

Economic & Labour Market Review

April 2007 | Volume 1 | Number 4

Contents

REGULARS	
In brief	3
CPI and the Budget; Focus on the Digital Age; Review of workforce jobs benchmarking Workshop at University of the West of England, Bristol	g;
Updates and forthcoming releases	5
Economic review	6
Independent forecasts	15
Key indicators	16
FEATURES	
Measuring low pay: the importance of timing	18
Catrin Ormerod and Felix Ritchie	
Demonstrates the above, particularly when the survey period and National Minimum Wage changes do not coincide	
International comparisons of labour disputes in 2005	23
Dominic Hale	
Presents data for EU countries and the OECD, comparing overall strike rates between countries and by industry	
Modernising the UK's National Accounts	32
Jon Beadle	
Describes the above at the forefront of a major programme involving ONS's statistical systems and processes	
CPI and RPI: the 2007 basket of goods and services	39
Damon Wingfield	
Describes the annual review process and explains how and why the various items are chosen	
Comparing ONS's retail sales index with the BRC's retail sales monitor Nicholas Palmer and Joscelyne Hynard	47
Examines the above key indicators of retail sales growth and summarises important differences between them	
Services Producer Price Index (experimental) – fourth quarter 2006	50
Ian Richardson	
Measuring movements in prices charged for services, illustrates the effect some industries have on the aggregate indicator	
DATA AND SUPPORT	
Key time series	53
National accounts aggregates; gross domestic product: by category of expenditure;	
Labour market summary; Prices	
Notes to tables; Concepts and definitions	
Directory of online tables	58
Contact points	61

62

63

ONS economic and labour market publications

Recent and future articles



ISBN 978-0-230-52574-0 ISSN (online) 1751-8334 ISSN (print) 1751-8326 National Statistics are produced to the professional standards set out in the National Statistics Code of Practice. They are produced free from political influence. Not all of the statistics reported on in this publication are within the scope of National Statistics.

The inclusion of reports on studies by non-governmental bodies does not imply endorsement by the Office for National Statistics or any other government department of the views or opinions expressed, nor of the methodology used.

About the Office for National Statistics

The Office for National Statistics (ONS) is the government agency responsible for compiling, analysing and disseminating economic, social and demographic statistics about the UK. It also administers the statutory registration of births, marriages and deaths in England and Wales.

The Director of ONS is also the National Statistician and the Registrar General for England and Wales.

Subscriptions

Annual subscription £200 Single issue £35 To subscribe, contact Palgrave Macmillan at www.palgrave.com/ons or



01256 357893

This issue is now available at www.palgrave-journals.com/elmr and at www.statistics.gov.uk/elmr

Editorial office

For enquiries about this publication, contact the Editor, David Harper, Economic & Labour Market Review, Room D4/18, Office for National Statistics, 1 Drummond Gate, London SW1V 2QQ.



020 7533 5914

elmr@ons.gsi.gov.uk

Statistical enquiries

For general enquiries, contact the National Statistics Customer Contact Centre.



0845 601 3034



(minicom: 01633 812399)

info@statistics.gsi.gov.uk

Post: Room 1015, Government Buildings, Cardiff Road, Newport, South Wales, NP10 8XG.

You can also find National Statistics on the Internet at: www.statistics.gov.uk

A fuller list of contact points can be found on page 61.

© Crown copyright 2007

Published with the permission of the Controller of Her Majesty's Stationery Office (HMSO).

You may re-use this publication (excluding logos) free of charge in any format for research, private study or internal circulation within an organisation. You must re-use it accurately and not use it in a misleading context. The material must be acknowledged as Crown copyright and you must give the title of the source publication. Where we have identified any third party copyright material you will need to obtain permission from the copyright holders concerned.

For any other use of this material please apply for a Click-Use Licence for core material at www.opsi.gov.uk/click-use/system/online/pLogin. asp or by writing to:

Office of Public Sector Information, Information Policy Team, St Clements House, 2-16 Colegate, Norwich NR3 1BQ.



01603 621000



hmsolicensing@cabinet-office.x.gsi.gov.uk

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

Printed and bound in Great Britain by Latimer Trend & Company Ltd, Plymouth, Devon.

In brief

CPI and the Budget

n 21 March 2007, 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 Budget will in total add 0.19 percentage points to the onemonth 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 +0.06% (21 March)
- alcohol +0.03% (26 March), and
- road fuel +0.10% (1 October)

This total is the same as the estimated increase from the measures that were implemented following their announcement in the March 2006 Budget and the December 2006 Pre-Budget Report (PBR). Once last year's tax changes are taken into account, the net effect of the two most recent Budgets and the 2006 PBR on the CPI annual inflation rate is estimated to be negligible.

The 2006 Budget and PBR measures are now fully reflected in the CPI; the effects of the 2007 Budget will feed into the index over several months.

For the RPI, it is estimated that this year's Budget will add 0.22 percentage points to the one-month change. The effect of changes in excise duties for alcohol, tobacco and road fuel are very similar to those in the CPI; there was also a +0.04% contribution from vehicle excise duty (22 March) which is not included in the CPI. This total is the same as the estimated increase arising from the 2006 Budget and PBR. Overall, the net effect of the two most recent Budgets and the 2006 PBR on the RPI annual rate is estimated to be negligible.

More information

www.statistics.gov.uk/cci/article. asp?id=1760

Contact

Jim O'Donoghue

020 7533 5849

jim.o'donoghue@ons.gsi.gov.uk

Focus on the Digital Age

arch saw the publication of ONS's first summary of measurement of information and communication technology (ICT) and its impacts on the economy and society. Focus on the Digital Age brings together information about ownership and use of ICT. It illustrates how new technologies are transforming homes and businesses and highlights the 'digital divide' - the low take-up of ICT by some

UK business adoption of ICT, Internet use and e-commerce is well established and growing fast. In the home, almost half of households in Great Britain in 2006 had Internet access, a digital TV service and one or more mobile phones. But one in 12 households did not have any of these.

Focus on the Digital Age also shows that:

- business investment in ICT more than doubled in the UK between 1992 and 2004, outpacing growth in total investment
- the proportion of UK businesses selling over the Internet doubled between 2002 and 2005, from 7 to 15 per cent
- household adoption of ICT has been rapid, particularly among the young and those in the labour market, but slower among older people
- ICT ownership and use is also closely linked to household income. While more than 90 per cent of households in the highest income group in the UK had Internet access in 2005/06, the figure for those on the lowest incomes was under 20 per cent
- among businesses, the fastest growth in ICT use has been by smaller businesses, as they have followed the progress made by larger companies in the 1990s

ICT use in the UK has advanced to put the UK above the EU average in key areas. For example, 44 per cent of UK households had a broadband connection in 2006, well above the EU-25 average. In 2006, the UK had the second highest proportion of businesses receiving orders through any form of ICT in the EU, at 30 per cent.

More information



www.statistics.gov.uk /StatBase/ Product.asp?vlnk=14797

> Hard copies of this publication can be obtained from Palgrave Macmillan, price £40 (www.palgrave.com/ons).

Contact

Tony Clayton

020 7533 5913

tony.clayton@ons.gsi.gov.uk

Review of workforce jobs benchmarking

he annual benchmarking of the workforce jobs (WFJ) series to the 2005 Annual Business Inquiry estimates was delayed in December 2006, as further quality assurance was needed before the results could be published. ONS set up a review to consider the quality of the benchmarking process and investigate the consequent large revision to the WFJ series. It also examined the large difference between the annual growth in jobs implied by the revised WFJ series and growth as measured by the Labour Force Survey (LFS).

The revised WFJ estimates were published in the March Labour Market Statistics First Release, following a recommendation of the review which was published at the same time, on 14 March.

The review took account of the National Statistics Quality Review of Employment and Jobs Statistics (EJR), published in 2006, which had already examined factors contributing to the difference between LFS and WFJ measures of jobs. A number of recommendations of that review should be given a high priority.

The review concluded that, of the total difference between the annual growth in jobs from 2004 to 2005 as measured by the LFS and WFJ (280,000), 20,000 to 100,000 might be explained by an increase in undercoverage of temporary foreign workers. The remaining 200,000 or so is of more normal size but there may be a number of factors contributing to the difference. The impact

of these factors is difficult to measure, and a number of studies, aimed at providing estimates, have been recommended.

This review also recommended that the EJR's conclusion, that the LFS provides the best measure of total jobs in the economy, should be kept under review. In particular, it is expected that some improvement to estimates of short-term migration will be possible later this year, and it should then be considered whether the LFS data can be adjusted to include all temporary foreign workers to provide the best measure of jobs. The review also proposed a treatment of managed service companies in business surveys.

More information



www.statistics.gov.uk/StatBase/ Product.asp?vlnk=9765

Contact

Andrew Machin

020 7533 6178

andrew.machin@ons.gsi.gov.uk

Workshop at University of the West of England, **Bristol**

number of analytical divisions within ONS have either relocated, or are in the process of relocating, to South Wales, and by 2010 Newport will be the main centre of analytical expertise within ONS. To promote and develop collaborative links with government and the research community within the region, ONS organised a day workshop on 28 March at the University of the West of England, Bristol. The workshop was attended by 120 delegates, including academics, representatives from university careers and research support services and those employed in other government departments, regional agencies or other organisations that have an interest in economic and social analysis.

Grice, Executive Director of Social Analysis and Reporting, ONS. This introduced a number of themes for the day including possibilities for collaborative research, resources for research, opportunities for students to gain experience at ONS through placement schemes and employment openings for economists, statisticians and social researchers. Joe emphasised that by

building upon the existing capacity within the region, such linkages with the academic and research community would further develop the region as an 'intellectual cluster' for research and analysis.

Following the introductory address, Sian Bourne of the Economic and Social Research Council provided an overview of available resources for research, including online resources, CPD opportunities and funding initiatives. Professors Martin Boddy of the University of West England and Frank Dunstan of Cardiff University then presented findings from research projects undertaken in collaboration with ONS. After lunch, themed parallel sessions provided the opportunity for ONS business areas to present their work in more detail, outlining their own opportunities for recruitment and collaborative working.

The day concluded with a panel discussion. Members of the panel representing the South West Regional Development Agency and the Welsh Assembly Government welcomed the efforts made by ONS to engage with the region. In his summary, Joe Grice reflected positively on the discussions that had taken place during the course of the day and that the event underlined the synergies that could be achieved through linkages with the academic and research communities.

Contact

Rhys Davies

01633 812868

rhys.davies@ons.gsi.gov.uk

UPDATES

Updates to statistics on www.statistics.gov.uk

9 March

Index of production

Manufacturing: 0.1% three-monthly rise to January 2007

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

12 March

Producer prices

Factory gate inflation remains at 2.2% in February

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

13 March

UK trade

Deficit narrowed to £3.8 billion in January 2007

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

14 March

Average earnings

Pay growth steady in the year to January

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

Employment

Rate falls to 74.4% in three months to January 2007

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

Public sector employment

Employment falls in Q4 2006 www.statistics.gov.uk/cci/nugget.asp?id=407

15 March

Use of ICT at home

Two in three homes have digital TV service www.statistics.gov.uk/cci/nugget.asp?id=1710

20 March

Inflation

February: CPI up to 2.8%; RPI up to 4.6% www.statistics.gov.uk/cci/nugget.asp?id=19

Public sector

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

22 March

Retail sales

Underlying growth remains robust www.statistics.gov.uk/cci/nugget.asp?id=256

23 March

CPI and the Budget

Estimated impact on inflation www.statistics.gov.uk/cci/nugget.asp?id=336

Motor vehicles

Car production falls in the three months to February

www.statistics.gov.uk/cci/nugget.asp?id=376

27 March

Business investment

4.5% rise in Q4 2006

www.statistics.gov.uk/cci/nugget.asp?id=258

The opening address was made by Joe

Investment

Institutional net investment £25.0 billion in Q4 2006

www.statistics.gov.uk/cci/nugget.asp?id=396

Regional household income

Highest per head in Inner London in 2005 www.statistics.gov.uk/cci/nugget.asp?id=1552

28 March

Balance of payments

UK current account deficit widens in 2006 www.statistics.gov.uk/cci/nugget.asp?id=194

GDP growth

UK economy up by 0.7% in Q4 2006 www.statistics.gov.uk/cci/nugget.asp?id=192

29 March

Index of services

0.8% three-monthly rise into January www.statistics.gov.uk/cci/nugget.asp?id=558

Productivity

Productivity growth falls in Q4 2006 www.statistics.gov.uk/cci/nugget.asp?id=133

30 March

UK Government debt and deficit

Deficit 2.7% of GDP in 2006 www.statistics.gov.uk/cci/nugget.asp?id=277

3 April

Corporate profitability

15.5% in Q4 2006

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

FORTHCOMING RELEASES

Future statistical releases on www.statistics.gov.uk

5 April

Index of production – February 2007

11 April

MQ5: Investment by insurance companies, pension funds and trusts – Q4 2006

12 April

UK trade - February 2007

15 April

Public and private sector breakdown of labour disputes

16 April

Producer prices - March 2007

17 April

Consumer price indices – March 2007

18 Δnri

Labour market statistics – April 2007 MM19: Aerospace and electronic cost indices – January 2007

19 Anril

Public and private sector breakdown of labour disputes

Trade union membership - 2006

20 April

Retail sales – March 2007

SDM28: Retail sales - March 2007

23 Apri

Focus on consumer price indices
– March 2007

24 April

MM22: Producer prices – March 2007 Public sector finances – March 2007

25 April

Gross domestic product (GDP) preliminary estimate – Q1 2007 Index of services – February 2007 Monthly digest of statistics – April 2007

27 Apri

International trade in services: 2005 Motor vehicle production – March

Public sector finances: supplementary (quarterly) data

1 Ma

Mergers and acquisitions involving UK companies – Q1 2007

4 May

PM 34.10: Motor vehicle production business monitor – Q1 2007

Economic review

April 2007

Anis Chowdhury

Office for National Statistics

SUMMARY

GDP continued to grow robustly in 2006 quarter four, driven mainly by the services sector, with little contribution from manufacturing output. On the expenditure side in 2006 quarter four, robust business investment continues to drive growth, supported by a pick up in household spending. As a reflection of the UK's dynamic domestic demand profile and unfavourable exchange rate position, the trade deficit widened in 2006 quarter four. The current account deficit also widened. The Labour Market continues to grow robustly, but average earnings remain subdued. The public sector finances improved in February 2007. Consumer and producer output price inflation rose in February 2007.

GROSS DOMESTIC PRODUCT

Fourth quarter growth of 0.7 per cent

DP growth for the fourth quarter of 2006 is according to the latest quarterly National Accounts release estimated to have grown fairly strongly by 0.7 per cent, similar to the rate in the previous quarter. The annual rate of growth was 3.0 per cent; up from 2.9 per cent in the previous quarter (Figure 1).

The growth rate in the UK economy in 2006 quarter four continues to be led by strong growth in services sector output. Total industrial production growth in contrast remains subdued, recording virtually flat growth and continuing the trend from the previous quarter. Muted industrial production was led by flat manufacturing output and weakening energy supply output. This was offset by a bounce back in mining & quarrying output, although the sector's contribution to growth remained negative. Construction output

Figure 1
Gross Domestic Product
Growth

5
4
Quarter on same quarter a year earlier
2
Quarter on quarter
2
Quarter on quarter
2
2001
2002
2003
2004
2005
2006
2007

accelerated in quarter four, continuing to grow strongly. On the expenditure side, growth was led by a strong pick up household consumption expenditure and by a continued robustness in business investment growth.

OTHER MAJOR ECONOMIES

Global growth picks up in 2006 quarter four

DP estimates for 2006 quarter four for the other major OECD countries are available and these show a strengthening picture of the global economy. US GDP data for the fourth quarter showed a slight increase. Growth was 0.6 per cent compared to 0.5 per cent in 2006 quarter three. The higher rate of growth was mainly led by strong household consumption expenditure, which was underpinned by a fairly buoyant labour market together with a fall in energy prices. Government spending growth also made a positive contribution to GDP growth as did net exports which rose faster whilst imports fell. Investment growth in contrast, fell markedly on the quarter. Japan's GDP growth showed a marked improvement in 2006 quarter four. Growth was 1.3 per cent, a sharp increase from the virtually flat growth in quarter three. Growth was primarily led by household consumption expenditure which grew strongly in quarter four, reversing the contraction in quarter three. Growth was also underpinned by an acceleration in private non-residential investment and a bounce back in residential investment. Government spending also made a positive contribution to growth. This was offset by a deceleration in exports growth, which made a muted contribution to GDP growth.

Growth in the three biggest mainland EU economies – Germany, France and Italy – exhibited a strengthening picture. Euroarea growth overall was 0.9 per cent, up from 0.5 per cent in the previous quarter. German GDP growth was a strong 0.9 per cent in 2006 quarter four, continuing the trend of 0.8 per cent growth in quarter three. German GDP growth was led by a strong net trade position with an acceleration in exports. Investment growth remained buoyant. This was offset by a slowdown in household consumption growth. French GDP growth showed a rebound in 2006

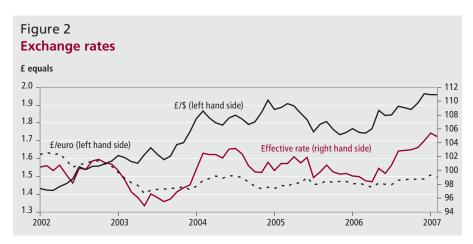
quarter four. Growth was 0.6 per cent, compared to flat growth in the previous quarter. French growth was led by an acceleration in business investment and to a lesser extent, by a pick up in household consumption expenditure. Net exports also made a positive contribution to growth. The Italian economy showed a resurgence in the latest quarter. Growth was a strong 1.1 per cent, the highest since 1999 and up considerably from 0.3 per cent growth in the previous quarter. According to the breakdown, growth was led by a bounce back in export growth, which rose strongly in quarter four. Growth was also led by a lesser extent by investment growth, driven by construction output. Household consumption in contrast was subdued.

FINANCIAL MARKETS

Share prices fall and pound appreciates in 2006 quarter four

quity performance has been fairly volatile in 2006. The FTSE All-Share index fell by 2 per cent in 2006 quarter four after increasing by around 9.0 per cent in 2006 quarter three. Share prices in 2007 quarter one picked up but overall showed stable but fairly modest growth, despite some turbulence towards the end of February 2007, where there was a sharp fall in share prices. This was partly led by rumours of capital gains taxes on shares in China. The FTSE All-Share index in the two months to February increased on average by around 3.0 per cent. Other factors for the relative weakness in share prices in 2006 quarter four and 2007 quarter one could be due to a more pessimistic outlook of the global economy, particularly in regards to the US economy, on the part of investors. Also, this has coincided with increases in actual interest rates in some world economies in order to dampen inflationary pressures, therefore making interest bearing assets more attractive than shares.

As for currency markets, 2006 quarter four saw sterling's average value appreciating and broadly grow in line with quarter three. The pound appreciated against the dollar by around 2.0 per cent. In the two months ending February 2007, average growth against the dollar was fairly flat. Against the euro, sterling's values appreciated by around 1.0 per cent in 2006 quarter four. It appreciated on average by around a further 1.0 per cent in the two months to February 2007. Overall, the quarterly effective



exchange rate appreciated by 1.4 per cent in 2006 quarter four. (**Figure 2**). In the two months to February 2007, the effective exchange rate appreciated on average by around 1.0 per cent.

The recent movements in the exchange rate might be linked to a number of factors. Firstly, exchange rate movements can be related to the perceptions of the relative strengths of the US, the Euro and UK economy. The appreciation of the pound against the both the dollar and euro in 2006 quarter four and at the beginning of 2007 may be partly linked to perceptions of stronger UK economic growth, leading to greater inflationary pressures and therefore the prospects of higher interest rates in the UK. In recent months, there have been particular concerns regarding the impact of the US housing slowdown and weaker US GDP growth. Furthermore, inflationary pressures have been relatively subdued in the US. This may have lessened the likelihood of further interest rate rises in the US. US interest rates currently stand at 5.25 per cent. In the euro-area, there has been a degree of monetary tightening with interest rates rising by a further 0.25 percentage points in March 2007, following the 0.25 percentage points rise in December 2006 to leave rates currently standing at 3.75 per cent. However, compared to US and UK rates, euro-zone interest rates still remain moderate and accommodative. In the UK, interest rates were raised by a further 0.25 percentage points in January 2007 following on from the 0.25 percentage point increase in November 2006 to leave interest rates currently standing at 5.25 per cent.

Secondly, another factor for the US depreciation relative to the pound may be due to the current account deficit which is generally seen as a weakness for the US economy. The dollar may have fallen recently in response to a readjustment process, with the intended consequence of making exports

cheaper and imports dearer- thus in theory leading to switch in expenditure to home produced goods and ultimately leading to a narrowing in the deficit.

Thirdly, another factor may be due to a lack of international appetite for dollar denominated assets, particularly from central banks, whom are choosing to mix up their currency assets on their balance sheets (for portfolio and risk management purposes) thereby further undermining the value of the dollar.

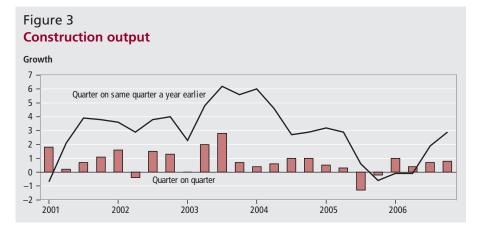
OUTPUT

Services sector drives economic growth

DP growth in 2006 quarter four was estimated at 0.7 per cent, a similar rate to the previous quarter. On an annual basis it was 3.0 per cent, up from 2.9 per cent in 2006 quarter three.

Construction activity is estimated to have grown strongly in the fourth quarter of 2006. Construction output grew by 0.8 per cent in quarter four, up from 0.7 per cent in the previous quarter. Comparing the quarter on the quarter a year ago, construction output rose by 2.9 per cent following growth of 1.9 per cent in the previous quarter (Figure 3).

