1.3	2.4	-0.4		3.2
2007 Q1	3.5	4.1	1.5	9.3			3.8	-10.2	0.5	-7.4		3.0
2007 Q2	2.8	4.2	2.3	6.5			3.4	-11.7	-0.2	-10.3		3.2
2007 Q3	3.5	4.0	2.3	5.1			4.0	1.6	3.5	4.0		3.1
2007 Q4	2.4	4.1	1.3	4.1			3.7	0.6	3.1	3.1		2.8

Notes:

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

Source: Office for National Statistics

Labour market summary

Last updated: 19/03/08

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 2006	48,022	30,392	28,848	1,544	17,631	63.3	60.1	5.1	36.7
Nov-Jan 2007	48,420	30,787	29,090	1,697	17,633	63.6	60.1	5.5	36.4
Feb-Apr 2007	48,522	30,770	29,087	1,683	17,752	63.4	59.9	5.5	36.6
May-Jul 2007	48,624	30,833	29,178	1,656	17,791	63.4	60.0	5.4	36.6
Aug-Oct 2007	48,730	30,931	29,291	1,640	17,799	63.5	60.1	5.3	36.5
Nov-Jan 2008	48,839	31,065	29,457	1,608	17,774	63.6	60.3	5.2	36.4
Male	MGSM	MMSG	MGSA	MGSD	MGSJ	MGWH	MGSS	MGSY	YBTD
Nov-Jan 2006	23,299	16,467	15,577	890	6,832	70.7	66.9	5.4	29.3
Nov-Jan 2007	23,523	16,687	15,716	971	6,837	70.9	66.8	5.8	29.1
Feb-Apr 2007	23,580	16,707	15,736	971	6,873	70.9	66.7	5.8	29.1
May-Jul 2007	23,638	16,734	15,783	951	6,904	70.8	66.8	5.7	29.2
Aug-Oct 2007	23,696	16,757	15,832	925	6,939	70.7	66.8	5.5	29.3
Nov-Jan 2008	23,755	16,827	15,901	926	6,928	70.8	66.9	5.5	29.2
Female	MGSN	MGSH	MGSB	MGSE	MGSK	MGWI	MGST	MGSZ	YBTE
Nov-Jan 2006	24,723	13,924	13,270	654	10,799	56.3	53.7	4.7	43.7
Nov-Jan 2007	24,897	14,101	13,374	727	10,796	56.6	53.7	5.2	43.4
Feb-Apr 2007	24,942	14,063	13,350	712	10,879	56.4	53.5	5.1	43.6
May-Jul 2007	24,987	14,099	13,394	705	10,887	56.4	53.6	5.0	43.6
Aug-Oct 2007	25,035	14,174	13,459	715	10,860	56.6	53.8	5.0	43.4
Nov-Jan 2008	25,084	14,238	13,556	682	10,846	56.8	54.0	4.8	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 2006	37,200	29,244	27,725	1,519	7,956	78.6	74.5	5.2	21.4
Nov-Jan 2007	37,453	29,562	27,887	1,675	7,891	78.9	74.5	5.7	21.1
Feb-Apr 2007	37,505	29,534	27,875	1,658	7,971	78.7	74.3	5.6	21.3
May-Jul 2007	37,557	29,583	27,954	1,629	7,974	78.8	74.4	5.5	21.2
Aug-Oct 2007	37,608	29,650	28,035	1,615	7,958	78.8	74.5	5.4	21.2
Nov-Jan 2008	37,658	29,768	28,178	1,590	7,890	79.0	74.8	5.3	21.0
Male	YBTG	YBSL	YBSF	YBSI	YBSO	MGSP	MGSV	YBTJ	YBTM
Nov-Jan 2006	19,267	16,075	15,196	879	3,192	83.4	78.9	5.5	16.6
Nov-Jan 2007	19,446	16,279	15,316	963	3,168	83.7	78.8	5.9	16.3
Feb-Apr 2007	19,490	16,296	15,336	960	3,195	83.6	78.7	5.9	16.4
May-Jul 2007	19,534	16,308	15,368	940	3,226	83.5	78.7	5.8	16.5
Aug-Oct 2007	19,572	16,333	15,418	915	3,239	83.4	78.8	5.6	16.6
Nov-Jan 2008	19,608	16,390	15,473	918	3,217	83.6	78.9	5.6	16.4
Female	YBTH	YBSM	YBSG	YBSJ	YBSP	MGSQ	MGSW	YBTK	YBTN
Nov-Jan 2006	17,933	13,169	12,529	641	4,764	73.4	69.9	4.9	26.6
Nov-Jan 2007	18,007	13,283	12,571	712	4,723	73.8	69.8	5.4	26.2
Feb-Apr 2007	18,015	13,238	12,539	698	4,777	73.5	69.6	5.3	26.5
May-Jul 2007	18,023	13,275	12,586	689	4,748	73.7	69.8	5.2	26.3
Aug-Oct 2007	18,035	13,317	12,618	699	4,718	73.8	70.0	5.3	26.2
Nov-Jan 2008	18,050	13,378	12,705	672	4,672	74.1	70.4	5.0	25.9