As for external surveys of construction, the CIPS survey signalled strengthening activity in 2006 quarter four, with the average headline index at 56.8 up from 53.8 in the previous quarter. Stronger activity was driven by sharp growth across all sectors, with commercial activity recording the fastest growth. In February 2007, the headline index edged up to 57.3. The RICS in its 2006 quarter four construction survey report that construction workloads showed the largest rise in over two years, led by rapid expansion in commercial and private housing activity. The workload balance was 26 per cent, up from 21 per cent in quarter three.



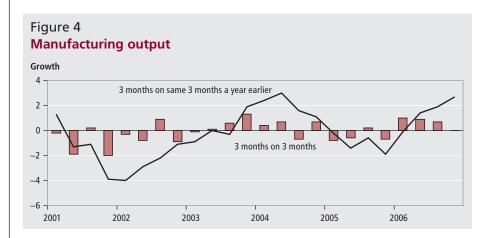
Total output from the production industries fell by 0.2 per cent in 2006 quarter four following growth of just 0.2 per cent in the previous quarter. On an annual basis it grew by 1.0 per cent compared to 0.6 per cent in the previous quarter. The main contribution to the decline came from flat manufacturing output after fairly robust growth of 0.7 per cent in the previous quarter. On an annual basis, manufacturing output continues to grow strongly at 2.7 per cent (Figure 4). Another contribution to the fall came from a weakening in the output of the electricity, gas and water supply industries which decelerated further, by 1.6 per cent in 2006 quarter four following a decrease of 0.2 per cent in quarter three. The decrease in output can be mainly attributed to milder weather in quarter four. Mining and quarrying output (including oil & gas production), fell by 0.6 per cent in quarter four; although negative it is still an improvement on the 3.5 per cent decrease in quarter three. Higher oil production was offset by a decline in gas extraction. This suggests that the temporary maintenance shutdowns of oil rigs in the third quarter may no longer be a factor. Production growth has generally been weak in the last three quarters of 2006. Mining and quarrying output has also been weak for much of 2006, although as mentioned, there are signs of a pick up in the latest quarter. The output of the agriculture, forestry and fishing industries fell by 0.5 per cent following virtually flat growth in the previous quarter.

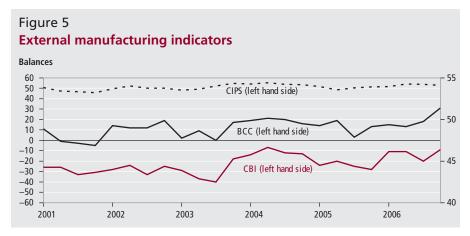
According to the latest Index of Production figures, production output was flat in the three months to January compared with the previous three months. There was a fall in the output of the mining and quarrying industries of 1.4 per cent. Electricity, gas and water industries output increased by 0.9 per cent in the three months to January. However, manufacturing output continues to show weakness with growth of just 0.1 per cent in the three months to January compared to the previous three months.

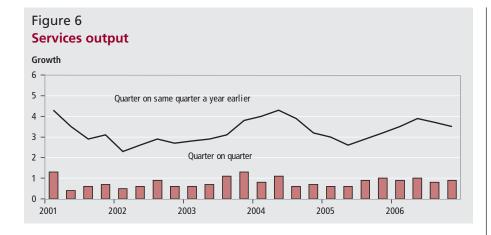
External surveys of manufacturing for 2006 quarter four show a mixed picture (Figure 5). It is not unusual for the path of business indicators and official data to diverge over the short term. These differences happen partly because the series are not measuring exactly the same thing. External surveys 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 output indicated a slowdown in 2006 quarter four. The headline index was 52.7, down from 53.8 in quarter three, but still indicative of fairly robust growth. The output index fell sharply to 53.8 from 56.2 in the previous quarter. In February 2007, the headline index was a strong 55.4. The CBI in its quarter four Industrial Trends survey reports an improvement in its total order books balance, although the balance was negative at minus 9. The latest CBI monthly Industrial Trends survey showed the level of manufacturers' total order books reached a new 12 year high in March with the balance at plus eight. The BCC survey in reports an overall positive picture in 2006 quarter four. The net balance for home sales rose sharply to plus 31 from plus 18 in the previous quarter. The net balance for home orders rose by 9 points to plus 27, both recording the highest growth since 2004 quarter two.

Overall, the service sector, by far the largest part of the UK economy and the main driver of UK growth recently, continued to grow strongly in 2006 quarter four. Growth was 0.9 per cent, up from 0.8 per cent growth in the previous quarter (Figure 6). The main contribution to the growth rate came from distribution, hotels and catering, where output accelerated sharply in 2006 to 1.2 per cent from 0.2 per cent in the previous quarter. Transport, storage and communication output also grew strongly, by 1.3 per cent in quarter four, a jump from 0.2 per cent







in the previous quarter. This was offset by slower growth in output of business services & finance at 1.0 per cent, still a robust rate of growth but down from 1.4 per cent in the previous quarter. Government and other services output continues to grow moderately, with growth of 0.4 per cent in 2006 quarter four.

The external surveys on services showed a strengthening picture in 2006 quarter four in line with the official picture. The CIPS survey signalled strong growth in 2006 quarter four. The headline index was 59.9 in quarter four, up from 57.2 in the previous quarter, led by new orders. In February 2007, the headline index fell to 57.4, but still indicative of robust growth. It should be noted that the CIPS survey has a narrow coverage of the distribution and government sectors.

The CBI and BCC also report a strengthening of service sector output (Figure 7). The CBI in its latest services sector survey in February reported strong growth in business volumes for both consumer and business & professional services firms over the last three months. The consumer services volume balance was at plus 13 and for business & professional services, the balance was at plus 27. The BCC in its 2006 quarter four survey reported a strengthening picture. The service sector's domestic balance rose 10 points to plus 34, the highest since 2004 quarter two. The net balance for home orders rose 9 points in 2006 quarter four, the highest since 2000 quarter four.

The UK sectoral account shows the UK corporate sector once again as being a big net lender in 2006 quarter four. 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

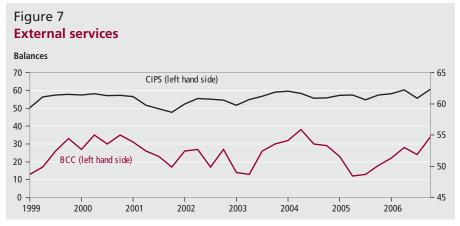
growth proved insufficient to finance total outlays. Households debt levels continue be relatively high, although the quarterly interest payments on the loans are still being kept down by low interest rates as a proportion of income, although they have steadily increased in recent quarters due to rises in interest rates. The level of central government borrowing increased in quarter four from quarter three, and 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.

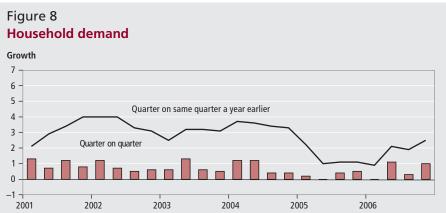
EXPENDITURE

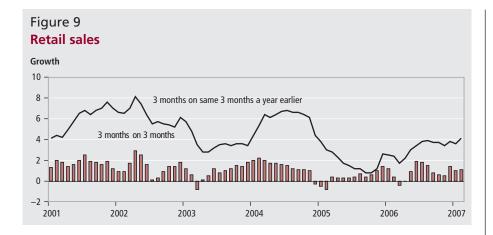
Consumers' spending strengthens in quarter four

showed a marked acceleration in 2006 quarter four after fairly modest growth in the previous quarter. Growth achieved a strong 1.0 per cent compared to 0.3 per cent in the previous quarter. Growth compared with the same quarter a year ago also accelerated, to 2.5 per cent, up from 1.9 per cent in the previous quarter (Figure 8). In terms of expenditure breakdown, the increase in household consumption growth was broad based with durable and semi-durable goods registering strong growth and to a lesser extent non-durable goods.

Household consumption expenditure in 2006 quarter four could have strengthened for a number of economic reasons. On the face of it, the two 0.25 percentage point increases in interest rates in August and November; the negative consumer expenditure indicators of GfK and MORI and the rise in utility bills and taxes through







the year, could have been expected to have a negative impact on consumer spending in quarter four. Household consumption expenditure in 2006 quarter four however strengthened significantly in comparison with quarter three.

One key indicator of household expenditure is retail sales. Retail sales appear to have picked up strongly in quarter four, with sales increasing by 1.4 per cent compared to 0.8 per cent in quarter three. This may suggest a certain degree of postponement in expenditure on the part of consumers. Much of the pick up in consumer expenditure can be explained by shop prices (that is, the prices deflator which on average grew by just 0.2 per cent in 2006 quarter four).

It should be noted that household consumption accounts for a much broader range of spending than just retail sales. For instance, household purchases of services, motor vehicles and housing (imputed rents) are not included in retail sales. Since the beginning of 2005, retail sales have grown faster than household consumption as a whole, but seem to have showed signs of narrowing in 2006 quarter three and four.

Retail sales figures are published on a monthly basis and the latest available figures for February showed a robust rate of growth, continuing the trend from the previous month (Figure 9). According to the latest figures, the volume of retail sales in the three months to February 2007 was 1.1 per cent higher than the previous three months. This followed upwardly revised growth of 1.0 per cent in the three months to January. On an annual basis, retail sales grew by 4.1 per cent in the three months to February 2007, up from 3.6 per cent compared to the previous month's annual growth rate.

At a disaggregated level, retail sales growth during the three months to the end of February was driven by the 'Predominantly non-food' sector which grew by 0.9 per cent. Within this sector, growth was led by the 'Non-store retailing and repair' sector (which includes mail order and internet sales) which grew by 4.8 per cent. This was followed by growth in 'Household goods stores' at 4.0 per cent. Growth in the 'Predominantly food-stores' was 0.5 per cent.

The pick up in sales in February can to some extent be attributed, to the continued weakness in shop prices (that is, the shop price deflator). This fell by 0.3 per cent in February.

External surveys for retail show a robust picture. The CBI in its monthly Distributive Trades survey report that retail sales volumes grew for a third consecutive month with the balance at plus 19 in February. The BRC report that retail sales increased by 3.3 per cent on a like-for-like basis in February, up from 3.1 per cent in the previous month.

Both attribute some of the increase to the effects of discounting (**Figure 10**).

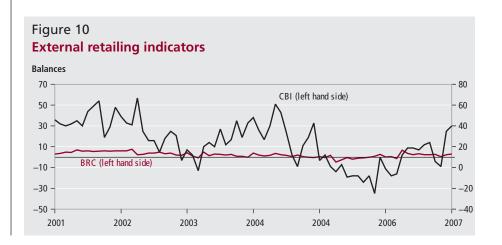
Another factor for the increase in household spending in quarter four may be attributed to the continued strength in household borrowing. Household consumption has risen faster than disposable income in recent years as the household sector has become a considerable net borrower and therefore accumulated high debt levels.

The sectoral accounts show how the strength of consumer demand relative to available has resulted in higher household sector net borrowing. Household net borrowing was £10.1 billion in 2006 quarter four compared to £5.9 billion in the previous quarter.

There are two channels of borrowing available to households; i) secured borrowing; usually on homes and ii) unsecured borrowing, that is, on credit cards.

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. In 2006 quarter four, lending was driven by loans on secured dwellings - of about £29 billion; this was offset by a weaker growth in unsecured lending - of around £794 million. The growth of secured lending may reflect households just choosing to incorporate some of their unsecured debts into their secured borrowing to lower the cost of re-financing. This subsequently may have released expenditure, leading partly to strong growth in consumption expenditure in 2006 quarter four. 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.

Another boost to expenditure may have been provided by the rise in house prices which according to the Nationwide and Halifax, grew at quarterly rate of 2.0 per cent and 4.0 per cent respectively in 2006 quarter four. The rise in house prices may have further increased the level of equity and therefore led to increased borrowing to



finance further consumption. The stimulus in this process could well have outweighed any concerns about increase in mortgage and equity release borrowing costs.

Broad money and credit growth grew strongly in quarter four, with quarterly growth of M4 and M4 lending growing by 13.0 per cent and 14.0 per cent respectively and this may have further underpinned expenditure.

Another contribution to the increase in household spending growth may be attributed to the savings ratio. The savings ratio fell sharply in 2006 quarter four to 3.7 per cent from 5.3 per cent in quarter three. This could be a reflection of an increased resort to a drawing down on savings to fund expenditure. This has coincided with a fall in real household disposable income which fell be 0.7 per cent in 2006 quarter four compared to growth of 0.9 per cent in the previous quarter, partly due to higher interest payments.

Other possible upsides to consumer expenditure in 2006 quarter four may have been due to the recent fall in oil prices which averaged \$60 a barrel compared to \$70 a barrel in quarter three; this may have led to expenditure switching to non-petrol goods. Households could be spending now in anticipation of future inflation and subsequently higher interest rates. Finally, the labour market appears healthy and could have provided an underlying boost to confidence and therefore spending.

BUSINESS DEMAND

Business investment maintains strong momentum in quarter four

otal investment grew relatively strongly in 2006 quarter four. Growth was 2.6 per cent compared to 2.1 per cent in the previous quarter. On an annual basis it grew by 8.2 per cent compared to 5.6 per cent in the previous quarter. Growth on an annual basis was primarily driven by business investment.

Business investment for the fourth quarter of 2006 showed a fairly robust growth of 4.5 per cent, up from 3.1 per cent in the previous quarter. On an annual basis it grew by 13.5 per cent, up from 8.5 per cent in the previous quarter (**Figure 11**). Profitability is one factor determining investment, and this has shown some positive signs in recent quarters. The expectations of future higher profits may also provide an explanation for the increased investment in quarter four.

Figure 11 **Total fixed investment** 10 Ouarter on same quarter a year earlier 8 6 2 0 Quarter on quarter 2002 2004 2005 2006 2001 2003

Another factor could be due the existence of low real interest rates. Finally, business investment may have also been encouraged by a positive outlook of the global economy aided by improved export prospects.

According to the sectoral accounts, the private non-financial corporate sector was a net lender in 2006 quarter four lending £4.3 billion, up from £2.8 billion in the previous quarter. This is mainly due to a combination of higher profits and interest payments received. 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 £1.9 billion.

Evidence on investment intentions from the latest BCC and CBI surveys showed a somewhat mixed but slightly improving picture in quarter four. According to the quarterly BCC survey, the balance of manufacturing and services firms' investment in plant and machinery rose by one point to plus 23. The CBI in its 2006 quarter four Industrial Survey reports an improvement in investment although the balance is still negative at minus 8.

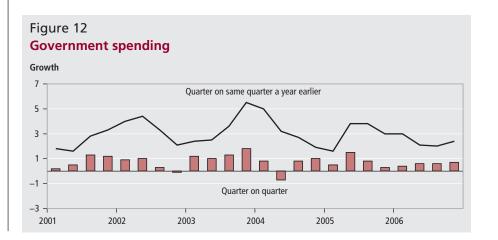
GOVERNMENT DEMAND

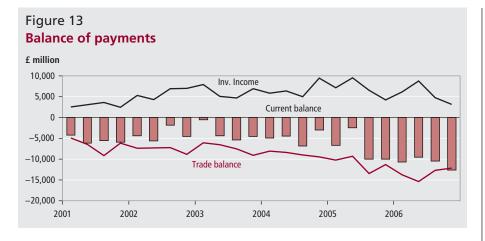
Government expenditure strengthens

overnment final consumption expenditure showed strong growth in 2006 quarter four. Growth was 0.7 per cent in 2006 quarter four, up slightly from growth of 0.6 per cent in the previous quarter. Growth quarter on quarter a year ago was 2.4 per cent, up from 2.0 per cent in the previous quarter (Figure 12).

Public sector finances improve

he latest figures on the public sector finances report in the current financial year to February 2007 and illustrated a positive picture. Overall, it showed the government continue to operate a financial deficit, with government expenditure continuing to exceed revenues. Over the financial year April to February 2006/07, the current budget was in deficit by £6.4 billion, a lower deficit compared to £11.8 billion for financial year April to February 2005/06.





Net borrowing (which includes capital investment) also fell, to £26.9 billion in the financial year April to February 2006/07 from £31.0 billion in the financial year April to February 2005/06. The positive picture mainly reflects a continued surge in income tax receipts from the previous month, which coincided with the return of self-assessment tax forms; offset by a fall in corporation tax receipts. This has led to a lower current budget deficit in the current financial year. However, this continues to be exceeded by central government net borrowing, albeit at a lower rate in the current financial period, partly to fund capital spending.

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 £442.6 billion and of Treasury bills at £19.4 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 by the end of February 2007 was 36.2 per cent of GDP, unchanged from the previous month but down from 36.5 per cent of GDP over the financial year 2005/06.

TRADE AND THE BALANCE OF PAYMENTS

Current account deficit widens; goods deficit widens in quarter four

he publication of the latest quarterly Balance of Payments shows that the current account deficit widened in 2006 quarter four to £12.7 billion (the highest deficit on record), from a deficit of £10.5 billion in the previous quarter

(**Figure 13**). As a proportion of GDP, the deficit rose to 3.8 per cent of GDP (the highest since 1990 quarter two) from 3.2 per cent in 2006 quarter three.

The widening current account deficit in 2006 quarter four was due to a lower surplus on investment income and higher deficits on trade in goods and current transfers, partially offset by a higher surplus on trade in services. The surplus on income fell £1.6 billion to £3.2 billion, the deficit on current transfers increased by £1.1 billion to £3.6 billion, while the surplus on trade in services rose £0.9 billion to £8.0 billion. The deficit on trade in goods increased by £0.4 billion to £20.2 billion.

The current account for the year 2006 was in deficit by £43.4 billion (-3.4 per cent of GDP), compared with a revised deficit of £29.2 billion in 2005 (-2.4 per cent of GDP).

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 2006 quarter four showed the UK continuing to have a large trade deficit in goods with levels of imports rising faster than exports. This has provided a negative contribution towards GDP growth in the fourth quarter.

The deficit on trade in goods in 2006 quarter four was £20.2 billion, compared with a deficit of £19.8 billion in the previous quarter. Exports fell by £1.6 billion while imports fell by £1.2 billion. A substantial proportion of these falls represented lower trade in oil and commodities associated with VAT Missing Trader Intra-Community (MTIC) fraud. Therefore, trade in goods figures need to be treated with caution, as this makes it difficult to

analyse trade figures as increases inflate both imports and exports, though with no impact on net trade

The deficit with the EU was £7.4 billion in 2006 quarter four, the same as in the previous quarter. Exports to EU countries and imports from EU countries fell by £1.4 billion. The deficit with non-EU countries rose from £12.4 billion to £12.8 billion in the fourth quarter of 2006. Exports to non-EU countries fell by £0.2 billion while imports from those countries rose by £0.1 billion.

The appreciation of the pound recently may have been a factor for the relatively high trade deficit, as a higher pound makes imports cheaper and exports more expensive.

According to the latest trade figures in January, the UK's deficit on trade in goods and services is estimated at £3.8 billion, down from £4.4 billion in December. Total imports of goods fell by 4.6 per cent and total exports fell by 1.0 per cent on the month. In the three months ended January, the deficit on trade in goods and services widened to £12.6 billion from a £12.2 billion deficit in the previous three months. In terms of rates exports of goods fell by 1.0 per cent whilst import of goods fell by 0.3 per cent. The falls in exports and imports reflect lower trade associated with MTIC fraud, and again should be treated with caution. Estimated MTIC fraud fell to £0.1 billion in January.

Overall, the persistence of the current account deficit has led to the deterioration in the UK's international investment position (IIP) with the rest of the world. The net asset/liability was negative to the tune of £265.2 billion at the end of the fourth quarter of 2006 compared with net external liabilities of £243.4 billion at the end of the previous quarter. UK assets abroad increased by £39.1 billion from the end of the third quarter to a level of £5,279.0 billion at the end of the fourth quarter. UK liabilities increased by £60.9 billion over the same period to a level of £5,544.2 billion. The rise in the level of both UK assets and UK liabilities in the fourth quarter reflects both net investment and price movements, which outweigh the effects of exchange rate movements.

External surveys on exports show a generally weak picture. The BCC reported that the export sales net balance fell markedly in quarter four, by 14 points to plus 20. The CBI in its 2006 quarter four Industrial Trends Survey reports that the export order book was minus 3. According to the latest monthly Industrial Trends Survey in February 2007, the balance was zero.

LABOUR MARKET

Labour market activity remains robust

he Labour market showed a mixed picture in the latest reference period, but overall, continued the recent trend of fairly strong growth in labour market activity of the recent previous months. This follows the looser conditions prevalent in earlier quarters. As the labour market operates on a time lag, this could be perhaps due to the pick up in demand conditions in 2005 quarter four beginning to feed through into a strengthening labour market picture.

The latest figures from the Labour Force Survey (LFS) pertain to the three-month period up to January 2007 and show a mostly positive picture. The number of people in employment rose. The number of unemployed people fell. The claimant count fell. Job vacancies increased. On the downside, the employment rate fell whilst the unemployment rate remained unchanged. Average earnings, excluding bonuses fell, while average earnings including bonuses rose; but overall, average earnings remain subdued with weak real wage growth. The concurrent rise and fall in the employment and unemployment levels may be partially attributed to higher workforce participation levels.

Looking at a detailed level, the increase in employment levels appears to be mainly generated by an increase in the number of people in self-employment.

The current working age employment rate was 74.4 per cent, in the three months to January 2007, down 0.1 percentage point from the three months to October 2006 and from a year earlier. The number of people in employment increased by 18, 000 over the quarter, and by 221,000 over the year, to leave the employment level standing at 29.02 million in the three months to January 2007. The unemployment rate was 5.5 per cent, in the three months to January 2007, unchanged from the three months to October 2006 but up 0.4 percentage points from a year earlier (Figure 14). The number of unemployed people fell by 3,000, from the three months to October, but increased by 151,000 from a year earlier, leaving the unemployment level standing at 1.69 million.

According to the LFS, in the period November to January 2007, the number of people in employment increased by 18,000. The increase was driven by a rise in self-employment of 26,000 offset by a

Figure 14 **Employment and unemployment** Percentage 75.5 Employment rates (left hand side) 75.0 6.5 74.5 6.0 74.0 5.5 73.5 5.0 73.0 Unemployment rates (right hand side) 4.5 72.5 4.0 2003 2004 2001 2005 2006 2000 2002 2007

contraction in employees of 15,000. From another perspective, the number of full-time employees fell by 28,000, whilst part-time employees increased by 13,000, continuing the trend from the previous quarter.

Workforce jobs rises

ccording to employer surveys, there was an increase of 88,000 jobs in the three months to December 2006. Most sectors showed increases in jobs over the quarter and year. The largest quarterly contribution came from an increase in finance & business services jobs at 51,000 followed by construction at 21,000 and distribution, hotels & restaurants at 19,000. Two sectors recorded a fall in jobs. Manufacturing continues to shred jobs, with a decrease of 23,000 in the latest period followed by other services at 4,000. Over the year, education, health and public administration saw the largest increase in jobs at 96,000 followed by finance & business services at 95,000. The manufacturing sector in contrast lost over 53,000 jobs on the year, followed by distribution hotels & restaurants at 8,000.

Claimant count falls

he claimant count measures the number of people claiming the jobseekers allowance. The latest figures for February showed the claimant count level at 922,200, down 3,800 on the month and down 2,800 on a year earlier. The claimant count rate in February 2007 was 2.9 per cent, unchanged from the previous month and from a year earlier.

Vacancies rise

here were 622,800 job vacancies on average in the three months to February 2007, up 24,800 from the previous three months and up 19,700 from the same period a year earlier.

Inactivity level rises

he working age inactivity rate was 21.1 per cent in the three months to January 2007, up 0.1 percentage point from the three months to October but down 0.3 percentage points from a year earlier. In level terms, the number of economically inactive people of working age was up 42,000 over the quarter to leave the level standing at 7.88 million in the three months to January 2007. There were inactivity increases amongst most categories over the quarter. The largest increase in the inactivity rate occurred amongst those categorised as 'student' which increased by 31,000, followed by the 'temp sick' category at 22,000 and the 'retired' category at 12,000. This was partially offset by a fall in those categorised as 'other' at 23,000, followed by those categorised as 'looking after family/home' at 14,000. On an annual basis, inactivity fell by 71,000, with the largest fall being amongst those categorised as 'long-term sick' at 46,000, followed by those 'looking after family/home' at 43,000.

Average earnings remain subdued

verage earnings growth showed a mixed picture in January 2007, but the underlying picture is still that of relative weakness. Average earnings (including bonuses) increased in the latest reference period. It rose by 0.2 percentage points to 4.2 per cent. This can mainly be attributed to the timing of bonuses payments, coinciding in the latest reference period. Average earnings growth (excluding bonuses), in contrast fell by 0.1 percentage point in January 2007 compared to the previous month to leave the rate standing at 3.6 per cent.

In terms of the public and private sector split, the gap in earnings growth, excluding bonuses, showed signs of narrowing. Private sector wage growth was 3.7 per cent, down 0.2 percentage points from the previous months while public sector wage growth was 3.1 per cent in the three months to January, unchanged from the previous month.

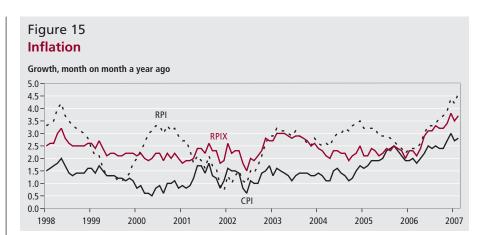
Overall, the numbers point to a fairly buoyant labour market, although it is still loose compared to previous years, with employment increasing due mainly to higher activity rates, which is consistent with robust GDP growth. Average earnings show stable but fairly modest growth, consistent with increase supply in the labour force.

PRICES

Producer output prices rises: producer input prices fall

ndustrial input and output prices are an indication of inflationary pressures in the economy. According to the latest figures in February 2007, output prices exhibited signs of moderate growth and therefore some inflationary pressures, maintaining the pick up from the end of 2006 quarter four. Input prices in contrast fell. The divergence between input and output price inflation which narrowed in 2006 quarter four, seems to have narrowed again in February after widening in the previous month.

Input prices fell by 1.1 per cent in the year to February 2007, a lower rate of decline compared to the decrease in January of 2.1 per cent; which was the largest fall since February 2004. The fall in February also contrasts with 2006 quarter four where prices on average increased by 3.5 per cent, a marked easing compared to growth in average prices of 8.0 per cent in quarter three. The main contribution to the fall in February came from a decrease in crude oil prices which fell by around 15.0 per cent in the year to February. However, on the month, crude prices increased by 5.3 per cent. This net reduction in prices is partly as a result of warmer weather and partly due to higher US crude inventories. Gas prices also made a contribution to the fall in input prices falling by approximately 31.0 per cent over the year and by 10.0 per cent on the month. The core input price index, excluding food, beverages, tobacco



and petroleum rose by 1.3 per cent in the year to February, a lower rate of growth compared to 1.6 per cent in the year to January 2007. It is also a marked easing on 2006 quarter four and three where prices on average increased by 4.8 per cent and 8.0 per cent respectively. The slower growth in input prices was to some extent helped by the appreciation of the pound relative to the dollar and euro, which had the effect of making exports dearer but imports cheaper. The fall in input prices may have had little impact on output prices.

The output price index rose by 2.2 per cent in the year to February 2007, the third consecutive monthly rise of 2.2 per cent. This is a pick up from average growth of 1.9 per cent in 2006 quarter four. This may suggest a continuing attempt by firms to rebuild their profit margins. The underlying picture however suggests greater inflationary pressures. On the core measure which excludes food, beverages, tobacco and petroleum, producer output prices rose by 2.7 per cent in February 2007, up from growth of 2.4 per cent in the year to January 2007. This was the strongest rise since June 2006 and was up on 2006 quarter four, where average prices increased by 2.4 per cent. The increase in February 2007 was driven by a rise in scrap metal prices of around 34.0 per cent on the year.

Consumer prices rise

rowth in the consumer price index (CPI) – the Government's target measure of inflation – was 2.8 per cent in February 2007; up from 2.7 per cent in the previous month. This still continues

to exceed the Government's 2.0 per cent inflation target. The Retail Price Index (RPI) a broader measure of inflation also rose, to 4.6 per from 4.2 per cent in January. The Retail Price Index, excluding mortgage interest payments (RPIX) was 3.7 per cent in February, up from 3.5 per cent in January 2007 (Figure 15).

The largest upward effect on the CPI annual rate came from transport costs. There was a large upward contribution from air fares, particularly from flights to Europe, which experienced larger price increases in February than a year ago. Another large upward contribution came from miscellaneous goods and services, where prices for personal care appliances increased in February by more than a year ago. There were further large upward contributions from food and non-alcoholic beverages and furniture and household equipment where prices for furniture, furnishings and carpets recovered from January sales and generally rose by more than a year ago. Small upward contributions came from sea fares and motor vehicle purchase, both of which increased in price by more than a year ago.

The largest downward effect on the CPI came from recreation and culture, where prices of computer games fell in February compared with large increases a year ago. Another large partially offsetting downward effect came from fuels and lubricants, where the average price recorded for petrol across February fell by 0.6p per litre, compared with an increase of 0.5p per litre last February.

Independent forecasts

March 2007

The tables below supplement the Economic review by providing a forward-looking view of the UK and world economy.

UK forecasts

The UK tables show the average and range of independent forecasts for 2007 and 2008 and are extracted from HM Treasury's Forecasts for the UK Economy.

2007

2007				2008			
	Average	Lowest	Highest		Average	Lowest	Highest
GDP growth (per cent)	2.6	1.3	3.0	GDP growth (per cent)	2.3	-0.3	2.9
Inflation rate (Q4, per cent)				Inflation rate (Q4, per cent)			
CPI	1.9	1.4	3.0	CPI	2.0	1.5	2.3
RPI	3.1	2.4	3.9	RPI	2.6	1.5	3.3
Claimant unemployment (Q4, million)	0.97	0.86	1.15	Claimant unemployment (Q4, million)	1.00	0.81	1.30
Current account (£ billion)	-36.7	-57.7	-25.1	Current account (£ billion)	-37.8	-63.7	-23.8
Public Sector Net Borrowing (2007/08, £ billion)	36.5	28.7	44.5	Public Sector Net Borrowing (2008/09, £ billion)	34.3	22.5	49.3

Notes

Forecasts for the UK economy gives more detailed forecasts, covering 27 variables, 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 world tables show forecasts for a range of economic indicators taken from Economic Outlook (preliminary edition), published by OECD (Organisation for Economic Co-operation and Development).

2007

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	2.4	2.0	2.2	2.5
Consumer price (percentage change from previous year)	2.6	0.2	2.0	2.2
Unemployment rate (per cent of the labour force)	4.8	3.9	7.4	5.8
Current account (as a percentage of GDP)	-6.5	4.5	-0.1	-1.9
Fiscal balance (as a percentage of GDP)	-2.8	-4.2	-1.1	-2.1

2008

	US	Japan	Euro area	Total OECD
Real GDP growth (per cent)	2.7	2.0	2.3	2.7
Consumer price (percentage change from previous year)	2.6	0.6	2.0	2.1
Unemployment rate (per cent of the labour force)	5.1	3.6	7.1	5.7
Current account (as a percentage of GDP)	-6.6	<i>5.3</i>	-0.1	-1.8
Fiscal balance (as a percentage of GDP)	-2.9	-4.1	-1.2	-2.2

Notes

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

Key indicators

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

						Season	ally adjusted	unless otherv	vise state
	Source	2005	2006	2006	2006	2006	2006	2007	2007
	CDID			Q2	Q3	Q4	Dec	Jan	Feb
GDP growth - chained volume measures (CVM)									
Gross domestic product at market prices	ABMI	1.9	2.8	0.8	0.7	0.7			
Output growth - chained volume measures (CVM)									
Gross value added (GVA) at basic prices	ABMM	2.0	2.7	0.7	0.7	0.7			
Industrial production	CKYW	-1.9	0.1	0.1	0.2	-0.2	-0.1	0.0	
Manufacturing	CKYY	-1.0	1.5	0.9	0.7	0.1	0.1	-0.1	
Construction	GDQB	1.5	1.1	0.4	0.7	0.8			
Services	GDQS	2.9	3.6	1.0	0.7	0.9			
Oil and gas extraction	CKZO	-10.8	-8.8	-4.6	-3.2	-0.7	-4.1	1.9	
Electricity, gas and water supply	CKYZ	-0.2	-2.8	-2.7	-0.2	-1.6	0.2	0.6	
Business services and finance	GDQN	4.2	5.4	1.7	1.4	1.0			
Household demand									
Retail sales volume growth	EAPS	2.0	3.3	1.9	0.8	1.4	1.1	-1.5	1.4
Household final consumption expenditure growth (CVM)	ABJR	1.4	1.9	1.1	0.3	1.0			
GB new registrations of cars (thousands) ¹	BCGT	2,444	2,340	570	662	446	136		
Labour market ^{2,3}									
Employment: 16 and over (thousands)	MGRZ	28,674	28,895	28,930	28,986	29,036	29,022		
Employment rate: working age (%)	MGSU	74.7	74.6	74.6	74.5	74.5	74.4		
Workforce jobs (thousands)	DYDC	31,042	31,409	31,409	31,494	31,583			
Total actual weekly hours of work: all workers (millions)	YBUS	918.6	923.7	926.3	925.4	925.8	929.6		
Unemployment: 16 and over (thousands)	MGSC	1,426	1,657	1,683	1,711	1,687	1,692		
Unemployment rate: 16 and over (%)	MGSX	4.7	5.4	5.5	5.6	5.5	5.5		
Claimant count (thousands)	BCJD	861.8	944.1	950.3	955.3	948.1	939.3	926.0	922.2
Economically active: 16 and over (thousands)	MGSF	30,100	30,552	30,613	30,696	30,723	30,715		
Economic activity rate: working age (%)	MGSO	78.5	78.9	79.0	79.0	79.0	78.9		
Economically inactive: working age (thousands)	YBSN	7,933	7,843	7,822	7,835	7,854	7,877		
Economic inactivity rate: working age (%)	YBTL	21.5	21.1	21.0	21.0	21.0	21.1		
Vacancies (thousands)	AP2Y	619.6	600.0	598.4	603.4	601.8	601.8	607.9	622.8
Redundancies (thousands)	BEAO	126	145	137	141	130	136		
Productivity and earnings annual growth									
GB average earnings (including bonuses) ³	LNNC			4.3	3.9	4.0	4.0	4.2	
GB average earnings (excluding bonuses) ³	JQDY			3.9	3.5	3.7	3.7	3.6	
Whole economy productivity (output per worker)	A4YN			1.9	2.3	1.9			
Manufacturing productivity (output per job)	LOUV						4.7	4.5	
Unit wage costs: whole economy	LOJE			1.9	2.0	1.9			
Unit wage costs: manufacturing	LOJF						-0.1	-0.6	
Business demand									
Business investment growth (CVM)	NPEL	17.2	-4.7	3.0	3.1	4.5			
Government demand									
Government final consumption expenditure growth	NMRY	3.0	2.4	0.6	0.6	0.7			
Prices (12-monthly percentage change – except oil pri	ices)								
Consumer prices index ¹	D7G7	2.1	2.3	2.3	2.4	2.7	3.0	2.7	2.8
Retail prices index ¹	CZBH	2.8	3.2	3.0	3.5	4.0	4.4	4.2	4.6
	CDKQ	2.3	2.9	2.8	3.2	3.5	3.8	3.5	3.7
Retail prices index (excluding mortgage interest payments)									
	EUAA	2.1	2.3	2.6	2.3	2.6	2.6	2.5	2.7
Producer output prices (excluding FBTP) ⁴	EUAA EUAB	2.1 11.7	2.3 9.6	2.6 13.3	2.3 7.9	2.6 3.4	2.6 2.1	2.5 –2.1	
Retail prices index (excluding mortgage interest payments) Producer output prices (excluding FBTP) ⁴ Producer input prices Oil price: sterling (£ per barrel)									2.7 –1.0 29.829

	Source	2005	2006	2006	2006	2006	2006	2006	2007
	CDID			Q2	Q3	Q4	Nov	Dec	Jan
Financial markets									
Sterling ERI (January 2005=100)	BK67	100.5	101.0	99.4	102.2	103.5	104.3	105.4	104.9
Average exchange rate /US\$	AUSS	1.820	1.843	1.827	1.875	1.917	1.963	1.959	1.958
Average exchange rate /Euro	THAP	1.463	1.467	1.454	1.471	1.485	1.486	1.508	1.497
3-month inter-bank rate	HSAJ	4.57	5.26	4.71	5.02	5.26	5.26	5.54	5.48
Selected retail banks: base rate	ZCMG						5.00	5.25	5.25
3-month interest rate on US Treasury bills	LUST	3.92	4.89	4.88	4.77	4.89	4.89	4.99	5.05
Trade and the balance of payments									
UK balance on trade in goods (£m)	BOKI	-68,783	-83,691	-22,530	-19,818	-20,191	-6,945	-6,226	
Exports of services (£m)	IKBB	114,330	125,561	31,190	31,214	31,742	10,350	10,379	
Non–EU balance on trade in goods (£m)	LGDT	-31,912	-46,105	-10,524	-12,415	-12,724	-4,321	-3,678	
Non–EU exports of goods (excl oil & erratics) ⁵	SHDJ	119.8	117.8	119.4	111.7	112.6	111.1	117.3	
Non–EU imports of goods (excl oil & erratics) ⁵	SHED	116.8	124.5	123.4	123.0	127.4	127.3	120.0	
Non–EU import and price index (excl oil) ⁵	LKWQ	101.2	103.9	104.2	103.4	103.1	102.1	101.1	
Non–EU export and price index (excl oil) ⁵	LKVX	100.6	102.0	102.6	101.7	100.7	99.9	101.3	
Monetary conditions/government finances									
M0 (year on year percentage growth)	VQMX	5.1	**					**	
M4 (year on year percentage growth)	VQJW	11.4	13.3	13.6	14.3	12.8	12.8	13.0	
Public sector net borrowing (£m)	-ANNX	40,184	34,538	16,692	6,571	13,303	6,340	-10,653	1,035
Net lending to consumers (£m)	RLMH	19,690	12,597	3,148	2,867	3,202	1,025	1,063	
External indicators – non-ONS stat	istics								
		2006 Aug	2006 Sep	2006 Oct	2006 Nov	2006 Dec	2007 Jan	2007 Feb	2007 Mar
Activity and expectations			•						
	ETCU	11	14	9	5	11	12	28	21
CBI output expectations balance		11	14		5	11	12 -7	28	21
CBI optimism balance	ETBV	1.4	13	-10	22	c		16	4.0
CBI price expectations balance	ETDQ	14	12	11	23	8	11	16	19

Notes

- 1 Not seasonally adjusted.
- 2 Annual data are for April except for workforce jobs (June), claimant count (average of the twelve 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.

For further explanatory notes, see Notes to tables on page 57.

FEATURE

Catrin Ormerod and Felix Ritchie
Office for National Statistics

Measuring low pay: the importance of timing

SUMMARY

Recently the Labour Force Survey (LFS) has moved from reporting on a seasonal to calendar quarter basis. This article uses data on both bases to demonstrate how timing can affect low pay estimates, particularly when the survey period and changes in the National Minimum Wage (NMW) do not coincide. The number of low paid can vary considerably over a year. Looking at the changes in responses throughout the year shows some evidence of non-compliance and different patterns of implementing the NMW according to firm size.

he National Minimum Wage (NMW) is set in October of each year. The following April, the percentage of jobs paid below the NMW is estimated by the Office for National Statistics (ONS), to give the official estimate of the number of low paid.

Up to 2003, ONS estimates used both an employer survey, the New Earnings Survey (NES),¹ and a household survey, the Labour Force Survey (LFS).² Neither survey was felt to give a definitive picture of the number of low paid, and so the mean of the two survey estimates was used as the official value.

In 2004, the NES was redesigned specifically to address its coverage of the low paid, and was renamed the Annual Survey of Hours and Earnings (ASHE).³ As this was believed to address most of the shortcomings of the NES, the ASHE low paid figure become the National Statistic on the number of low paid (Milton (2004)).

However, ASHE only holds a limited range of personal characteristics, and so the LFS is still used to give supporting estimates of the number of low paid when these are required, for example, by ethnicity and skill. Hence, the LFS methodology continues to be used. Since the inclusion of a new question on the hourly rate of second jobs in 2004, the LFS methodology has recently been improved (see Ormerod (2006)).

The most recent change to the LFS was a result of a European requirement to move the reporting period from seasonal to calendar quarters. This raises the possibility of investigating the impact of the time of measurement on the final estimate of low paid. The official estimate is carried

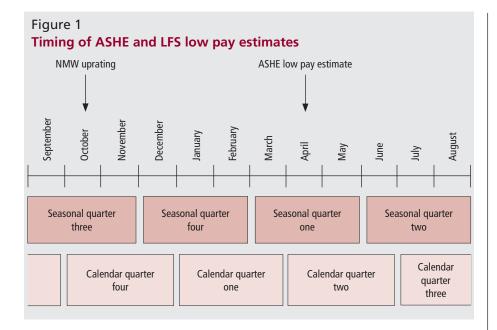
out in April because this is the reporting period for ASHE. However, the LFS runs throughout the year, and so it is possible to recreate the LFS low pay numbers in all quarters, not just the April one. This article generates these additional low pay estimates, and investigates what can be learned about the changing patterns of compliance and the way timing affects the estimates of low pay.

Annual low pay estimates

The LFS collects information on a quarterly basis. This has recently moved from seasonal to calendar quarters to comply with European requirements. ONS has developed a partial back series for calendar quarters so that the effect of this change can be investigated. **Figure 1** shows the timing of ASHE and LFS low pay estimates and the relationship between the old seasonal quarters and the new calendar quarters.

The Government makes a change in the NMW (called an uprating) in October. The ASHE survey takes place in April, so there is a six-month gap between the uprating of the NMW and the official ONS measurement of the low paid.

Before the move to calendar quarters, LFS information from the spring seasonal quarter (March, April, May) was used to compare with the ASHE estimates. It is possible to apply the same methodology to produce estimates for other LFS quarters. Calendar quarters lag behind the seasonal quarters by one month. Following the move to calendar quarters in 2006, the quarter covering April, May, June will be used to



compare with the ASHE April estimate. Interest lies in the difference between the LFS estimate for the seasonal and calendar quarters containing April.

Figure 2 shows the annual estimates of the percentage of jobs paid below the NMW at April each year. The pattern for all estimates is similar, with an increase in the percentage of jobs paid below the NMW since 2003 (the change in the number of low paid is also related to the size of the change in the NMW; see Lam *et al* (2006)). Both LFS methodologies show a decrease in the estimate when moving from seasonal to calendar quarters. In general, the pattern of low pay is consistent across all methods.

Quarterly LFS low pay estimates

In the past, ONS has only looked at low pay in the April period when the official estimates are produced. However, the full set of quarterly estimates is available back to 2004; therefore, study can be made of whether the difference between the seasonal and calendar quarter estimates persists throughout the year. **Figure 3** shows the LFS low pay estimates for all quarters from 2003 using the old and revised methodology, on calendar and seasonal quarter bases.

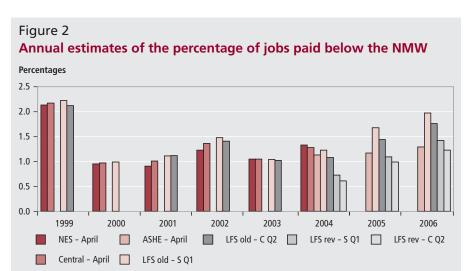
Generally, the April results are replicated throughout the year in that the calendar estimate is lower than the seasonal estimate. This is as expected, as wages are expected to increase as time progresses. There is some variation, probably due to sampling, as only two-thirds of the seasonal quarter sample appears in the calendar quarter.