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

Prices

Last updated: 18/03/08

Percentage change over 12 months

	Consumer prices						Not seasonally adjusted, except for series PLLW, RNPE and RNPF			
	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	PLLW ³	RNPE ³	RNPF ³
2004 Jan	1.4	1.5	1.3	2.6	2.4	2.0	1.6	1.4	-0.3	0.0
2004 Feb	1.3	1.3	1.1	2.5	2.3	1.9	1.6	1.5	-0.8	-0.4
2004 Mar	1.1	1.1	1.0	2.6	2.1	1.7	1.4	1.5	0.8	-0.1
2004 Apr	1.1	1.1	1.0	2.5	2.0	1.8	1.8	1.3	2.9	-0.1
2004 May	1.5	1.4	1.3	2.8	2.3	2.2	2.5	1.4	5.6	0.6
2004 Jun	1.6	1.5	1.4	3.0	2.3	2.3	2.6	1.4	3.8	1.3
2004 Jul	1.4	1.4	1.2	3.0	2.2	2.0	2.6	1.7	3.9	1.8
2004 Aug	1.3	1.3	1.1	3.2	2.2	2.0	2.8	2.2	4.6	2.4
2004 Sep	1.1	1.0	0.9	3.1	1.9	1.7	3.1	2.3	8.1	3.6
2004 Oct	1.2	1.2	1.1	3.3	2.1	2.0	3.5	2.9	9.0	4.6
2004 Nov	1.5	1.4	1.4	3.4	2.2	2.2	3.5	3.0	6.4	4.5
2004 Dec	1.7	1.7	1.6	3.5	2.5	2.5	2.9	2.5	4.0	4.0
2005 Jan	1.6	1.7	1.5	3.2	2.1	2.0	2.6	2.6	9.7	7.5
2005 Feb	1.7	1.7	1.6	3.2	2.1	2.0	2.7	2.5	11.0	8.2
2005 Mar	1.9	2.0	1.8	3.2	2.4	2.3	2.9	2.4	11.1	7.4
2005 Apr	1.9	2.0	1.9	3.2	2.3	2.3	3.3	2.6	10.1	7.0
2005 May	1.9	2.0	1.8	2.9	2.1	2.2	2.7	2.5	7.6	6.7
2005 Jun	2.0	2.2	1.9	2.9	2.2	2.2	2.5	2.2	11.8	7.4
2005 Jul	2.3	2.5	2.3	2.9	2.4	2.5	3.1	2.2	14.1	8.7
2005 Aug	2.4	2.6	2.3	2.8	2.3	2.3	3.0	1.9	13.0	7.6
2005 Sep	2.5	2.6	2.4	2.7	2.5	2.5	3.3	2.1	10.6	5.6
2005 Oct	2.3	2.5	2.3	2.5	2.4	2.3	2.6	1.4	8.8	7.0
2005 Nov	2.1	2.3	2.1	2.4	2.3	2.3	2.3	1.3	13.5	9.6
2005 Dec	1.9	2.1	1.8	2.2	2.0	2.0	2.4	1.8	17.9	12.0
2006 Jan	1.9	2.1	1.9	2.4	2.3	2.3	2.9	1.7	15.8	10.2
2006 Feb	2.0	2.1	2.0	2.4	2.3	2.3	2.9	1.7	15.0	10.6
2006 Mar	1.8	1.9	1.7	2.4	2.1	2.2	2.5	1.9	13.0	10.0
2006 Apr	2.0	2.1	2.0	2.6	2.4	2.3	2.5	2.2	15.3	10.0
2006 May	2.2	2.3	2.2	3.0	2.9	2.8	3.1	2.4	13.6	8.6
2006 Jun	2.5	2.6	2.4	3.3	3.1	3.2	3.4	2.9	11.1	8.7
2006 Jul	2.4	2.4	2.3	3.3	3.1	3.2	2.9	2.5	10.6	8.3
2006 Aug	2.5	2.6	2.4	3.4	3.3	3.4	2.7	2.3	8.0	7.9
2006 Sep	2.4	2.6	2.3	3.6	3.2	3.3	1.9	2.2	5.4	7.4
2006 Oct	2.4	2.7	2.3	3.7	3.2	3.3	1.6	2.6	4.6	6.3
2006 Nov	2.7	3.0	2.6	3.9	3.4	3.6	1.8	2.5	3.4	4.9
2006 Dec	3.0	3.2	2.9	4.4	3.8	3.9	2.2	2.4	2.1	3.0
2007 Jan	2.7	2.9	2.6	4.2	3.5	3.7	2.2	2.5	-2.8	1.5
2007 Feb	2.8	2.9	2.6	4.6	3.7	3.9	2.3	2.7	-1.7	1.0
2007 Mar	3.1	3.1	2.9	4.8	3.9	4.0	2.7	2.8	0.7	2.4
2007 Apr	2.8	2.9	2.6	4.5	3.6	3.7	2.4	2.4	-0.9	1.9
2007 May	2.5	2.6	2.3	4.3	3.3	3.4	2.4	2.2	1.2	3.6
2007 Jun	2.4	2.5	2.2	4.4	3.3	3.3	2.5	2.1	2.4	3.3
2007 Jul	1.9	2.0	1.7	3.8	2.7	2.6	2.5	2.2	0.6	1.5
2007 Aug	1.8	1.9	1.6	4.1	2.7	2.6	2.4	2.4	1.1	2.1
2007 Sep	1.8	1.7	1.6	3.9	2.8	2.8	2.9	2.3	7.5	3.7
2007 Oct	2.1	1.9	1.8	4.2	3.1	3.0	4.0	2.4	9.7	3.2
2007 Nov	2.1	1.9	1.8	4.3	3.2	3.0	4.7	2.4	11.3	2.5
2007 Dec	2.1	2.0	1.9	4.0	3.1	3.1	5.0	2.6	12.8	4.3
2008 Jan	2.2	2.1	2.0	4.1	3.4	3.3	5.7	3.2	19.0	7.2
2008 Feb	2.5	2.5	2.3	4.1	3.7	3.6	5.7	3.0	19.3	8.1