2000

The largest difference is for the quarter containing October (seasonal quarter three and calendar quarter four, see Figure 1). The seasonal quarter estimate covers responses to the LFS taken in September, October and November. All these are measured against the October rate. As such, the seasonal quarter three estimate is expected to be higher than the true value as there will be

a number of respondents from September who are being measured against an NMW rate which is not a legal requirement until October. The calendar quarter estimate is therefore a better measure over this period as it covers one NMW rate throughout the entire quarter.

An additional issue to take into consideration, which could also affect the calendar estimate covering October, is the way respondents in the LFS report hours and earnings. When answering questions on earnings, respondents sometimes look at documentation such as pay slips or bank details to provide their response. Respondents in October could therefore be referring to a document for September in their response to the earnings questions. These earnings could have increased over the NMW change period. Similarly, respondents who do not refer to documentation or respondents who answer on behalf of other members of the household (proxy response) may be recalling earnings from the previous month. This will again lead to the estimate being higher than the true value. Therefore, seasonal quarter four or calendar quarter one may be a better estimate of the low paid as the first 'true' estimate following the uprating.



Notes: NES NES estimates, applicable until 2003 Central Central estimate derived using ASHE and LFS methodologies ASHE ASHE estimate, applicable from 2004 LFS old LFS old methodology LFS revised methodology, applicable from 2004 S Q1 Seasonal quarter one (March, April, May) C Q2 Calendar quarter two (April, May, June)

Calendar data set not available for LFS

Figure 3 Quarterly estimates of the percentage of jobs paid below the NMW Percentages 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0304/ 0402/ 0403/ 0404/ 0501/ 0303/ 0401/ 0502/ 04CQ3 03CQ4 04CQ4 05CQ2 06CQ1 03C03 05C01 Old - S Old - C Rev - S Rev - C

Notes:

Old LFS old methodology

LFS revised methodology, applicable from 2004 Rev

Seasonal quarter

S C Calendar quarter; a full back series is not available, therefore some estimates

cannot be calculated

For description of quarters see Figure 1

03Q1/03CQ2 'Q' refers to the seasonal quarter, 'CQ' to the calendar quarter, that is,

March to May 2003 and April to June 2003

Why do differences persist through the year?

On all measures, the estimate of the percentage of jobs paid below the NMW is highest in the quarter containing October and then decreases throughout the year until the next uprating is made. While low pay estimates attempt to measure the number of jobs that are paid below the NMW, the estimates cannot be used directly as a measure of non-compliance with the legislation. This is because it is not possible to discern from data sources on earnings whether an individual is eligible for the minimum wage; for example, apprentices and those undergoing training, who are exempt from the minimum wage or are entitled to lower rates. If employees receive free accommodation, employers are entitled to offset hourly rates to reflect this.

However, if the issues in recording discussed above were the only ones in the measurement, we would expect the estimate to drop from the quarter containing October and then remain steady throughout the year. This is not the case, and the estimates continue to drop throughout the year. This suggests that companies are taking time to respond to the October rate and the trend in the LFS figures can provide some evidence about compliance or patterns of compliance.

There are two obvious possibilities why we might expect compliance to change over time. First, large companies often have complex pay negotiations with workforces which may run into several months. The LFS is not updated retrospectively, so if

an employee appears to be earning below the NMW in October but later receives back pay to cover this period, the October value will not be adjusted. Hence, for large companies, it might be expected that there is a delay in complying with pay legislation due to organisational inertia.

The second possibility is that large companies, even if involved in complex pay negotiations, would be more likely to implement NMW changes quickly than smaller companies. Larger companies:

- are more likely to be targeted by regulatory bodies checking on compliance
- will have a significant public presence and so be more promising targets for low pay campaigners
- have dedicated human resources departments, who should be aware of legislative changes and who can calculate complex wage changes accurately

Small companies may not have the information to set an acceptable wage level. They have a low probability of prosecution, and penalties imposed are relatively small. Small firms may therefore conclude that keeping up with the latest legislation is not a high priority.

These competing hypotheses can be examined. The LFS asks respondents how many employees are at the respondent's workplace. Estimates of the percentage of jobs paid below the NMW can therefore be broken down by company size. Figure 4 shows estimates of the percentage of jobs paid below

the NMW for large, small and medium-sized companies. The pattern in the overall estimate with a high estimate in the quarter containing October and falling throughout the year can be seen clearly in the estimates for small companies. The pattern is still apparent, but not as pronounced in medium-sized companies. For large companies, the pattern has almost disappeared.

Examining the pattern across all bands and not only those selected in Figure 4 shows that the pattern appears to be less pronounced for companies with 25 or more employees.

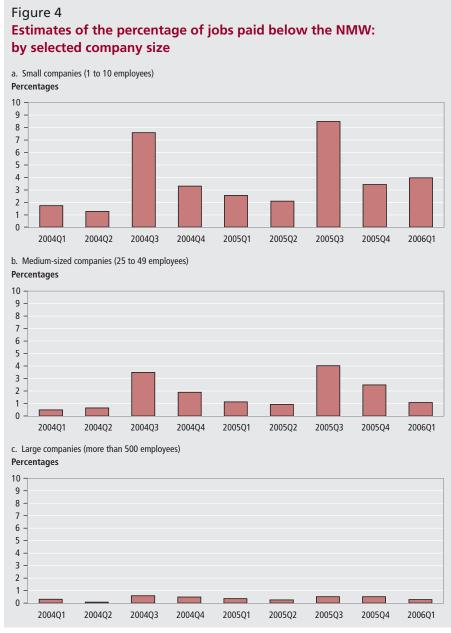
Figure 5 shows the estimate of the percentage of jobs paid less than the NMW, across all quarters from 2004, by company size. It can be seen that smaller companies have a higher percentage of jobs paid less than the NMW. The pattern in the high level estimate (shown under 'Total') is apparent across all groups. This pattern is more pronounced in the smaller companies and is almost non-existent for companies with 500 or more employees. This suggests that smaller companies are taking time to respond to the uprating in the NMW while large companies respond more quickly.

In summary, there is no evidence to support the view that back pay is a significant factor in the low pay estimates. Large companies, for whom back pay is expected to be important, appear to comply with legislation quickly.

On the other hand, small firms do take longer to adjust to rises in the NMW. There are few positive incentives to do so, and there may not be the awareness of legal requirements that large firms have. Hence, this may be the first indirect evidence of compliance problems. It should be noted that this could be a separate and additional effect of being a small company or it could be attributed to compositional effects relating to other characteristics of small organisations, for example, small companies may be clustered in different industrial sectors and have different mix of employees.

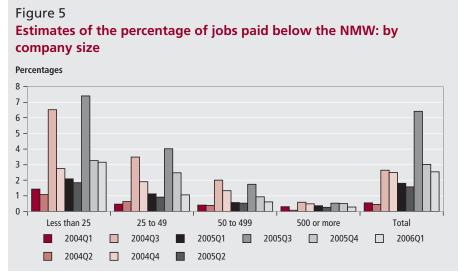
Implications for official low pay estimates

It is not possible to carry out the same analysis using ASHE as it is an annual survey. There is no reason to believe that the employers' surveys would produce a significantly different outcome from the household survey. Official low pay estimates are taken at a point in time, six months after the uprating, and should be interpreted as such and not as an annual average. The LFS figures do show that this is a relatively stable phenomenon, so ASHE figures can be compared from year to year.



Note

LFS revised methodology used. Seasonal quarters shown, as full back series of calendar quarters not available.



Note:

LFS revised methodology used. Seasonal quarters shown, as full back series of calendar quarters not available.

Conclusion

The official ASHE estimates are measured in April which is some time after the NMW uprating takes place in the previous October. The Low Pay Commission (LPC) is eager to ensure compliance with the minimum wage legislation from the date it is implemented in October. The LFS is the only source that can provide information at this point in the year. The calendar quarter containing October is a better measure than the seasonal quarter as the period starts in October. The measure may still be higher than the true value due to respondents in October providing information relating to the previous month. Therefore the estimate in the first calendar quarter (January, February, March) should be the most useful for measuring the number of jobs below the NMW following the uprating. This supports the move from seasonal to calendar quarters in the LFS collection.

Overall, the move from seasonal to calendar quarters makes little difference to the LFS low pay estimates but this investigation has raised some interesting issues relating to timing. This investigation shows that the timing of low pay measurement is important; the number of low paid can vary considerably throughout the year.

More interestingly, using LFS quarterly estimates can provide some evidence of patterns of compliance when the trend throughout the year is examined. If measurement were the only issue, we would expect to see all quarterly estimates for quarters not containing October to be constant throughout the year. However, this is not the case. The estimate drops throughout the year until the next uprating is made. Moreover, this effect is much more pronounced in small companies where the incentive to comply is much lower. This suggests that companies are taking time to respond to the NMW uprating in October, which is not consistent with a view that observed payment below the NMW is entirely due to the legal exceptions.

Notes

1 The New Earnings Survey (NES) is an annual sample survey of the earnings of employees in Great Britain. The main purpose of the survey is to obtain information about the levels, distribution and make-up of earnings, and for the collective agreements which cover them. From October 2004, the NES was replaced by the Annual Survey of Hours and Earnings (ASHE). More

- information on the NES is available at www.statistics.gov.uk/statbase/Product. asp?vlnk=13293
- The Labour Force Survey (LFS) is a survey of households living at private addresses in Great Britain. It is the main source for information on the labour market in the UK. It is a random survey of approximately 57,000 households every three months. As well as private households, the survey includes people living in student residence halls and NHS accommodation. More information on the LFS is available at www.statistics.gov.uk/statbase/Source. asp?vlnk=358
- The Annual Survey of Hours and Earnings (ASHE) is a survey of employers requesting individual level information about their employees. ASHE is a new survey that has been developed to replace the New Earnings Survey (NES). ASHE includes improvements to the coverage of employees and to the weighting of earnings estimates. The data variables collected remain broadly the same, although an improved questionnaire was introduced for the 2005 survey. The change in methodology means that statistics on pay and hours published from ASHE, including the calculation of ONS's low pay statistics,

are discontinuous with previous NES surveys. More information on ASHE is available at www.statistics.gov.uk/statbase/Source. asp?vlnk=1319

ACKNOWLEDGEMENTS

The authors would like to thank colleagues from ONS, the Low Pay Commission, Scottish Executive and expert researchers in this area who attended a closed workshop at ONS, London, on 30 November 2006.

CONTACTS



elmr@ons.gsi.gov.uk

REFERENCES

Lam K, Ormerod C, Ritchie F and Vaze P (2006) 'Do company pay policies persist in the face of minimum wages?', Labour Market Trends 114(3), pp 69-81 and at www. statistics.gov.uk/downloads/theme_labour/ LMT_Mar06.pdf

Milton J (2004) 'New methodology for low pay estimates' at www.statistics.gov.uk/cci/ article.asp?ID=992

Ormerod C (2006) 'Labour force survey low pay estimates: Method of dealing with second jobs', Labour Market Trends 114(7), pp 233-9 and at www.statistics.gov.uk/ downloads/theme_labour/LMT_July06.pdf

FEATURE

Dominic Hale

Office for National Statistics

International comparisons of labour disputes in 2005

SUMMARY

This article continues a regular series on international labour disputes and presents data on labour disputes in member countries of the European Union and the Organisation for Economic Co-operation and Development, between 1996 and 2005. 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.

his article continues a regular series of international labour dispute features and presents data on labour disputes in member countries of the Organisation for Economic Co-operation and Development (OECD) and the European Union (EU), between 1996 and 2005. In 2004, ten countries joined the EU, increasing membership to 25 countries; data 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 2006 is expected to appear in the June 2007 edition.

A number of countries have been unable to supply data on labour disputes for 2005 as yet. Belgium has not supplied data for the last four years; France and Japan do not have data available for 2005 and Cyprus has not supplied data. Thus, the OECD¹ comparisons for 2001 to 2005 are based on 23 countries, while those for the EU in 2005 are based on 19. Any further figures which become available will be posted on the National Statistics website.

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.

It should also be noted 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 data on working days lost, or that 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. For 2004, revisions have been made to the OECD averages in all three tables. The OECD average has also been revised for 2001 and 2003 in Table 1. France, Turkey and Japan also have revisions in all three

Overall comparisons

Table 1 shows the number of working days lost through labour disputes per thousand employees (the strike rate) over the tenyear period 1996 to 2005² for each of the OECD and EU countries, where figures are available. This shows that the UK strike rate decreased by 82 per cent in 2005, ranking it 12th highest out of 27. In 2004, the UK ranked 22nd lowest out of 29. For comparison, on the same basis in 2005, the UK ranked fifteenth lowest out of the 27 countries where figures were available.

Table 1
Labour disputes: working days not worked per 1,000 employees¹ in all industries and services

												Average ²		Percentage change
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1996–2000	2001–05	1996–2005	1996–2000 to 2001–05
United Kingdom	55	10	11	10	20	20	51	19	34	6	21	26	23	24
Austria	0	6	0	0	1	0	3	398	0	0	1	80	41	7,900
Belgium	48	13	28	8	8	69 ^R	*	*	*	*	21	*	*	*
Denmark	32	42	1,317	38	51	24	79	23	31	21	296	36	165	-88
Finland	11	56	70	10	126	30	36	42	21	322	56	91	74	63
France	57	42	51	64	114	82	*	10 ^R	9 ^R	*	66	34	53	-48
Germany	3	2	1	2	0	1	10	5	2	1	2	4	3	100
Ireland	110	69	32	168	72	82	15	26	14	17	91	30	57	-67
Italy	137	84	40	62	59	67	311	124	44	56	76	120	99	58
Luxembourg	2	0	0	0	5	0	0	0	0	0	1	0	1	-100
Netherlands	1	2	5	11	1	6	35	2	9	6	4	12	8	200
Portugal	17	25	28	19	11	11	29	15	12	7	20	15	17	-25
Spain	165	182	121	132	296	152	379	59	306	62	182	189	186	4
Sweden	17	7	0	22	0	3	0	164	4	0	9	34	22	278
EU14 average³	53	37	53	36	60	43 ^R	109	44 ^R	49 ^R	25	48	53	50	10
Cyprus					*	*	*	*	35	*	*	*	*	*
Estonia					*	*	*	*	*	0	*	*	*	*
Latvia					0	0	3	0	0	0	7	1	0	-86
Lithuania					7	2	0	0	0	1	*	*	*	*
Malta					*	*	*	*	11	0	*	*	9	*
Hungary					46	2	0	1	6	0	*	2	2	*
Poland					7	0	0	1	0	0	*	0	1	*
Slovakia					0	0	0	0	0	0	*	*	*	*
EU22 average ³									43 ^R	16	*	*	*	*
Iceland	0	292	557	0	368	1,571	0	0	1,052	0	245	552	401	125
Norway	286	4	141	3	239	0	72	0	68	5	134	29	80	-78
Switzerland	2	0	7	1	1	6	6	2	11 ^R	0	2	5	4	150
Turkey	30	19	29	23	35	28	4	14	8 ^R	15	27	14	20	-48
Australia	131	77	72	89	61	51	33	54	45 ^R	28	85	42	62	-51
Canada	280	296	196	190	125	162	218	122	226	280	215	202	208	-6
Japan	1	2	2	2	1	1	0	0	0^R	*	1	0	1	-100
New Zealand	51	18	9	12	8	37	23	13	4	18	19	18	19	-5
United States	42	38	42	16	161	9	5	32	8	10	61	13	36	-79
OECD average ⁴	51	41	46	29	86	27 ^R	47	33 ^R	31 ^R	29	51	33	42	-35

¹ Some employee figures have been estimated.

Sources for working days not worked: ILO; Eurostat; national statistics offices Sources for employees: OECD; national statistics offices

Over the OECD as a whole, 13 countries saw their strike rate fall in 2005 and eight showed a rise, the most significant of which was Finland, increasing from a rate of 21 in 2004 to 322 in 2005. The OECD average strike rate of 29 days in 2005 showed a decrease from 31 (revised) in 2004.

Figure 1 shows the strike rates in 2005 for the 19 EU countries that supplied data, with the UK having the eighth highest rate. Luxembourg, Austria, Sweden, Estonia,

Hungary, Latvia, Malta, Poland and Slovakia all had an average strike rate of zero for 2005. France, Belgium and Cyprus did not supply figures and so have been excluded. **Figure 2** displays the UK strike rate against the EU average for each year from 1996 to 2005. The UK strike rate has been significantly below the EU average since 1996. 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 62 in 2005, second only to Finland. Generally, it can be seen from the statistics, where available, that the strike rate in the new EU member countries is low.

Labour disputes figures are erratic and year-on-year comparisons should be made with caution. Finland's high 2005 strike rate of 322 days is attributable to one stoppage in the manufacturing sector; 98 per cent of

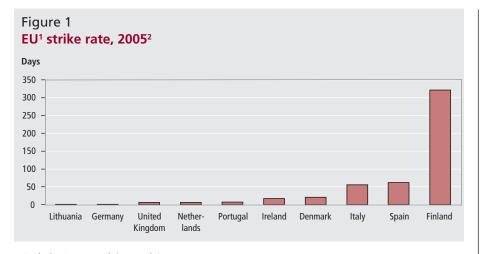
² Annual averages for those years within each period for which data are available, weighted for employment.

³ Greece, the Czech Republic and Slovenia no longer collect data on labour disputes; the European Union average therefore excludes these countries.

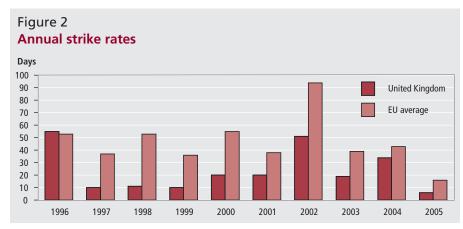
⁴ From 2000 the OECD average includes Hungary, Poland and Slovakia.

R Revised

^{*} No data available

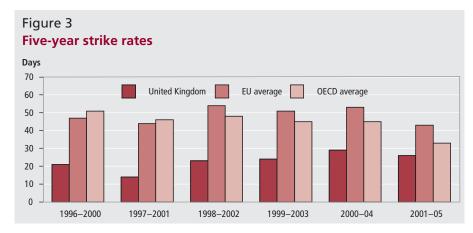


- 1 Excludes France, Belgium and Cyprus.
- 2 Luxembourg, Austria, Sweden, Estonia, Hungary, Latvia, Malta, Poland and Slovakia have a strike rate of zero in 2005.



Note:

From 2004, ten new EU members were included.



Note:

From 2000, OECD figures include the Czech Republic, Hungary, Poland and Slovakia.

working days lost were as a result of this strike. Similarly, 60 per cent of the working days lost in the UK for 1996 were as a result of one stoppage in the transport, storage and communication group. 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. Four EU countries have shown increased strike rates in 2005, nine have shown a decrease and five have shown no change.

In order to lessen the weight of a single year's data, 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 1996.3 The OECD and EU strike rates have remained relatively stable over this period, although the OECD rate did peak in 2000. The UK strike rate is consistently below both the EU and OECD averages. The average rates for the periods 1996 to 2000 and 2001 to 2005 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 10 per cent. Across the OECD, the equivalent strike rate fell by 35 per cent for the same period. Twelve OECD countries have shown a decrease in their strike rates, the largest being Denmark with a decrease of 88 per cent, United States with a decrease of 79 per cent and Norway with a decrease of 78 per cent.

The five-year on five-year comparisons need to be interpreted carefully, as both rises and falls may be determined by oneyear high values, for example, Denmark in 1998, the USA in 2000, Austria in 2003 and Finland in 2005. Also, percentage change comparisons for countries with very low strike rates (under five days) should be treated with caution. Between 2001 and 2005, the average number of working days lost per thousand employees in the UK was 26, an increase of 24 per cent over the 1996 to 2000 period. Both Iceland and Finland have shown sharp rises of 125 per cent and 63 per cent respectively. The increase of 7,900 per cent shown by Austria has been caused by the 2003 data, and the rise of 150 per cent shown by Switzerland is a large percentage increase, but only from an average rate of two days between 1996 and 2000 compared with a rate of five days between 2001 and 2005.

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. In addition, the different industrial classifications and groupings used by the separate countries when compiling statistics on labour disputes means that it is only possible to compare strike rates by industry at a broad level.

Table 2 shows working days lost per thousand employees for the production and construction industries,⁴ for each country where figures are available, for 1996 to 2005.

Nine countries saw a fall in their strike rates for the production and construction industries between 2004 and 2005 and ten countries saw a rise. Finland reported a large strike rate of 1,183 working days lost per thousand employees in this sector for 2005. **Table 3** shows the equivalent for the service industries.⁵ Between 2004 and 2005, within the service industry group, 13 countries saw a fall in their strike rates and six saw a rise, with Canada again

Table 2
Labour disputes: working days not worked per 1,000 employees¹ in the production and construction industries

												Average ²		Percentage change
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1996–2000	2001–05	1996–2005	1996–2000 to 2001–05
United Kingdom	20	19	9	20	20	15	8	16	8	9	18	11	15	-39
Austria	0	0	0	0	0	0	*	*	*	0	*	*	*	*
Belgium	135	48	26	20	28	157	*	*	*	*	51	*	*	*
Denmark	102	99	3,215	94	112	70	124	60	97	45	729	79	418	-89
Finland	21	48	37	20	280	16	107	88	43	1,183	84	283	185	237
France	58	52	43	79	82	30	*	*	24 ^R	*	63	*	*	*
Germany	7	3	1	6	0	2	27	15	5	1	3	10	7	233
Ireland	116	45	29	81	43	41	22	8	7	9	62	17	38	<i>–73</i>
Italy	308	164	62	116	62	126	83	80	48	118	142	91	116	-36
Luxembourg	*	*	*	*	*	*	*	*	0	0	*	*	*	*
Netherlands	4	7	2	15	2	6	152	1	7	11	6	36	21	500
Portugal	32	56	39	20	11	15	40	18	12	11	31	20	25	-35
Spain	320	349	253	135	534	363	60	101	174	71	321	150	224	<i>–53</i>
Sweden	0	2	2	2	0	9	1	26	17	0	1	11	6	1,000
EU14 average³	(89)	(69)	(97)	(48)	(84)	(69)	(47)	(42)	(40 ^R)	(60)	77	52	66	-32
Cyprus					*	*	*	*	123	*	*	*	*	*
Estonia					*	*	*	*	*	998	*	*	*	*
Latvia					*	*	*	*	0	0	*	*	*	*
Lithuania					*	*	*	*	0	0	*	*	*	*
Malta					*	*	*	*	0	3	*	*	*	*
Hungary					0	2	0	1	0	1	*	1	1	*
Poland					3	0	0	2	0	0	*	0	1	*
Slovakia					0	0	0	0	0	0	*	*	*	*
EU22 average³									(34 ^R)	(54)	*	*	*	*
Iceland	*	*	*	*	*	*	*	*	*	0	*	*	*	*
Norway	1,106	13	12	8	842	0	131	1	241	25	222	248	235	12
Switzerland	*	*	*	*	*	*	*	*	12	1	*	*	*	*
Turkey	57	39	31	53	55	62	6	31	21 ^R	35	36	34	35	-6
Australia	383	237	235	250	186	221	128	163	110	93	220	159	188	–28
Canada	349	319	336	272	182	220	192	228	230	177	251	209	229	-17
Japan	1	1	1	1	1	0	0	0	0 ^R	*	1	*	*	*
New Zealand	54	42	7	7	27	70	16	56	5	12	22	33	28	50
United States	116	78	137	62	54	14	11	4	4	37	78	19	50	-76
OECD average⁴	(96)	(67)	(97)	(54)	(62)	(44)	(30)	(29)	(28 ^R)	(51)	75	36	56	<i>-52</i>

¹ Some employee figures have been estimated.

Sources for working days not worked: ILO; Eurostat; national statistics offices Sources for employees: OECD: national statistics offices

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

³ Greece, the Czech Republic and Slovenia no longer collect data on labour disputes; the European Union average therefore excludes these countries.

⁴ From 2000 the OECD average includes Hungary, Poland and Slovakia.

⁽⁾ Brackets indicate averages based on incomplete data.

No data available

experiencing the most significant rise and the UK the most notable fall. In fact, the strike rate for the UK in this sector dropped from a rate of 40 working days lost per thousand employees in 2004 to six in 2005. Conversely, in the production and construction sector, the UK rate rose from eight working days lost per thousand employees in 2004 to nine in 2005.

Over the average ten-year period from 1996 to 2005, the EU14 strike rates in the production and construction industries

were more than double that of the service industries. The same can almost be said for the OECD countries, with 25 more working days lost per thousand extra in production than in services. Over the same period, the production and construction sector rate in the UK was 42 per cent lower than the service sector rate. Between 1996 and 2005, 13 of the 18 OECD countries, where figures were 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 1996 to 2005 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 two noticeable increases in 1996 and 2002; the figures for 2004 are also higher than average. In the production and construction sector, the UK rate has been substantially below the OECD average since

Table 3
Labour disputes: working days not worked per 1,000 employees¹ in the service industries

												Average ²		Percentage change
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1996–2000	2001–05	1996–2005	1996–2000 to 2001–05
United Kingdom	66	7	12	7	20	22	62	20	40	6	22	30	26	36
Austria	0	9	0	0	1	0	*	*	0^{R}	0	2	*	*	*
Belgium	15	0	30	4	1	5	*	*	*	*	10	*	9	*
Denmark	3	20	494	5	14	5	9	3	6	4	107	5	55	<i>–95</i>
Finland	8	62	75	5	52	36	9	11	13	9	41	16	27	-61
France	58	35	54	68	128	102	*	*	4 ^R	*	70	36	56	-49
Germany	1	1	0	1	0	0	1	0	0	0	1	0	0	-100
Ireland	111	85	34	214	87	102	12	33	16	11	108	31	61	-71
Italy	32	33	22	33	57	35	43	37	43	25	36	36	36	0
Luxembourg	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	0	1	6	11	1	7	4	2	0	1	4	3	3	-25
Portugal	8	8	20	10	11	9	20	13	13	5	11	12	12	9
Spain	99	116	39	61	197	37	50	25	49	61	105	45	70	<i>–57</i>
Sweden	24	9	0	29	0	1	0	208	0	0	12	42	28	250
EU14 average ³	(37)	(22)	(30)	(26)	(51)	(32)	(30)	(23)	(20 ^R)	(11)	(33)	(23)	(28)	-30
Cyprus					*	*	*	*	8	0	*	*	*	*
Estonia					*	*	*	*	*	0	*	*	*	*
Latvia					*	*	*	*	0	0	*	*	*	*
Lithuania					*	*	*	*	0	1	*	*	*	*
Malta					*	*	*	*	16	0	*	*	*	*
Hungary					78	3	0	1	9	0	*	3	15	*
Poland					10	1	0	0	0	0	*	*	2	*
Slovakia					0	0	0	0	0	0	*	*	*	*
EU22 average ³									(18 ^R)	(10)	*	*	*	*
Iceland	*	*	*	*	*	*	*	*	*	0	*	*	*	*
Norway	30	0	185	2	67	0	56	0	22	0	57	16	36	-72
Switzerland	*	*	*	*	*	*	*	*	11	0	*	*	*	*
Turkey	10	4	30	2	1	3	3	1	1 ^R	3	9	2	5	-78
Australia	61	32	28	47	28	8	9	27	31	8	39	17	27	<i>–56</i>
Canada	251	294	102	158	100	150	236	87	229	319	179	207	194	16
Japan	1	3	3	2	1	1	0	0	0^{R}	*	2	*	*	*
New Zealand	49	9	9	13	2	33	30	0	3	14	16	15	16	-6
United States	19	25	12	2	198	8	4	41	9	6	53	14	33	-74
OECD average ⁴	(33)	(31)	(23)	(18)	(97)	(20)	(21)	(27)	(21 ^R)	(20)	(42)	(22)	(31)	-48

¹ Some employee figures have been estimated.

Sources for working days not worked: ILO; Eurostat; national statistics offices Sources for employees: OECD; national statistics offices

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

³ Greece, the Czech Republic and Slovenia no longer collect data on labour disputes; the European Union average therefore excludes these countries.

⁴ From 2000 the OECD average includes Hungary, Poland and Slovakia.

⁽⁾ Brackets indicate averages based on incomplete data.

No data available

1996. 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, when the USA's high rate resulting from strike action in the renting, real estate and other business activities sector caused the service sector rate to be greater.

Table 2 and Table 3 also show average rates by industry for the five-year periods 1996 to 2000 and 2001 to 2005. Between these periods, the OECD saw a 52 per cent reduction in the production and construction sector rate and a 48 per cent reduction in the service sector rate. The equivalent figures for the EU14 were falls of 32 per cent and 30 per cent respectively. Over the same period, the UK saw a fall of 39 per cent in the production and construction sector and a rise of 36 per cent in the service sector. Sweden showed the greatest rise (1,000 per cent) in its production and construction sector rate over the period, while Denmark showed the biggest fall (89 per cent). Three countries other than the UK saw a rise in their service sector rates: 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 31 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.

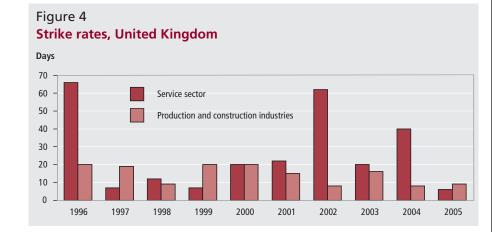
There are significant differences between countries in the criteria that exist to determine whether a particular stoppage will be entered in the official records. Most countries exclude small stoppages from

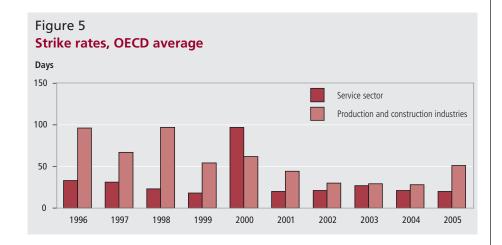
the statistics, the threshold being defined in terms of workers involved, the length of the dispute, the number of working days lost, or a combination of all or some of these. These are summarised in the Technical Note. The UK, for example, excludes disputes involving fewer than ten workers or lasting 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 USA and Denmark. The USA 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 USA 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 USA. In the UK this is insignificant. The last identified political strike in the UK was in 1986 (resulting from a visit by an MP to the coal industry) and fewer than 1,000 working days were 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 USA, 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 2004, less than 1 per cent were lost by workers indirectly involved in strike action; in 2005 the equivalent figure was also less than 1 per cent.

Notes

- OECD averages include data (where available) only from member countries presented in the tables; statistics are not collected from Korea or Mexico.
- Greece, the Czech Republic and Slovenia no longer collect data on labour disputes; the European Union averages for 2005 exclude these countries.
- From 2000, OECD figures include the Czech Republic, Hungary, Poland and Slovakia. EU figures from 2004 $\,$ onwards include ten new EU members.
- Production and construction industries include mining and quarrying, energy and water supply, manufacturing and construction.
- Service industries include retail sales, wholesale, hotels and catering, transport, storage and communication, finance, business services, education, health, social services, and public administration.

CONTACT



elmr@ons.gsi.gov.uk

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.
inland	One hour duration.	Yes	Yes	Principally, returns from employers (+90%) some reports from employees and press.
rance	One workday not worked. Excluding agriculture.	Yes	Yes	Labour inspectors' reports.
Germany	Ten workers involved and of one day duration unless 100 workdays not worked. Excluding public administration. From 1993 data cover the entire FRG; earlier data represented West Germany only.	Yes	No	Compulsory notification by employers to local employment offices.
Hungary	Ten workers involved.	No	No	Compulsory questionnaires to employers following media coverage.
celand	Restrictions on size.	Not known	No	No information.
reland	Ten workdays not worked or one day duration.	Yes	Yes	Reports from Department of Enterprise and Employment, Department of Social Welfare and press.
aly	No restrictions on size.	Yes	No	No information.
apan	Half a day duration. Excluding unofficial disputes.	Yes	No	Legal requirement to report to Labour Relations Commission.

	Minimum criteria for inclusion in statistics	Are political stoppages included?	Are indirectly affected workers included?	Sources and notes
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.
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

Jon Beadle

Office for National Statistics

Modernising the UK's National Accounts

SUMMARY

The Office for National Statistics (ONS) is engaged in a major programme modernising its statistical systems and processes. National Accounts modernisation is at the forefront of this programme and will bring significant improvements in the quality of National Accounts estimates. This article describes these systems and processes. In order to carry forward modernisation, ONS has had to re-prioritise and reduce the scope of Blue Book 2007. This will mean some additional, temporary uncertainty about the quarterly path of GDP. When completed, National Accounts modernisation will mean more coherent estimates less prone to revision, consolidating the position of the UK's National Accounts as being among the best in the world.

he Office for National Statistics (ONS) is engaged in a major programme modernising its statistical systems. The National Accounts are at the forefront of that programme. The aim is to produce the UK National Accounts *Blue Book* in September 2008 using modernised systems and methods, giving significant benefits to users in the form of better quality statistics.

Benefits will include:

- a more coherent picture of the economy produced by extending the framework for balancing income, expenditure and output
- expanded coverage of the services sector from 31 industries to around 100
- early estimates of GDP less prone to revision because changes to the structure of the economy will be incorporated more quickly, making full use of the available data

Both HM Treasury and the Bank of England have been consulted. They have commented that they

regard the delivery of better quality statistics through modernisation as a high priority, because modernised National Accounts will mean more reliable and coherent data that are less prone to revision, taking on latest information and improved methods on a much more timely basis. It will also increase our ability to relate supply and demand to each other. This will be of considerable benefit in the setting of both monetary and fiscal policy, with consequent benefits for the economy at large.

Carrying forward modernisation of the National Accounts is one of ONS's top development priorities in 2007 and 2008. This will necessitate some re-prioritisation, including reducing the scope of the *Blue Book* in 2007. Expert national accounts resources will be focused on testing and analysing modernised systems and methods.

Blue Book 2007 will, therefore, be a transition Blue Book, paving the way for modernised National Accounts in 2008. The scope of Blue Book 2007 will be reduced in two main ways:

- annual benchmarking, including balancing the accounts in current prices for 2005 using supply and use balancing and benchmarking to annual surveys, will be postponed to 2008. The UK is unusual in fully benchmarking its accounts every year; most countries do it only every three to five years or even less frequently. According to a recent OECD study, the UK is only one of two countries to benchmark every year, the other being Poland, and
- previously planned methodological improvements will be postponed to 2008, apart from the improved method for measuring software investment which will go ahead

The implementation of an improved method for measuring banking sector output known as Financial Intermediation Services Indirectly Measured (FISIM) will be postponed to 2008, but a new quarterly experimental release giving GDP figures incorporating the improved FISIM estimates was launched in March 2007.

ONS's aim is to maintain the quality of the regular ongoing quarterly National Accounts estimates. However, the postponement of annual benchmarking inevitably means some temporary additional uncertainty about the path of the economy. HM Treasury and the Bank of England have been consulted and consider that the consequences for economic policy are manageable.

The UK's National Accounts are already generally considered among the best in the world and the modernisation programme will consolidate that position.

ONS modernisation programme

ONS currently has a wide range of statistical and technical legacy systems that are outdated, high risk and inefficient. The ONS Modernisation Programme is aimed at modernising systems and processes to improve the quality and reliability of its statistics and allow us to reflect changes in society faster and be more responsive to the needs of users.

The modernisation programme is doing this through:

- the creation and further development of a shared corporate data repository (CORD – Central ONS Repository for Data) which will eventually hold all ONS's statistical sources in a common environment
- the standardisation of statistical methods, systems, processes and technology solutions used to deliver ONS outputs
- the re-engineering of business processes to reduce statistical risk and improve efficiency and effectiveness

National Accounts modernisation has been at the forefront of the ONS modernisation programme since its inception. The focus of National Accounts modernisation is to address some of the issues that have been of concern to users by upgrading the systems and processes used to produce the National Accounts.

The project has been aimed at three distinct areas:

- upgrading the systems, tools and processes used to compile the National Accounts
- reviewing the methods used to compile the key components of the National Accounts
- reviewing the organisational structure and skills required to operate the new systems and processes

The project has also provided the opportunity to compare the UK National Accounts with international best practice, to identify improvements to existing methods and approaches, to produce a blueprint for the future UK National Accounts with a clear focus on user needs.

Most of the work so far has involved developing new generic systems, which will support modernisation of all ONS statistical systems. National accounts modernisation is now at the early stage of testing both new systems and new methodology. During 2007, the aim is to prepare a series of presentations and articles that will prepare the way for publication in 2008. ONS recognises the importance of being able to describe comprehensively the improvements made and the impact on published data.

Implementation of the changes described in this article is dependent on the continued development of technical systems and will be managed carefully to ensure the quality of regular monthly and quarterly National Accounts outputs is maintained.

Existing methods for compiling the National Accounts

The existing methods reflect the independent development of systems and processes for estimating gross domestic product (GDP), short-term indicators and supply and use tables. The current situation is that the three stages of the GDP process, from short-term indicators, quarterly GDP estimates and annual supply and use estimates, are not fully integrated into the same framework. The links between these three stages are seen as the cause of much of the inconsistency and bias, and analysis shows that significant revisions occur at these stages. The complexities of the links between these stages are also a cause of difficulty to users.

Definitive estimates of GDP are produced at the Blue Book stage by reconciling and balancing annual estimates of expenditure, income and production in current prices through the input-output framework. The input-output framework consists of the regularly produced supply and use tables and input-output analytical tables. The supply and use tables are compiled around 18 months after the year in question, when comprehensive information on expenditure, income and production becomes available. The different approaches are based on different survey and administrative data sources, and each produces estimates that, like all statistical estimates, are subject to errors and omissions. Typically, the three

measures produce different estimates. A single, definitive GDP estimate can only emerge therefore after a process of balancing and adjustment. Even after this stage, GDP estimates are liable to be revised as a result of new methodology.

Supply and use tables are constructed to show a balanced and complete picture of the flows of products in the economy and illustrate relationships between producers and consumers of goods and services. In addition, they show the interdependence between industries: what industries either purchase from one another or import to produce their output.

The general policy for managing the introduction of new data and methodological changes into the National Accounts is usually split into two phases. Using Blue Book 2006 as an example: firstly, estimates relating to the three most recent calendar years (2003 to 2005 in Blue Book 2006) and secondly for all periods before this (up to 2002). Revisions for the most recent three years reflect a range of routine annual revisions, including the annual benchmarking exercise to incorporate new and revised current price data as part of the regular supply and use tables. In Blue Book 2006, 2004 was balanced through the input-output supply and use framework for the first time and 2003 was also updated. In addition, a number of methodological changes were incorporated to earlier years.

Annual chain-linking of the National Accounts was introduced in 2003. Since then, the reference year and latest price base for chained-volume measures (CVM) series, expressed in £ million or as indices, has each year been advanced forward by one year. The re-referencing only affects the level of each CVM series but has no effect on growth rates. However, moving the price base provides a better basis for tracking movements in the most recent years and does have an impact on growth rates from that point onwards. For $Blue\ Book\ 2006$, the base year was advanced one year from 2002 to 2003.

The periods after the last supply and use balance are compiled by aligning the income and expenditure estimates to the production measure, which is derived from the short-term output indicators, weighted together into the GDP(O) or production estimate. For example, in *Blue Book* 2006, for the periods from the first quarter of 2005 onwards, the expenditure, income and production components were balanced on a quarterly basis. This is achieved by aligning the GDP aggregates from the income and expenditure components to that derived from the output measure. The

short-term output measure is based on volume estimates of output as a proxy for gross value added (GVA). This automatic process is augmented by judgmental adjustments to ensure that the alignment adjustments are not beyond the error ranges of the components that they are applied to, that is, changes in inventories and non-financial corporations' operating surplus. This quarterly process is used for balancing all periods after the latest supply and use balance

Modernisation of the National Accounts: methodological improvements

Improvements to national accounts methods being introduced as part of the modernisation programme mainly involve an extension of the input-output supply and use framework. This extension was first described in Tuke and Aldin (2004). Other improvements will be the development of the basis for a monthly GDP estimate, a flow of funds matrix in the financial accounts and restoring the dividends and interest matrix (DIM) as part of the National Accounts published data set.

Expansion of the input-output supply and use framework

The central development of the modernisation of National Accounts is the expansion of the input-output supply and use framework. This expansion enables a number of improvements to the quality of the UK National Accounts and an extended range of analysis.

- Firstly, the framework has been adapted to balance supply and use tables not only using estimates in current prices but also volume estimates. This will enable the move to deriving volume estimates of GDP and GVA from what is known as double deflation separate deflation of outputs and inputs on the production side of GDP. The coherence of deflators on the expenditure and production side can then be assured
- Secondly, the initial specification of the framework has been broadened from the current 123-industry and product classification, most notably an expansion of services from 31 to around 100 industries and products. The precise level at which the data will be published will be determined over the next few months
- Thirdly, the framework has been adapted further to accommodate quarterly data, allowing quarters to be

fully balanced at detailed component level rather than reconciled through use of alignment adjustments. This development, which is built up from monthly indicators of output on the production side, also provides the foundation for a monthly estimate of GDP

Improvements in quality

The main improvements in quality derive from the integration of all the national accounts source data into a single framework making full use of all the available data.

Integrating the data at a detailed level ensures that a coherent story of the economy is built from the bottom up. Typical questions from users can then be more easily addressed. In the first instance, consistency issues will be tackled in quarterly balancing and such dependencies and relationships can be more easily analysed and presented. In particular, deflation techniques will be consistent between measures. Data will be used for balancing as soon as they are available rather than waiting 18 months for the first supply and use balance.

The enhanced framework will allow changes to the structure of the economy to be reflected faster and the structure and coherence of the framework will be more straightforward for users to interpret and analyse.

Below are a few examples of detailed consistency and coherence issues that should be resolved by the new framework:

- retail sales estimates against household expenditure components
- imports of capital goods, gross fixed capital formation on machinery and equipment against domestic production
- output of construction industries against gross fixed capital formation
- imports and exports of erratic items such as precious stones and changes in inventories
- producer and consumer prices at a detailed level

It will be possible to track these issues through the tables, and anomalies will be removed.

All these will be analysed at an earlier stage and in more detail under the expanded framework. In addition, the extended framework will permit an examination across all products in the framework, with the best data given the greatest weight in balancing the different data sources. It will also improve the ability to track transactions

of goods potentially affected by VAT missing trader intra-Community fraud.

It is envisaged that the extension of the framework should provide early estimates less prone to revision. This will partly be achieved by adopting the same processes for both early and benchmark data, but it will also be aided by the development of greater consistency between short-term and benchmark data sources. The new system builds in a much greater level of scrutiny between these two sets of sources at a very detailed level and will help analysis of the differences and more importantly better anticipate them.

Sector accounts developments

ONS has developed a flow of funds matrix in the financial flows and balance sheet system. This system will more clearly identify the sources and uses of funds through mapping the direct relationship between sector liabilities and the counterpart asset holding sector. This improvement meets extended data needs in this area required under European statistical legislation.

ONS published a DIM until 1998. The DIM shows payments and receipts of interest and dividends by financial instrument between the main institutional sectors of the economy. Resource pressures prevented the full redevelopment of the DIM at that time. The existing system is able to produce the sector total resources and uses required for the sector income and capital accounts, but it has not been fully converted onto the European System of Accounts (ESA95) framework, which the UK adopted in 1998. The new DIM system will produce income flows for each sector, and by instrument, consistent with the financial flows and financial balance sheets and the ESA95 framework. This development will raise the quality of property income estimates for all institutional sectors. ONS aims to restore the publication of resources and uses (receipts and payments) by instrument, and by sector, in Blue Book 2008. This will improve the basis for analysing the income position of many sectors, especially the financial and household sectors.