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.

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 who:

- were not in employment during the reference week, and
- reported that they had been made redundant in the month of, or the two calendar months prior to, the reference week

plus the number of people who:

- were in employment during the reference week, and
- started their job in the same calendar month as, or the two calendar months prior to, the reference week, and
- reported that they had been made redundant in the month of, or the two calendar months prior to, the reference week

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 old *Economic Trends* tables and 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.

Weblink: www.statistics.gov.uk/elmr/04_08/data_page.asp

Title	Frequency of update	Updated since last month
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	Q	✓
1.14 Private non-financial corporations: secondary distribution of income account and capital account	Q	✓
1.15 Balance of payments: current account	M	✓
1.16 Trade in goods (on a balance of payments basis)	M	✓
1.17 Measures of variability of selected economic series	Q	.
1.18 Index of services	M	✓

Selected labour market statistics

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

Weblink: www.statistics.gov.uk/elmr/04_08/data_page.asp

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

Prices

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

Selected output and demand indicators

4.01	Output of the production industries	M	✓
4.02	Engineering and construction: output and orders	M	✓
4.03	Motor vehicle and steel production	M	✓
4.04	Indicators of fixed investment in dwellings	M	✓
4.05	Number of property transactions	M	✓
4.06	Change in inventories	Q	✓
4.07	Inventory ratios (THIS TABLE IS NO LONGER BEING UPDATED)	Q	.
4.08	Retail sales, new registrations of cars and credit business	M	✓
4.09	Inland energy consumption: primary fuel input basis	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	M	✓
5.04	Public sector receipts and expenditure	Q	✓
5.05	Public sector key fiscal indicators	M	✓
5.06	Consumer credit and other household sector borrowing	M	✓
5.07	Analysis of bank lending to UK residents	M	.
5.08	Interest rates and yields	M	✓
5.09	A selection of asset prices	M	✓

Further labour market statistics

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

Weblink: www.statistics.gov.uk/elmr/04_08/data_page.asp

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 by size of enterprise	M	✓
6.26	Redundancies: re-employment rates	Q	.
6.27	Redundancies by Government Office Region	Q	.
6.28	Redundancy rates by industry	Q	.
6.29	Labour disputes: summary	M	✓
6.30	Labour disputes: stoppages in progress	M	✓