Plans for Blue Book 2007

This development of the UK National Accounts is one of the most significant since their compilation began. Given the high priority attached to delivering modernised National Accounts in 2008, it has proved necessary to free resources from other activities in order to ensure this transition is

managed as smoothly as possible, and with a complete range of analysis. Consequently, *Blue Book* 2007 has been designated a transition *Blue Book* with a number of regular outputs temporarily postponed. The annual updating of the accounts through the existing supply and use tables will not take place in *Blue Book* 2007 and the latest annual benchmark data will not be incorporated until 2008. The potential consequences of this postponement are considered in more detail below.

The reduced scope in the *Blue Book* in 2007 means:

- not incorporating annual benchmark survey data, including the Annual Business Inquiry and estimates from HM Revenue and Customs of income, and not striking a balanced picture of the economy based on these new data for 2005. A recent OECD study shows that the UK is only one of two countries in the 24 surveyed to benchmark every year (the other is Poland); most countries benchmark only every three to five years or even less frequently
- postponing implementation of some methodological improvements to 2008

Postponed benchmarking

Estimates for the very latest quarters would continue to be updated as usual, drawing on ONS's regular quarterly surveys. ONS attaches high priority to maintaining the quality of ongoing quarterly National Accounts estimates. However, the Blue Book process also involves updating information on the structure of the economy which is used as a foundation for the quarterly estimates. Postponement of this structural updating means that some additional uncertainty will attach to the quarterly estimates until Blue Book 2008. Some of the data will still be incorporated into the quarterly accounts where possible but not using the supply and use tables. ONS will be closely monitoring the quality of quarterly estimates through 2007 and 2008.

HM Treasury and the Bank of England have been consulted about the planned reduction in scope of *Blue Book* 2007 and both consider that the consequences for policy are manageable and both attach high priority to the delivery of modernised accounts.

National accounts volume estimates are currently referenced on to 2003 prices and since the implementation of annual chainlinking have been updated annually. In *Blue Book* 2007, volume estimates will continue to use 2003 as the reference year. Volume estimates are planned to move onto a reference year of 2005 in *Blue Book* 2008.

Methodological improvements

It has previously been announced that two major methodological improvements would be implemented in *Blue Book* 2007: improved estimates of own-account software investment and improved estimates of banking output. These major developments will now only be partially implemented in 2007.

The own-account software estimates, adding about 0.7 per cent to the level of nominal GDP over the period from the 1970s to 2005, will be seen in updated estimates of gross fixed capital formation and gross operating surplus. This development is conceptually a balanced change to all three measures of GDP and can be implemented outside the supply and use framework in a straightforward manner. The consequence of not updating the supply and use tables, however, is that the weights for the output measure of GDP (GDP(O)) will also not be updated and the change will not be reflected in short-term estimates of GDP growth from 2005 onwards. This will now be implemented in 2008. Further information is given in Box 1.

Improved estimates of banking output for which no explicit charge is made (FISIM) will not be incorporated into the National Accounts until 2008. This is a complex change that impacts on every industry and institutional sector adding, on latest estimates, about 1.9 per cent to the level of GDP in 2005. These are large revisions to the level of GDP even by the standards of Blue Book revisions. The effect on real growth in any one year is, however, relatively small. As with the software change, the revisions go back a number of years and the effect on the level of GDP only builds up gradually. On balance, it has been decided that the benefits of implementing the range of modernisation improvements in Blue Book 2008 outweigh the impact of the delay to the implementation of FISIM. To help users anticipate the effects of this change, an experimental quarterly statistical release was initiated in March 2007, which describes the impact of FISIM on the National Accounts. Box 2 discusses the issue and associated plans in more detail.

Around 20 other much smaller revisions will also be postponed to *Blue Book* 2008. These include the reclassification of London and Continental Railways (Kellaway and Shanks, 2006), the introduction of new methodology to estimate imputed rentals, and updated information on compensation of employees and mixed income. Taken together, these changes would have resulted in a rise in the level of GDP, although this

cannot be precisely quantified until the changes are taken through the supply and use balancing process.

A number of the proposed changes also impact on the public sector finances. Most of these changes, including the reclassification of London and Continental Railways, have already been taken through the public sector accounts.

The 2007 Blue Book, Pink Book and Input-Output Analyses

The main *Blue Book* estimates will be published as usual in the Quarterly National Accounts First Release, on 29 June 2007. *Blue Book* 2007, to be released electronically on 20 July 2007, will follow the usual pattern except for those sections and tables dependent on the annual supply and use balancing. The main omission will be part 2, the industrial analyses, although estimates from GDP(O) incorporating the Index of Production and the Index of Services will be available.

The contents will therefore include:

- part 1 main aggregates and summary accounts
- part 3 the sector accounts, except the production account and generation of income tables
- part 4 other analyses and derived statistics
- part 5 UK Environmental Accounts except some tables broken down by industry

The UK Balance of Payments *Pink Book* for 2007, also to be released electronically on 20 July 2007, is not affected by the annual supply and use exercise, but will focus on data tables in order that resources can be released for the work leading up to implementation of National Accounts modernisation in 2008. There will be less analysis included than usual but all existing tables will be present except some geographic breakdowns.

UK Input-Output Analyses will not be produced in 2007.

Impact of transition arrangements on GDP estimates

It will be 2008 before the impact of not incorporating benchmark data for 2005 can be quantified. However, it is possible to analyse the impact on GDP for the newly benchmarked year at this stage at previous *Blue Books* to get some indication of the possible effect. The analysis in Table 1, covering both GDP in current prices

Box 1

Production of own-account software

The 1993 System of National Accounts (SNA93), states that both the purchase and own-account (in-house) production of software should be recorded as investment (gross fixed capital formation) and not as intermediate consumption. The acquisition must satisfy SNA93 asset definitions, such that the enterprise expects to use the software in production for more than a year. The software is then treated as an intangible fixed asset rather than as an intermediate consumption good.

The UK National Accounts to date have included estimates for own-account software, using assumptions about the labour input into this activity, by sector, based on an historic demandside survey. It was recognised, however, that these estimates were likely to understate the activity actually taking place.

The new methodology used by ONS to improve its estimates of own-account software in *Blue Book* 2007 is in accordance with the recommendations of the Eurostat and OECD computer software task forces, that is, own-account software investment should be measured implicitly by its costs of production, otherwise known as a supply-side approach. A summary of the main findings of the task forces and their possible implications is presented in Ahmad (2003). ONS's implementation of this method is based on labour market data and is described by Chamberlin and Chesson (2006). This article presents an early estimate of the effect of the new method on GDP, which is to have increased the level of nominal GDP by around 1.0 per cent over the period from the 1970s to 2005.

In fact, the increase in nominal GDP over the whole period is expected to be slightly lower at around 0.7 per cent, with a similar cumulative effect on real growth. On average, the new method increases the annual growth in real GDP by less than

0.05 percentage points a year, although the effect on growth is not smooth over the period; increased growth during the 1990s is followed by more variable effects on growth since 2000.

In the absence of supply and use balancing in 2007, the new method is being implemented in the National Accounts in a simplified way initially, in order to take on the expected revisions to levels and growth rates. This simplified implementation is possible because the new estimates of own-account software will change all three measures of GDP equally, as additions to production (value added), income (gross operating surplus) and expenditure (gross fixed capital formation), that is, the revision is balanced across the three measures of GDP. The implementation is straightforward for periods before 2005.

For more recent periods, the existing ONS methodology does not provide the basis for a balanced implementation. So for the quarters of 2005 onwards, the revised data will be incorporated into the expenditure and income measures of GDP (in gross fixed capital formation and gross operating surplus) but will not be automatically reflected in the production measure. This is because the quarterly production measure is constructed using volume indices which are aggregated based on industry weights obtained from the supply and use balance in the base year (now 2003). Since supply and use balancing using the revised data will not be done in 2007, the production weights will not take account of the revision. Although GDP growth in recent periods is based predominantly on the production measure, growth in the own-account software data will be used to inform the compilation and short-term balancing processes. As indicated above, analysis shows that, on average, the new method increases the annual growth in real GDP by less than 0.05 percentage points a year.

Box 2

Financial Intermediation Services Indirectly Measured (FISIM)

As well as charging customers directly for banking services, banks also generate service income by charging a higher rate of interest on loans than they pay on deposits. In the National Accounts, the resulting net interest receipts on lending and borrowing are treated as payment for Financial Intermediation Services Indirectly Measured (FISIM).

Currently, FISIM is not allocated to the industries or sectors that consume it, either as final or intermediate consumption. Instead, all consumption is treated as intermediate consumption of a notional industry and sector and hence does not add to GDP. ESA95, and a subsequent EU regulation, require that FISIM is allocated by consuming industry and sector or as final consumption.

The impact on the National Accounts will be that FISIM is no longer recorded entirely as intermediate consumption, but also as final consumption, for example household expenditure and exports, adding to GDP. There will also be revisions to the supply of FISIM, due to the incorporation of estimates for imports

and a revised method for the estimation of domestic output implemented by the Bank of England.

ONS published provisional estimates of the impact of the changed treatment of FISIM in March 2006, in an article released to accompany transmission of figures to the European Commission (Tily and Jenkinson, 2006). The article showed that, on average, the change added 1.6 per cent to the level of GDP at current prices.

It had previously been planned to incorporate these changes into the National Accounts in Blue Book 2007, but this change has been postponed to Blue Book 2008. However, in order to give users a guide to the potential effects on GDP, a new quarterly experimental release was introduced in March 2007. This shows the impact of FISIM on the quarterly level of 'money' or nominal GDP. A further article will provide more detail on the methodology, an update and analysis of the results, and an assessment of the impact on GDP in both nominal and real terms. This will be published in the May issue of *Economic & Labour Market Review*.

('money' GDP) and GDP in volume terms, examines revisions made at previous Blue Books for the year benchmarked for the first time, for instance 2004 in Blue Book 2006. The revisions to annual growth shown will also include methodological changes included at the same time.

This is unlike the regular ONS revisions analysis (see Obuwa and Robinson, 2006), which for any one year looks at cumulative revisions as a result of successive Blue Books. Here, the concern is with the effect of postponing taking on annual benchmark data for one year.

The level of 'money' GDP is nearly always revised up but, since the revisions often go back a number of years, the percentage revisions to annual growth are smaller than to the level. The average revision to annual volume or real growth is between 0.1 and 0.2 percentage points.

Impact of revisions on Blue **Book 2008**

The analysis indicates that the delayed incorporation of benchmark revisions for 2005 to Blue Book 2008 is likely to lead to larger revisions in 2008 when benchmark data are incorporated for 2005 and 2006 and the FISIM changes are introduced. This will be alongside the wide range of methodological changes that are planned to be implemented as part of the modernisation of the UK National Accounts. The most significant areas of change are likely to be from:

- balancing of supply and use tables at current and previous years' prices
- the review of deflators and price indices to be used in the new supply and use
- using supply and use tables to inform quarterly GDP estimates
- the review of methods in the UK National Accounts not covered by the above changes

It is not yet known what the effect of these changes will be in terms of GDP levels or growth rates.

The new GDP supply and use system will be applied to periods from 1997, with many new methods being incorporated. There is a likelihood that GDP growth rates could be significantly revised after this point. It is unlikely that GDP growth rates will be significantly affected in earlier periods. Over the next year, as the project progresses, it is intended to publish a series of analytical articles giving further evidence on the effects of modernisation, including indications of possible revisions in Blue Book 2008.

Developments beyond 2008

The development of systems and national accounts methods will continue beyond 2008. Only systems that support the new supply and use framework and sector and financial accounts will be developed for Blue Book 2008. Major developments of systems underpinning the detailed

Table 1 Revisions made at previous Blue Books

			Revisions to annual level	Revisions to annual growth	Revisions to annual volume
	New			in 'money'	growth of
Blue Book	benchmark	'money' GDP	GDP	GDP	GDP
(year)	(year)	(£ million)	(per cent)	(per cent)	(per cent)
1994	1992	956	0.2	-0.1	-
1995	1993	684	0.1	0.1	0.1
1996	1994	-611	-0.1	-0.2	0.1
1997	1995	3,266	0.5	0.3	0.2
1998	1996	12,301	1.6	0.5	0.4
1999	1997	1,917	0.2	0.2	0.0
2000	1998	7,929	0.9	0.7	0.4
2001	1999	10,163	1.1	0.2	-0.2
2002	2000	7,003	0.7	0.6	0.0
2003	2001	6,023	0.6	0.5	0.0
2004	2002	200	0.0	0.0	0.2
2005	2003	6,023	0.5	0.2	0.3
2006	2004	12,088	1.0	0.7	0.2
Average		5,226	0.6	0.3	0.15

GDP components will not be completed before 2010. This will be accompanied simultaneously by a review of detailed compilation methods. These include:

- a major review of the transactions underpinning the sector and financial accounts which has just started
- service sector statistics used within the production measure of GDP which will continue to be developed

The expectation is that methodological development of the UK National Accounts will be a continual process aiming to meet the constant evolution of the UK economy.

ACKNOWLEDGEMENTS

This article would not have been possible without contributions from many ONS colleagues.

CONTACT

elmr@ons.gsi.gov.uk

REFERENCES

Ahmad N (2003): Measuring investment in software. STI working paper, OECD.

Chamberlin G and Chesson A (2006) 'Surveybased measures of software investment in the UK', Economic Trends 627, pp 61-72 and at www.statistics.gov.uk/CCI/article.asp?ID=1401

Humphries S (2006) 'Revisions planned for the 2006 annual Blue Book, Pink Book and Input-Output Analyses', Economic Trends 629, pp 20-3 and at www.statistics.gov.uk/CCI/article.asp?ID=1476

Kellaway M and Shanks H (2006) 'National Accounts Classification of London and Continental Railways (LCR)' at www.statistics.gov.uk/cci/article.asp?id=1409

Mahajan S (2006) 'Development, Compilation and Use of Input-Output Supply and Use tables in the UK National Accounts', Economic Trends 634, pp 28-46 and at www.statistics.gov.uk/cci/article.asp?ID=1611

Obuwa D and Robinson H (2006) 'Revisions to quarterly GDP growth and its components', Economic Trends 637, pp 28-39 and at www.statistics.gov.uk/cci/article.asp?ID=1694

Powell M (2002) 'A report on current and planned work on Constant Price Input-Output Supply-Use balances', Economic Trends 578, pp 39-40 and at www.statistics.gov.uk/CCI/article.asp?ID=137

Tily G and Jenkinson G (2006) 'Recording payments for banking services in the UK National Accounts' at www.eustatistics.gov. uk/cci/article.asp?id=1461

Tuke A and Aldin V (2004) 'Reviewing the methods and approaches of the UK National Accounts', *Economic Trends* 602, pp 47–57 and at www.statistics.gov.uk/CCI/article. asp?ID=690

FFATURE

Damon Wingfield

Office for National Statistics

CPI and RPI: the 2007 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 2007 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/articles/nojournal/ CPI&RPI_basket_2007.pdf

The main changes from the 2006 price collection are discussed below. Similar articles have been published in previous years. Unlike previous articles, this one also looks at the evolution of expenditure weights since the last RPI rebasing in 1987.

he 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, for example, due to 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 example, 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. This is reflected both in an increasing weight for this component in the CPI and RPI, and the addition of new items in the basket to improve measurement of price changes in this area: examples include internet subscriptions, playgroup and nanny fees.

For the RPI, changes to the items and weights are introduced in the February index each year, but 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) 'Consumer Price Indices – a Brief Guide' 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 (2006) Consumer Price Indices – Technical Manual (see references at the end of this article).

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 judgmental; the significant difficulties involved in defining an adequate sampling frame (that is, a list of all the individual goods and services bought by households) restrict the use of traditional random sampling methods when choosing the representative items.

For each product grouping, a number of items are selected 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 2007 index, and RPI section weights will be revised with effect from the February 2007 index, at which point the weights for the more detailed (unpublished) item indices are also revised. A brief comparison of high-level RPI weights since 1987 is shown in Table 2 later in this article, including the new weights for 2007. A more detailed article on changes to the published CPI and RPI weights will be published on the National Statistics website in April 2007.

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

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 inyear 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, apparently 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

Table 1
Allocation of items to CPI divisions in 2007

				Representative
			Observed	Items ²
		CPI weight	variation in	(per cent
		(per cent)	price changes ¹	of total)
1	Food and non-alcoholic beverages	10.3	High	22
2	Alcohol and tobacco	4.3	Low	4
3	Clothing and footwear	6.2	Medium	11
4	Housing and household services	11.5	Medium	5
5	Furniture and household goods	6.8	Medium	11
6	Health	2.4	Low	3
7	Transport	15.2	High	6
8	Communication	2.4	Low	1
9	Recreation and culture	15.3	High	17
10	Education ³	1.8	Low	1
11	Restaurants and hotels	13.8	Low	8
12	Miscellaneous goods and services	10.0	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 a 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.

of the changes to the basket introduced in 2007. Conversely, it also helps to highlight areas where there is scope to remove items from the basket without any significant loss of precision in the indices. It is important that growth in the overall size of the basket is limited each year so that production costs and processing times may be contained.

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

This focus on relative expenditures in determining the contents of the basket partly reflects the wealth of data that is available describing household spending patterns. One

major source of information comes from the diaries and questionnaires filled in by people taking part in the ONS 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 that the average household spends its money on are appropriately represented in the CPI and RPI baskets.

It is very important to note that the contents of the basket and, in particular changes from one year to the next, should not be accorded significance beyond their purpose as representative items used in estimating retail price changes. Changes to the basket will reflect evolving consumer tastes, but only over a long run of years. For example, olive oil, which is introduced to the basket in 2007, has been available for many years and has experienced gradually increasing expenditure for several years. It is not the case that between 2006 and 2007 there has been a sudden increase in spending, rather that the spending has reached a point where it is now a more representative item than other cooking oils. In any particular year, changes to the basket will reflect a range of considerations such as practical experience in collecting prices, the desire to improve coverage in high spending areas, or analysis that suggests that

estimated price changes could be improved at the margin by varying the number or type of representative items collected.

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

Finally, it should also be noted that the vast majority of the 650 or so representative items remain unchanged in 2007.

Changes to the basket in 2007

Changes to the basket of goods and services this year were introduced with the February 2007 consumer price indices published on 20 March; that is, monthly changes in prices from February 2007 to January 2008 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 2007 and those items removed, along with a brief summary of the motivation for these changes, are set out in **Table 3** and **Table 4**. Reasons for these changes are diverse. As in previous years, changes to the basket in 2007 certainly cannot 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 2007 affect both the CPI and RPI indices.

The bullet points below give a brief summary and explanation of the themes behind the changes to the basket for 2007:

- 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:
 - financial services (12.6), with new items introduced to represent credit card fees and mortgage arrangement fees
 - other appliances and products for personal care (12.1.2), through the addition of toothbrushes
- a number of new items are introduced to represent specific markets where consumer sending is significant, and existing items in the basket may not

- adequately represent price changes for such goods. These include portable electric fans (representing the market for personal cooling/heating), and mobile phone downloads (to represent all forms of media downloaded to mobile phones). In addition, as noted above, credit card charges and mortgage arrangement fees are brought into the basket in 2007 to increase the coverage of the heavily weighted financial services class
- in addition, three high-technology goods are introduced to the basket this year that can be seen as representing evolving trends: DVD recorders, satellite navigation systems and DAB radios. Following a period of ONS research into the rate of turnover of the specific models available for purchase, it was not considered necessary to use explicit quality adjustment techniques to account for changes in quality of these goods
- 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 spending is significant. For example, a new non-film pre-recorded DVD has been introduced to supplement the existing film DVD item introduced in 2004 to better represent the high spending on DVDs. Similarly, shower heads are introduced to the basket to improve coverage of bathroom fixtures and fittings and computer printers are added to the collection of computer peripherals already collected (previously these were only included if bundled with personal computers). Although already included in the basket, a detailed review of the computer games market has been undertaken and, from 2007, more prices from a wider range of outlets will be collected to represent the high weight of this item
- in other cases, the new items are direct replacements for similar products that leave the basket in 2006. For example, recordable DVDs replace blank VHS cassette tapes, broccoli replaces Brussels sprouts and olive oil replaces vegetable oil
- 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 the introduction of onboard snack or drink purchases which will be collected from train buffet cars and trolleys and

- domestic flights, and vending machine drinks. Such snacks and drinks are already included in the basket, but significant purchases through these specific retail channels have not previously been explicitly represented
- finally, the seasonality of some items within the basket is also reviewed. For example, strawberries have historically been collected only during the summer months with prices carried forward out of season. Strawberries are now readily available throughout the year and, for the first time in 2007, strawberry prices will be collected every month

As noted earlier, it is important that growth in the overall size of the basket is limited each year so that production costs and processing times may be contained. A number of items therefore have been removed from the basket in 2007 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, mail order develop and print has been replaced with digital photograph processing although both products represent photographic developing. 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, brie has been removed this year so that the market for functional foods can be represented by probiotic drinks
- In some cases a product will still remain represented in the basket even if there is no longer an explicit item. For example, although the designer spectacle frames have been removed from the basket, the remaining spectacle frame item description has been amended to allow this product to continue to be priced
- 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 car CD player/autochanger, child's wellington boot and decorative plant pot, all of which leave the basket in 2007 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

Petrol prices

Another change to the CPI shopping basket from 2007 relates to the collection of petrol prices. From February 2007, these will be calculated as the average price prevailing on each of the Mondays in

Table 2
Changes in high-level RPI weights¹

RPI group	1987	1992	1997	2002	2005	2006	2007
Food	167	152	136	114	110	105	105
Catering	46	47	49	52	49	50	47
Alcohol	76	80	80	68	67	67	66
Tobacco	38	36	34	31	29	29	29
Housing	157	172	186²	199	224	222	238
Fuel and light	61	47	41	31	31	33	39
Household goods	73	77	72	73	71	71	66
Household services	44	48	52	60	61	66	65
Clothing and footwear	74	59	56	51	48	49	44
Personal goods and services	38	40	40	43	41	41	39
Motoring expenditure	127	143	128	141	136	140	133
Fares and other travel costs	22	20	20	20	19	19	20
Leisure goods	47	47	47	48	46	41	41
Leisure services	30	32	59 ³	69	68	67	68

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.

Table 3
Additions to the CPI and RPI basket in 2007

CPI class	RPI section	New item	Notes
01.1.5 Oils and fats	2114 Oils and fats	Olive oil	Replaces vegetable oil. Olive oil has gradually risen in expenditure, exceeding vegetable oil in 2003 and continues to grow.
01.2.2 Mineral waters, soft drinks and juices	2118 Milk products	Probiotic drink	To improve coverage of the functional foods market. Currently no item representing yoghurt-style bacteria drinks.
01.1.7 Vegetables	2125 Fresh vegetables	Courgettes	Replaces pre-packed vegetables and included to represent spending on 'other vegetables'. Courgettes are available all year round even at many independent outlets.
01.1.7 Vegetables	2125 Fresh vegetables	Broccoli	Replaces sprouts. Spending on broccoli is higher, it is easier to collect and readily available all year round.
11.1.1 Restaurants and cafes	2201 Restaurant meals	On board catering (rail, sea and air)	Spending on 'In transport catering' currently unrepresented in basket.
11.1.1 Restaurants and cafes	2203 Takeaway meals	Vending machine – can/bottle of fizzy drink	Vending machine spending currently unrepresented in basket.
04.3.1 Products for the regular repair and maintenance of the dwelling	4106 DIY materials	Shower head	Introduced to improve coverage of household and bathroom fixtures and fittings.
05.3.1 Major household appliances	4303 Electrical appliances	Electric fan, portable or free-standing	Current fan heater item has a high weight – portable fan will split this weight and also represents the 'cooling' market which is currently not represented.
12.6.2 Financial Services	4402 Fees and subscriptions	Credit card charges	New item in the basket for 2007. Introduced to improve coverage of financial services. Charges include late payment fee and balance transfers.
12.6.2 Financial Services	4402 Fees and subscriptions	Mortgage fees	New item in the basket for 2007. Introduced to improve coverage of financial services. Charges include fees for setting up a mortgage and early repayment.
08.2.1 Telephone equipment and services	4404 Telephone charges	Mobile downloads (for example, ringtones)	To represent a significant and growing market. Mobile downloads are currently not represented in the basket. The market has been growing rapidly since 2004 with individual downloads often costing £3.
12.3.1 Jewellery, clocks and watches	5201 Personal articles	Diamond solitaire ring, specify carat of diamond	Replaces gemstone cluster ring which was difficult to collect and to choose replacements for.
12.1.2 Other appliances and products for personal care	5202 Chemists' goods	Toothbrush	To represent personal oral hygiene in an under- represented class.
07.2.1 Spare parts and accessories	6301 Audiovisual goods	Satellite navigation system	New item for 2007, to represent an emerging market.
09.1.1 Equipment for the reproduction of sound and audio	6301 Audiovisual goods	Flat panel television (14-25")	To replace portable CRT style television. Spending on conventional 'cathode ray tube' TVs has decreased and item no longer warrants inclusion. This becomes the second 'flat panel' television in the basket, alongside the larger version. Expenditure on flat panel televisions is high enough to warrant inclusion of two items.
09.1.1 Equipment for the reproduction of sound and audio	6301 Audiovisual goods	Digital (DAB) radio	Replaces radio CD cassette player. Expenditure on these has decreased to the point where item no longer warrants inclusion. DAB radio market has grown steadily in recent years and now warrants inclusion.
09.1.4 Recording media	6302 CDs and tapes	Pre-recorded DVD (non-film) from chart	To replace pre-recorded video that leaves the basket in 2007 and to supplement existing pre-recorded DVD (film) item.
09.1.4 Recording media	6302 CDs and tapes	Recordable DVD, price per DVD from pack of 5-25	Replaces blank VHS video cassette and will represent visual recording media.
09.4.2 Cultural services	6303 Toys, photographic and sports equipment	Digital processing, print of up to 50 photographs	Replaces mail order develop and print. Digital processing has grown in line with digital cameras and is now readily available in many shops and supermarkets. Spending on this 'convenient' method of developing photographs

Table 4
Items removed from the CPI and RPI basket in 2007

CPI class	RPI section	Dropped item	Notes
01.1.5 Oils and fats	2114 Oils and fats	Vegetable oil	Replaced. Makes way for olive oil (see above) which now attracts the higher spending. Spending on cooking oil is not large enough to justify more than one item.
01.1.4 Milk, cheese and eggs	2115 Cheese	Brie	Removed from basket. Low weighted item within over-represented CPI class. Continental cheeses already represented by other items within this class. Entered basket in the mid 1980s.
01.1.7 Vegetables	2125 Fresh vegetables	Brussels sprouts	Replaced. Low weighted item within CPI class. Only collected in winter months due to seasonality and spending is low in months other than December. Winter vegetables continue to be well represented and broccoli has been introduced in 2007. Entered basket in 1947.
01.1.7 Vegetables	2125 Fresh vegetables	Pre-packed fresh vegetables	Replaced. Low weighted item within CPI class. Replaced by courgettes (which can be collected pre-packed or loose) which attract the highest spend of other vegetables not already included in the basket. Entered basket in 1995.
03.2 Footwear	5105 Footwear	Child's wellington boots	Removed. Very low weighted item within over-represented CPI class. Children's footwear remains well represented. Entered basket in 1947.
03.2 Footwear	5105 Footwear	Men's leather boot	Removed. Very low weighted item within over-represented CPI class. Men's footwear (including boots) continues to be well represented by existing items. Entered basket in 1997.
06.1.2 Other medical and therapeutic products	5201 Personal articles	Sunglasses, non-designer UV frames	Removed. Very low weighted item within well represented class.
06.1.2 Other medical and therapeutic products	5201 Personal articles	Spectacle frames, designer	Removed. Analysis showed price movements of designer and non-designer frames were broadly similar. Designer frames continue to be represented in generic spectacle frames item which collects both designer and non-designer varieties.
12.3.1 Jewellery, clocks and watches	5201 Personal articles	Gemstone cluster ring	Replaced. Difficult to collect and choose replacements for, replaced by diamond solitaire ring.
09.1.1 Equipment for the reproduction of sound and audio	6301 Audio-visual products 6301 Audio-visual products	Portable colour television (CRT) VHS video recorder	Replaced. Low spending on item and has become increasingly difficult to collect in recent years. Spending has moved towards flat panel (Plasma and LCD type) displays and new item (see above), flat panel television (14-25") represents this. Entered basket pre-1987. Replaced. Low weighted item with diminishing
	osor, tadio risaa, producti	The field feedback	expenditure as people switch new purchases to DVD recorders.
	6301 Audio-visual products	Portable CD radio cassette	Replaced. This item has gradually become more difficult to find in line with the phasing out of cassettes and spending on varieties with cassette players has decreased in recent years as technology has advanced with the advent of mp3 players and DAB radio. Increasing expenditure on DAB radios means these are now a more representative item. Entered basket in 1997.
	6301 Audio-visual products	Car CD/radio auto-changer	Removed. Extremely low weighted item within CPI class. Class remains well represented with a variety of other audio equipment. Entered basket in 2003.

Table 4 - continuted

Items removed from the CPI and RPI basket in 2007

CPI class	RPI section	Dropped item	Notes
	6301 Audio-visual products	Widescreen (CRT) television	Removed. Spending on CRT televisions has continued to decrease and these are now very difficult to find in most outlets as flat panel televisions have become cheaper and the preferred choice of most consumers. Televisions continue to be represented by the two flat panel varieties, 14-25" and 26-42".
09.1.4 Recording media	6302 CDs and tapes	Blank VHS cassette	Replaced. Low weighted item within CPI class with decreasing expenditure. As people have shifted towards digital media and DVD recorders, so writable DVDs have become more representative of recording media. Entered basket in the mid-1980s.
09.1.4 Recording media	6302 CDs and tapes	Pre-recorded video	Replaced by a second pre-recorded DVD item. Spending on pre-recorded videos has decreased and this has been reflected in shops stocking far fewer pre-recorded videos, in turn causing collection and coverage difficulties. Spending has decreased to the point where the item no longer warrants inclusion. Entered basket in 1991.
09.1.2 Photographic equipment	6303 Toys, photographic and sports equipment	35mm compact camera	Removed. Digital cameras now dominate the photographic market. Disposable (non-digital) camera still remains to accompany digital cameras and digital camcorder. 35mm camera film and processing remain in the basket. Entered basket in mid 1970s.
09.4.2 Cultural services	6303 Toys, photographic and sports equipment	Develop and print, mail order	Replaced. Removed to make way for digital photo processing which attracts higher expenditure. In shop develop and print of 35mm films remains in the basket.
09.3.3 Gardens, plants and flowers	6305 Gardening products	Decorative outdoor plant pot	Removed. Very low weighted item in well represented class.
09.4.2 Cultural services	6401 Television licenses and rentals	Digital television installation fee	Removed. Very low weight as this fee is waived for most people who take out a subscription at the point of installation.

Note:

'Low weighted' denotes an item with a CPI weight of less than 0.5 parts per thousand in 2006.

the month, in accordance with a new EU Regulation aimed at spreading collection for those items with volatile prices across the month. Petrol prices used in the RPI will continue to relate to a single day in the month as recommended by RPI Advisory Committees. That day will be the Monday preceding index day.

Weights

Table 2 gives a snapshot of how the highlevel weights in the RPI have changed over the last 21 years, since the last rebasing of the series.6

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

Notes

CPI indices are first chain-linked 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.

- 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.
- 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).
- 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.

- 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 2007 CPI weights, this is equivalent to around £650 million.
- Coverage extensions during the development of the CPI/HICP mean that long-term comparisons of weights within CPI are more difficult.

CONTACT



elmr@ons.gsi.gov.uk

REFERENCES

Roe D and Fenwick D (2004) 'The New Inflation Target: the Statistical Perspective', Economic Trends 602, pp 24-46 and at www.statistics.gov.uk/cci/article.asp?id=688

Office for National Statistics (2004) Consumer price indices - a brief guide and at www.statistics.gov.uk/StatBase/Product. asp?vlnk62

Office for National Statistics (2006) Consumer Price Indices - Technical Manual and at www.statistics.gov.uk/StatBase/Product. asp?vlnk=2328

FEATURE

Nicholas Palmer

Office for National Statistics

Joscelyne Hynard

British Retail Consortium

Comparing ONS's retail sales index with the BRC's retail sales monitor

SUMMARY

This article compares two key indicators of retail sales growth, the Office for National Statistics' (ONS) retail sales index (RSI) and the retail sales monitor produced by the British Retail Consortium (BRC) in conjunction with KPMG. It is also an update of the joint ONS-BRC articles published by the BRC in spring 2003 and November 2006.

The two series are regularly quoted by the media and are used widely by retailers and retail analysts. Also, they both feature in the Bank of England's Inflation Report in its assessment of domestic demand and in the discussions of the Bank's Monetary Policy Committee.

There are some important differences between the two indicators in relation to coverage and the method of compilation, and these can sometimes lead to apparent discrepancies in the published figures. This article summarises those differences and compares the headline BRC series with an estimated RSI series based on the panel of contributors used by the BRC.

he retail sales index (RSI) measures movements in the average weekly sales of retailers in Great Britain. The monthly survey of 5,000 retailers collects the total retail turnover from each business selected. Responses are mandatory in accordance with government legislation. The retail turnover requested is the total value of sales of goods to the general public for personal or household use. It includes sales via the internet and other forms of mail order. For the first two months in each calendar quarter, the reporting period for which data are collected is four whole weeks and for the third month it is five weeks.

The Office for National Statistics' (ONS) monthly retail sales first release concentrates on seasonally adjusted volumes of retail sales, that is, after the estimated effects of price changes and regular seasonal variations have been removed.

The volume estimates are derived by applying weighted combinations of retail price indices for various types of retail goods to the returned sales data. These indices are the same as those published in ONS's consumer price indices first release.

The seasonal adjustment takes account of both calendar effects and within-year seasonal variation. Calendar effects cover, for example, how the different timings of Easter impact on the average weekly sales in March and April from one year to the next. Adjustments for within-year seasonality relate to the usual seasonal effects on the sales in each month. For example, the average weekly sales in December are usually much higher than in other months

of the year and this needs to be accounted for in the seasonally adjusted series.

An RSI for the value of retail sales, not seasonally adjusted, is also included in the first release. In addition, a monthly compendium called SDM28 is published which contains detailed series by type and size of retailer.

The retail sales monitor (RSM)

The RSM is produced from around 70 participants from across the UK retail industry who are members of the British Retail Consortium (BRC). Sales values across a range of 12 product categories are provided weekly to KPMG who then aggregate them into annual growth rates for each month on a total and like-for-like basis. The like-for-like figure strips out the effect of expansions and store openings and closures and is presented as a measure of retail industry performance. The total figure reflects retail industry growth.

The headline growth rates in the RSM are published in the second week after the month reported on. In addition, all participants in the survey receive analysis of sales split into the product categories as a tool for gauging their own performance in relation to their sector as a whole.

Comparing the RSI with the RSM

From the retail sales first release, the most appropriate measure to compare with the RSM total sales series is the RSI for the value of sales, not seasonally adjusted. These two series, along with the BRC's like-for-like sales, are compared in **Figure 1**.

Figure 1 indicates that, although the longer-term trends in each series are similar, there are sometimes differences in the direction of the movements from one month to the next. These are due to a range of differences that exist between the RSM and the RSI and which can be broadly described as relating to either:

- coverage, or
- methods

Coverage

The main coverage differences are summarised in **Table 1**. Some of these differences suggest that the RSI for large retailers, which is published monthly in the retail sales business monitor SDM28, may provide a more appropriate comparison with the RSM's total sales series than the RSI for all retailers. **Figure 2** shows this comparison.

While the RSI for large retailers appears to be slightly closer to the BRC's series than the RSI for all retailers, there are clearly more differences affecting the comparison than just the size of retailers covered. For a start, the RSI for large retailers represents around 900 businesses that have 100 or more employees. The differences related to some of the methods in **Table 2** are also likely to be contributing to the apparent discrepancies.

Differences in methods

In an attempt to measure the overall effect of the differences in methods, an RSI has been calculated just for the businesses surveyed by the BRC, as shown in **Figure 3**. A small number of these businesses are actually excluded from the RSI as they are not classified as retailers under the system used by ONS. However they are surveyed in ONS's monthly survey of the services sector and so their data were added into the analysis.

As might be expected, the RSI based on BRC contributors is generally much closer to the RSM's total sales series than the published RSIs for all retailers and large retailers. The relatively small discrepancies evident in Figure 3 would appear to relate mainly to the methodological differences described in Table 2. An additional factor may be the effect of changes to the profile of the participants in the BRC's survey over time.

Note that the reporting periods used by ONS and the BRC are usually the same, that is, standard periods of four, four and five weeks in each quarter. Occasionally they differ slightly, the most recent example being for June and July 2005, where the

Figure 1 **BRC series and ONS value RSI for all retailers** Percentage change over 12 months 10 Q RSI value unadjusted BRC total sales 2 BRC like-for-like sa 0 _2 Oct Jan July Oct Jan Jul Oct Jul Apr 2004

Source: Office for National Statistics, BRC-KPMG Retail Sales Monitor

Figure 2 BRC total sales series and ONS value RSIs for all and large retailers Percentage change over 12 months 10 8 RSI for large retailers BRC total sales 2 0 Jan Jul Oct July Oct Jul Oct

Source: Office for National Statistics, BRC-KPMG Retail Sales Monitor

Table 1
Main differences in coverage between RSI and RSM

RSI	RSM
Survey of 5,000 retailers of all sizes, Great Britain only	A range of mainly large retailers accounting for some 60 per cent of total UK retail sales value
Covers all kinds of retailers, including mail order/internet retailers and market stalls	A representative range of retailers across all sectors, both multiple and SME, but excluding market stalls
60 per cent response at first release, usually representing 90 per cent of the sales of those selected	100 per cent response every month
Sample updated each month, in accordance with the profile of the British retail industry	Sample related to BRC membership profile

Figure 3 BRC total sales series and ONS value RSI for BRC contributors Percentage change over 12 months 10 RSI for BRC contributors 8 4 2 0 BRC total sales -2 Jul Oct July Jul Oct

Source: Office for National Statistics, BRC-KPMG Retail Sales Monitor

BRC used four weeks for June compared with the usual five weeks, and then five weeks for July instead of four. This may partly explain the differences in the direction of the movements between June and July 2005 in Figure 3.

Conclusion

The relationships between the RSM and the published RSI series have not changed much in recent years and the conclusions drawn in the spring 2003 article still apply now.

- The RSM and the RSI show broadly similar trends
- The value RSI, not seasonally adjusted, usually falls somewhere between the RSM series for total sales and that for like-for-like sales
- The RSI for large retailers is closer to the RSM series for total sales than the RSI for all retailers

All are important and valuable indicators in their own right, serving a variety of users' needs and their respective differences are sometimes driven by those needs. For example, the nature of the RSI is dictated by the need for consistency with other ONS business surveys, and by UK and international official statistics protocols and conventions. The nature of the RSM is driven by demands from within the retail industry and the objectives of the BRC.

Table 2
Main methodological differences between RSI and RSM

RSI	RSM
Statutory survey, in accordance with the 1947 Statistics of Trade Act	Voluntary, market-led survey
Based on type of retailer, as defined by the Standard Industrial Classification (SIC)	Based on product categories
Components weighted by sales of each type of retailer	Components weighted by household expenditure on each type of product
Measured by orders received	Measured by cash received
Includes sales from retail services such as delivery, installation and repair	Retail services are excluded from sales figures
Results continuously open to revision from late or amended data	Annual growth rates derived from up-to-date comparison with the previous year, so reflecting any changes that affect the like-for-like figures
Values and volumes, both seasonally adjusted and unadjusted	Expressed as changes in sales values only with no seasonal adjustment
Results for total sales only, including detailed figures by type and size of retailer	Results published as total and like-for-like sales
Results usually published 14 working days after the end of the month	Results published seven working days after the end of the month

ACKNOWLEDGEMENTS

It should be noted that there are other indicators of UK retail sales growth, including the results of the Distributive Trades Survey carried out by the Confederation of British Industry and the 'FootFall' index produced by retail research group SPSL.

CONTACT



FEATURE

Ian Richardson

Office for National Statistics

Services Producer Price Index (experimental) – fourth quarter 2006

SUMMARY

The experimental Services Producer Price Index (SPPI) measures movements in prices charged for services supplied by businesses to other businesses, 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.

rices of business-to-business services rose by 3.0 per cent in the year to the fourth quarter of 2006. This is based on a comparison of the change in the top-level Services Producer Price Index (SPPI) on the 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 2006 Q4, the top-level SPPI (net sector) rose by 0.5 per cent compared with the previous quarter.

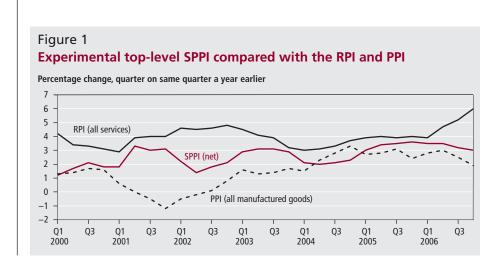
Figure 2 depicts the SPPI annual growths for both the net and gross sector time series. The annual growth for the SPPI net sector fell to 3.0 per cent in 2006 Q4, down from 3.2 per cent in 2006 Q3. The gross

SPPI growth fell to 2.9 per cent in 2006 Q4 down from 3.1 per cent in the previous quarter. The difference in the annual growth between the gross and net sector SPPI is 0.1 per cent this quarter.

Industry-specific indices

Tables available on the National Statistics website contain the data for the 34 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 2006 with Q4 2005, some key points to note are:

property rental prices rose by
 4.0 per cent, reflecting strong market conditions across the industry, as reported by the Investment Property
 Databank



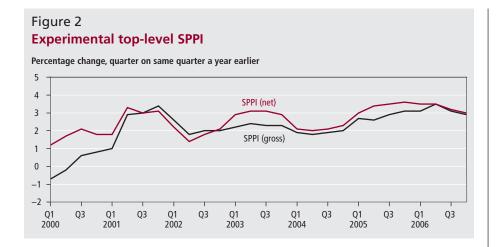


Table 1
Top-level SPPI results

	SPPI quarterly inde	x values, 2000=100	Percentage change, quarter on same quarter a year earlier			
	Gross sector	Net sector	Gross sector	Net sector		
2000 Q1	100.0	99.5	-0.7	1.2		
2000 Q2	99.9	99.8	0.1	1.7		
2000 Q3	100.0	100.2	0.7	2.1		
2000 Q4	100.1	100.5	0.7	1.8		
001 Q1	100.7	101.3	0.7	1.8		
001 Q2	102.5	103.1	2.6	3.3		
2001 Q3	102.8	103.2	2.7	3.0		
2001 Q4	103.3	103.6	3.1	3.1		
2002 Q1	103.3	103.6	2.7	2.2		
002 Q2	104.4	104.6	1.9	1.4		
002 Q3	104.9	105.0	2.1	1.8		
002 Q4	105.4	105.8	2.1	2.1		
2003 Q1	105.7	106.5	2.3	2.9		
.003 Q2	107.0	107.9	2.4	3.1		
003 Q3	107.4	108.3	2.4	3.1		
003 Q4	107.8	108.8	2.3	2.9		
1004 Q1	107.6	108.7	1.7	2.1		
004 Q2	108.9	110.0	1.8	2.0		
1004 Q3	109.4	110.6	1.8	2.1		
2004 Q4	109.9	111.3	1.9	2.3		
005 Q1	110.5	112.0	2.7	3.0		
.005 Q2	111.7	113.7	2.6	3.4		
.005 Q3	112.5	114.5	2.9	3.5		
005 Q4	113.3	115.3	3.1	3.6		
006 Q1	113.9	115.9	3.1	3.5		
006 Q2	115.6	117.7	3.5	3.5		
006 Q3	116.0	118.2	3.1	3.2		
006 Q4	116.6	118.8	2.9	3.0		

- banking services prices rose by 11.9 per cent, generated by the underlying interest on outstanding loan balances, and increases in balances as reported by the Bank of England
- sewerage services prices rose by
 8.3 per cent, following rises reported by
 OFWAT
- freight transport by road prices rose by
 1.1 per cent, following general increases in the cost of fuel and price reviews across the industry
- business telecommunications prices fell by 1.3 per cent, as reported by Ofcom

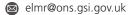
Next results

The next set of SPPI results will be issued on 23 May 2007 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, the redevelopment of an index for business telecommunications and the introduction of an index for banking services (together with more general information on the SPPI) are available at www.statistics.gov.uk/sppi

CONTACT



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:

Bank of England – banking services

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

Yew Tree - maintenance and repair of motor vehicles

- 7 The business telecommunications index has undergone the final stages of quality assurance and has been reintroduced this quarter with data revised back to 1998. For further details, please see the article 'A Redeveloped Services Producer Price Index for Business Telecommunications', available on the National Statistics website at:
 - www.statistics.gov.uk/downloads/experimental/Updated business telecoms in dexarticle.pdf
- 8 The top level net and gross series have been subject to revisions back to 1998. This has been due to the redevelopment of the business telecommunications index.