Notes

A Annually
Q Quarterly
M Monthly

More information

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

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

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

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

Contact points

Recorded announcement of latest RPI

☎ 01633 456961
✉ rpi@ons.gsi.gov.uk

Labour Market Statistics Helpline

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

Earnings Customer Helpline

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

National Statistics Customer Contact Centre

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

Skills and Education Network

☎ 024 7682 3439
✉ senet@isc.gov.uk

Department for Children, Schools and Families Public Enquiry Unit

☎ 0870 000 2288

For statistical information on

Average Earnings Index (monthly)

☎ 01633 819024

Claimant count

☎ 01633 456901

Consumer Prices Index

☎ 01633 456900
✉ cpi@ons.gsi.gov.uk

Earnings

Annual Survey of Hours and Earnings
☎ 01633 819024

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 812318

Total workforce hours worked per week

☎ 01633 812766
✉ productivity@ons.gsi.gov.uk

Workforce jobs series – short-term estimates

☎ 01633 812318
✉ workforce.jobs@ons.gsi.gov.uk

Labour costs

☎ 01633 819024

Labour disputes

☎ 01633 819205

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 812766

Public sector employment

General enquiries
☎ 01633 455889

Source and methodology enquiries

☎ 01633 812865

Qualifications (Department for Children, Schools and Families)

☎ 0870 000 2288

Redundancy statistics

☎ 01633 456901

Retail Prices Index

☎ 01633 456900
✉ rpi@ons.gsi.gov.uk

Skills (Department for Innovation, Universities & Skills)

☎ 0870 001 0336
Skill needs surveys and research into skill shortages
☎ 0870 001 0336

Small firms (BERR)

Enterprise Directorate
☎ 0114 279 4439

Subregional estimates

☎ 01633 812038

Annual employment statistics

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

Annual Population Survey, local area statistics

☎ 01633 455070

Trade unions (BERR) Employment relations

☎ 020 7215 5934

Training

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

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

☎ 0870 001 0336

Travel-to-Work Areas Composition and review

☎ 01329 813054

Unemployment

☎ 01633 456901

Vacancies

Vacancy Survey: total stocks of vacancies
☎ 01633 455070

ONS economic and labour market publications

ANNUAL

Financial Statistics Explanatory Handbook

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

www.statistics.gov.uk/products/p4861.asp

Foreign Direct Investment (MA4)

2006 edition

www.statistics.gov.uk/products/p9614.asp

Input-Output analyses for the United Kingdom

2006 edition

www.statistics.gov.uk/products/p7640.asp

Research and development in UK businesses (MA14)

2006 edition

www.statistics.gov.uk/statbase/product.asp?vlnk=165

Share Ownership

2006 edition

www.statistics.gov.uk/products/p930.asp

United Kingdom Balance of Payments (Pink Book)

2007 edition. Palgrave Macmillan, ISBN 978-1-4039-9397-7. Price £49.50.

www.statistics.gov.uk/products/p1140.asp

United Kingdom National Accounts (Blue Book)

2007 edition. Palgrave Macmillan, ISBN 978-1-4039-9398-4. Price £49.50.

www.statistics.gov.uk/products/p1143.asp

First releases

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

QUARTERLY

Consumer Trends

2007 quarter 4

www.statistics.gov.uk/products/p242.asp

United Kingdom Economic Accounts

2007 quarter 4. Palgrave Macmillan, ISBN 978-0-230-20894-0. Price £35.

www.statistics.gov.uk/products/p1904.asp

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

2007 quarter 4

www.statistics.gov.uk/products/p731.asp

First releases

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

MONTHLY

Financial Statistics

March 2008. Palgrave Macmillan, ISBN 978-0-230-20569-1. Price £47.50.

www.statistics.gov.uk/products/p376.asp

Focus on Consumer Price Indices

February 2008

www.statistics.gov.uk/products/p867.asp

Monthly review of external trade statistics (MM24)

February 2008

www.statistics.gov.uk/products/p613.asp

Producer Price Indices (MM22)

February 2008

www.statistics.gov.uk/products/p2208.asp

First releases

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

OTHER

The ONS Productivity Handbook: a statistical overview and guide

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

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

Labour Market Review

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

www.statistics.gov.uk/products/p4315.asp

National Accounts Concepts, Sources and Methods

www.statistics.gov.uk/products/p1144.asp

Sector classification guide (MA23)

www.statistics.gov.uk/products/p7163.asp

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Eddie Holmes

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