Key time series

National accounts aggregates

Last updated: 28/03/07

Seasonally adjusted

	£ mil	lion	Indices (2003 = 100)							
	At currer	nt prices	Value indices at	current prices	Cha	ined volume indic	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	•	GDP at market prices	GVA at basic prices	GDP at market prices	GVA at basic prices	
	ҮВНА	ABML	YBEU	YBEX	YBFP	YBEZ	CGCE	YBGB	CGBV	
2001 2002 2003 2004 2005 2006	996,987 1,048,767 1,110,296 1,176,527 1,225,978 1,289,989	882,753 930,297 985,558 1,044,165 1,088,506 1,145,167	89.8 94.5 100.0 106.0 110.4 116.2	89.6 94.4 100.0 105.9 110.4 116.2	93.8 97.2 100.0 103.4 104.5 106.6	95.4 97.4 100.0 103.3 105.3 108.2	95.7 97.4 100.0 103.3 105.3 108.2	94.1 97.0 100.0 102.6 104.9 107.4	93.6 96.9 100.0 102.6 104.9 107.4	
2001 Q1 2001 Q2 2001 Q3 2001 Q4 2002 Q1	246,345 248,058 249,447 253,137 257,368	217,972 219,362 220,955 224,464 228,051	88.7 89.4 89.9 91.2 92.7	88.5 89.0 89.7 91.1 92.6	93.2 93.4 94.5 94.2 95.9	95.0 95.1 95.7 96.0 96.5	95.4 95.4 95.9 96.1 96.6	93.4 94.0 93.9 95.0 96.1	92.7 93.3 93.5	
2002 Q2 2002 Q3 2002 Q4 2003 Q1	261,028 264,049 266,322 270,918	231,626 234,316 236,304 240,577	94.0 95.1 95.9 97.6	94.0 95.1 95.9 97.6	96.3 98.4 98.3 99.4	97.1 97.8 98.3 98.8	97.0 97.7 98.2 98.8	96.9 97.3 97.6 98.8	96.9 97.3 97.6 98.8	
2003 Q2 2003 Q3 2003 Q4	275,130 280,024 284,224	244,438 248,520 252,023	99.1 100.9 102.4	99.2 100.9 102.3	98.9 100.0 101.7	99.3 100.4 101.5	99.3 100.4 101.6	99.8 100.5 100.9	99.9 100.5 100.7	
2004 Q1 2004 Q2 2004 Q3 2004 Q4	286,975 293,120 295,998 300,434	254,169 260,148 262,789 267,059	103.4 105.6 106.6 108.2	103.2 105.6 106.7 108.4	101.9 103.2 103.0 105.4	102.2 103.1 103.5 104.1	102.2 103.2 103.5 104.2	101.1 102.4 103.0 103.9	100.9 102.4 103.0 104.0	
2005 Q1 2005 Q2 2005 Q3 2005 Q4	301,795 304,745 306,936 312,502	267,882 270,605 272,028 277,991	108.7 109.8 110.6 112.6	108.7 109.8 110.4 112.8	104.2 105.6 103.9 104.4	104.5 104.9 105.5 106.1	104.6 105.0 105.5 106.2	104.1 104.6 104.8 106.1	104.0 104.6 104.6 106.2	
2006 Q1 2006 Q2 2006 Q3 2006 Q4	315,133 319,346 325,413 330,097	279,917 283,338 288,772 293,140	113.5 115.0 117.2 118.9	113.6 115.0 117.2 119.0	105.3 107.0 107.0 107.1	107.0 107.8 108.6 109.3	107.1 107.9 108.6 109.3	106.1 106.7 108.0 108.8	106.1 106.6 107.9 108.8	
Percentag	e change, quarter	on correspondi	ng quarter of pre	vious year ⁴						
2001 Q1 2001 Q2 2001 Q3 2001 Q4	5.0 4.6 4.1 4.7	5.3 5.0 4.5 5.1	5.0 4.6 4.2 4.7	5.4 5.0 4.5 5.2	3.3 3.1 3.1 3.7	2.9 2.3 2.4 2.0	2.9 2.1 1.9 1.6	2.0 2.3 1.7 2.7	2.8 2.5	
2002 Q1 2002 Q2 2002 Q3 2002 Q4	4.5 5.2 5.9 5.2	4.6 5.6 6.0 5.3	4.5 5.1 5.8 5.2	4.6 5.6 6.0 5.3	2.9 3.1 4.1 4.4	2.1 2.2 2.4	1.3 1.7 1.9 2.2	2.9 3.1 3.6 2.7	3.9 4.1 3.0	
2003 Q1 2003 Q2 2003 Q3 2003 Q4	5.3 5.4 6.1 6.7	5.5 5.5 6.1 6.7	5.3 5.4 6.1 6.8	5.4 5.5 6.1 6.7	3.6 2.7 1.6 3.5	2.7 3.3	2.3 2.4 2.8 3.5	2.8 3.0 3.3 3.4	3.1 3.3 3.2	
2004 Q1 2004 Q2 2004 Q3 2004 Q4	5.9 6.5 5.7 5.7	5.6 6.4 5.7 6.0	5.9 6.6 5.6 5.7	5.7 6.5 5.7 6.0	2.5 4.3 3.0 3.6	3.8 3.1 2.6	3.4 3.9 3.1 2.6	2.3 2.6 2.5 3.0	2.5 2.5 3.3	
2005 Q1 2005 Q2 2005 Q3 2005 Q4	5.2 4.0 3.7 4.0	5.4 4.0 3.5 4.1	5.1 4.0 3.8 4.1	5.3 4.0 3.5 4.1	2.3 2.3 0.9 -0.9	2.3 1.7 1.9 1.9	2.3 1.7 1.9 1.9	3.0 2.1 1.7 2.1	2.1 1.6 2.1	
2006 Q1 2006 Q2 2006 Q3 2006 Q4	4.4 4.8 6.0 5.6	4.5 4.7 6.2 5.4	4.4 4.7 6.0 5.6	4.5 4.7 6.2 5.5	1.1 1.3 3.0 2.6	2.4 2.8 2.9 3.0	2.4 2.8 2.9 2.9	1.9 2.0 3.1 2.5	3.2	

Notes:

- 1 "Money GDP".
- This series is only updated once a quarter, in line with the full quarterly national accounts data set.
 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: 28/03/07

		£ million, chained volume measures, reference year 2003, seasonally adjusted
Domestic expenditure or	n goods and services at market prices	
inal consumption expenditure	Gross capital formation	
		Gross

	Final co	nsumption exp	oenditure		ss capital for							
	Households	Non-profit institutions ¹	General government		Changes in inventories ²	Acquisitions less disposals of valuables	Total	Exports of goods and services	Gross final expenditure	less imports of goods and services	Statistical discrepancy (expenditure)	Gross domestic at product market prices
	ABJR	HAYC	NMRY	NPQT	CAFU	NPJR	YBIM	IKBK	ABMG	IKBL	GIXS	ABMI
2001	653,326	27,155		171,639	5,577		1,075,760	277,694	1,353,632	294,449	0	1,059,648
2002 2003	676,833 697,160	27,130 27,185		178,066 178,751	2,289 3,983		1,109,596 1,139,741	280,593 285,397	1,390,217 1,425,138	308,706 314,842	0	1,081,469 1,110,296
2003	721,434	27,103		189,492	4,597		1,182,937	299,289	1,482,225	335,703	0	1,110,230
2005	731,274	28,119		195,107	3,611		1,205,170	322,869	1,528,039	359,132	-233	1,168,674
2006	744,933	29,883		207,704	5,501	66	1,241,322	360,440	1,601,762	401,331	529	1,200,960
2001 Q1	161,204	6,873		42,555	1,643	-26	265,928	71,295	337,389	73,841	0	263,631
2001 Q2 2001 Q3	162,333 164,239	6,788 6,762		43,242 43,357	1,802 1,743	202 30	268,431 270,836	69,333 67,921	337,813 338,708	73,937 73,327	0	263,935 265,519
2001 Q4	165,550	6,732		42,485	389	136	270,565	69,145	339,722	73,344	Ö	266,563
2002 Q1	167,588	6,762	55,756	42,927	1,047	66	274,166	69,440	343,608	75,709	0	267,948
2002 Q2	168,803	6,756		43,981	385	48	276,273	71,533	347,850	78,367	0	269,392
2002 Q3 2002 Q4	169,715 170,727	6,793 6,819		44,765 46,393	511 346	62 7	278,337 280,820	71,056 68,564	349,422 349,337	78,006 76,624	0	271,368 272,761
2002 Q 1 2003 Q1	171,828	6,843		44,934	-571	-8	280,285	72,662	352,958	78,836	0	274,119
2003 Q1	174,146	6,779		44,161	-644	94	282,367	70,611	352,971	77,283	Ö	275,712
2003 Q3	175,140	6,790		43,924	2,264	-68	286,503	70,334	356,830	78,089	0	278,748
2003 Q4	176,046	6,773		45,732	2,934	-55	290,586	71,790	362,379	80,634	0	281,717
2004 Q1 2004 Q2	178,197 180,362	6,830 6,805		47,256 47,102	–381 1,050	112 -90	291,983 294,759	73,389 74,861	365,373 369,620	81,648 83,313	0	283,725 286,307
2004 Q2 2004 Q3	181,032	6,826		47,102	1,025	-96	296,603	75,097	371,700	84,300	0	287,400
2004 Q4	181,843	6,866		47,321	2,903	32	299,592	75,942	375,532	86,442	0	289,091
2005 Q1	182,197	6,996		48,106	2,029	-158	300,079	75,533	375,611	85,591	-75	289,945
2005 Q2 2005 Q3	182,206 182,998	6,975 7,028		47,937 49,524	678 474	86 –201	299,673 302,095	79,293 82,167	378,967	87,595 91,391	–75 –58	291,297 292,813
2005 Q3 2005 Q4	183,873	7,020		49,540	430	-201 -81	302,093	85,876	384,262 389,199	94,555	-25	294,619
2006 Q1	183,907	7,325		50,616	2,173	-128	306,599	93,903	400,502	103,587	89	297,004
2006 Q2	185,998	7,415	63,106	51,207	2,407	233	310,366	96,086	406,451	107,282	126	299,295
2006 Q3	186,543	7,508		52,273	1,310	–29 –10	311,100	85,409	396,509	95,344	150	301,316
2006 Q4	188,485	7,635		53,608	-389		313,257	85,042	398,300	95,118	164	303,345
_	change, qua				-	r			4.0			
2001 Q1 2001 Q2	2.1 2.9	3.9 0.6		3.0 5.4			2.8 3.2	9.7 3.0	4.3 3.1	9.0 6.1		2.9 2.2
2001 Q2	3.4	-1.6		3.6			3.0	1.0	2.6	3.6		2.3
2001 Q4	4.0	-3.0	3.3	-1.8			2.7	-1.6	1.7	0.7		2.0
2002 Q1	4.0	-1.6		0.9			3.1	-2.6	1.8	2.5		1.6
2002 Q2 2002 Q3	4.0 3.3	-0.5 0.5		1.7 3.2			2.9 2.8	3.2 4.6	3.0 3.2	6.0 6.4		2.1 2.2
2002 Q3 2002 Q4	3.1	1.3		9.2			3.8	-0.8	2.8	4.5		2.3
2003 Q1	2.5	1.2	2.4	4.7			2.2	4.6	2.7	4.1		2.3
2003 Q2	3.2	0.3		0.4			2.2	-1.3	1.5	-1.4		2.3
2003 Q3 2003 Q4	3.2 3.1	0.0 -0.7		−1.9 −1.4			2.9 3.5	-1.0 4.7	2.1 3.7	0.1 5.2		2.7 3.3
2003 Q4 2004 Q1	3.7			5.2			4.2	1.0	3.5	3.6		3.5
2004 Q1 2004 Q2	3.6	0.4		6.7			4.4	6.0	4.7	7.8		3.8
2004 Q3	3.4	0.5		8.9			3.5	6.8	4.2	8.0		3.1
2004 Q4	3.3	1.4		3.5			3.1	5.8	3.6	7.2		2.6
2005 Q1 2005 Q2	2.2 1.0	2.4 2.5		1.8 1.8			2.8 1.7	2.9 5.9	2.8 2.5	4.8 5.1		2.2 1.7
2005 Q2 2005 Q3	1.0	3.0		3.6			1.7	5.9 9.4	2.5 3.4	5. I 8.4		1.7
2005 Q4	1.1	3.7		4.7			1.2	13.1	3.6	9.4		1.9
2006 Q1	0.9	4.7		5.2			2.2	24.3	6.6	21.0		2.4
2006 Q2	2.1	6.3		6.8			3.6	21.2	7.3	22.5		2.7
2006 Q3 2006 Q4	1.9 2.5	6.8 7.2		5.6 8.2			3.0 3.3	3.9 -1.0	3.2 2.3	4.3 0.6		2.9 3.0
									_,,,			

Notes:

Source: Office for National Statistics

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

Labour market summary

Last updated: 14/03/07

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 2005	47,581	30,054	28,637	1,417	17,527	63.2	60.2	4.7	36.8
Nov-Jan 2006	47,976	30,343	28,801	1,541	17,634	63.2	60.0	5.1	36.8
Feb-Apr 2006	48,069	30,545	28,925	1,620	17,524	63.5	60.2	5.3	36.5
May-Jul 2006	48,162	30,666	28,964	1,702	17,496	63.7	60.1	5.5	36.3
Aug-Oct 2006	48,254	30,700	29,005	1,695	17,555	63.6	60.1	5.5	36.4
Nov-Jan 2007	48,347	30,715	29,022	1,692	17,633	63.5	60.0	5.5	36.5
Male	MGSM	MGSG	MGSA	MGSD	MGSJ	MGWH	MGSS	MGSY	YBTD
Nov-Jan 2005	23,052	16,302	15,466	836	6,750	70.7	67.1	5.1	29.3
Nov-Jan 2006	23,268	16,430	15,542	888	6,838	70.6	66.8	5.4	29.4
Feb-Apr 2006	23,319	16,535	15,589	945	6,785	70.9	66.9	5.7	29.1
May-Jul 2006	23,370	16,585	15,602	983	6,785	71.0	66.8	5.9	29.0
Aug-Oct 2006	23,422	16,631	15,652	979	6,791	71.0	66.8	5.9	29.0
Nov-Jan 2007	23,474	16,635	15,668	967	6,840	70.9	66.7	5.8	29.1
Female	MGSN	MGSH	MGSB	MGSE	MGSK	MGWI	MGST	MGSZ	YBTE
Nov-Jan 2005	24,529	13,752	13,171	581	10,778	56.1	53.7	4.2	43.9
Nov-Jan 2006	24,708	13,913	13,259	654	10,795	56.3	53.7	4.7	43.7
Feb-Apr 2006	24,750	14,010	13,336	674	10,740	56.6	53.9	4.8	43.4
May-Jul 2006	24,792	14,081	13,362	719	10,711	56.8	53.9	5.1	43.2
Aug-Oct 2006	24,833	14,068	13,352	716	10,764	56.7	53.8	5.1	43.3
Nov-Jan 2007	24,873	14,080	13,354	726	10,793	56.6	53.7	5.2	43.4

		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 2005	36,858	29,013	27,615	1,398	7,844	78.7	74.9	4.8	21.3
Nov-Jan 2006	37,142	29,194	27,678	1,517	7,948	78.6	74.5	5.2	21.4
Feb-Apr 2006	37,208	29,375	27,782	1,593	7,834	78.9	74.7	5.4	21.1
May-Jul 2006	37,274	29,477	27,804	1,674	7,797	79.1	74.6	5.7	20.9
Aug-Oct 2006	37,323	29,488	27,820	1,668	7,835	79.0	74.5	5.7	21.0
Nov-Jan 2007	37,364	29,487	27,817	1,670	7,877	78.9	74.4	5.7	21.1
Male	YBTG	YBSL	YBSF	YBSI	YBSO	MGSP	MGSV	YBTJ	YBTM
Nov-Jan 2005	19,052	15,945	15,120	825	3,107	83.7	79.4	5.2	16.3
Nov-Jan 2006	19,224	16,037	15,160	877	3,188	83.4	78.9	5.5	16.6
Feb-Apr 2006	19,266	16,138	15,203	935	3,128	83.8	78.9	5.8	16.2
May-Jul 2006	19,308	16,187	15,216	971	3,121	83.8	78.8	6.0	16.2
Aug-Oct 2006	19,347	16,221	15,253	968	3,126	83.8	78.8	6.0	16.2
Nov-Jan 2007	19,385	16,225	15,266	959	3,160	83.7	78.8	5.9	16.3
Female	YBTH	YBSM	YBSG	YBSJ	YBSP	MGSQ	MGSW	YBTK	YBTN
Nov-Jan 2005	17,806	13,068	12,495	573	4,737	73.4	70.2	4.4	26.6
Nov-Jan 2006	17,918	13,158	12,518	640	4,760	73.4	69.9	4.9	26.6
Feb-Apr 2006	17,942	13,237	12,579	657	4,706	73.8	70.1	5.0	26.2
May-Jul 2006	17,966	13,290	12,587	703	4,676	74.0	70.1	5.3	26.0
Aug-Oct 2006	17,976	13,267	12,567	701	4,709	73.8	69.9	5.3	26.2
Nov-Jan 2007	17,979	13,262	12,551	711	4,717	73.8	69.8	5.4	26.2

Notes:

Source: Labour Force Survey, Office for National Statistics Labour Market Statistics Helpline: 020 7533 6094

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.

Office for National Statistics

Prices

Last updated: 20/03/07
Percentage change over 12 months

		Co	onsumer prices				Not seasonally adjusted, except for series PLLW, RNPE and RNF Producer prices			
	Cons	umer prices index	(CPI)	Retail p	rices index (RPI)		Outpu	t 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
2003 Jan 2003 Feb 2003 Mar 2003 Apr 2003 May 2003 Jun	1.3 1.6 1.5 1.4 1.3			2.9 3.2 3.1 3.1 3.0 2.9	2.7 3.0 3.0 3.0 2.9 2.8	2.9 3.1 3.2 2.9 2.7 2.7	1.3 1.5 2.1 1.6 1.1	0.9 1.1 1.3 1.3 1.2 1.2	1.7 2.5 0.8 -1.3 -0.1 0.0	-2.2 -2.0 -1.5 -0.6 -0.2 -1.2
2003 Jul 2003 Aug 2003 Sep 2003 Oct 2003 Nov 2003 Dec	1.3 1.4 1.4 1.3 1.3	1.1	1.1	3.1 2.9 2.8 2.6 2.5 2.8	2.9 2.9 2.8 2.7 2.5 2.6	2.8 2.7 2.7 2.4 2.1 2.2	1.3 1.5 1.4 1.5 1.7 1.8	1.3 1.2 1.4 1.3 1.4	0.6 1.9 1.3 2.5 4.6 2.0	-0.5 0.0 1.0 1.2 1.7 0.4
2004 Jan 2004 Feb 2004 Mar 2004 Apr 2004 May 2004 Jun	1.4 1.3 1.1 1.1 1.5 1.6	1.5 1.3 1.1 1.1 1.4 1.5	1.3 1.1 1.0 1.0 1.3 1.4	2.6 2.5 2.6 2.5 2.8 3.0	2.4 2.3 2.1 2.0 2.3 2.3	2.0 1.9 1.7 1.8 2.2 2.3	1.6 1.6 1.4 1.8 2.5 2.6	1.4 1.5 1.5 1.3 1.4 1.4	-0.3 -1.3 0.9 2.9 5.6 3.7	0.0 -0.5 -0.1 -0.2 0.7 1.3
2004 Jul 2004 Aug 2004 Sep 2004 Oct 2004 Nov 2004 Dec	1.4 1.3 1.1 1.2 1.5	1.4 1.3 1.0 1.2 1.4 1.7	1.2 1.1 0.9 1.1 1.4 1.6	3.0 3.2 3.1 3.3 3.4 3.5	2.2 2.2 1.9 2.1 2.2 2.5	2.0 2.0 1.7 2.0 2.2 2.5	2.6 2.8 3.1 3.5 3.5 2.9	1.7 2.2 2.3 2.9 2.9 2.5	3.7 4.6 8.1 9.2 6.7 4.4	1.4 2.3 3.8 4.8 4.6 4.2
2005 Jan 2005 Feb 2005 Mar 2005 Apr 2005 May 2005 Jun	1.6 1.7 1.9 1.9 1.9 2.0	1.7 1.7 2.0 2.0 2.0 2.2	1.5 1.6 1.8 1.9 1.8 1.9	3.2 3.2 3.2 3.2 2.9 2.9	2.1 2.1 2.4 2.3 2.1 2.2	2.0 2.0 2.3 2.3 2.2 2.2	2.6 2.7 2.9 3.3 2.7 2.5	2.5 2.5 2.4 2.6 2.5 2.3	9.6 11.0 11.1 10.0 7.6 12.0	7.5 8.2 7.4 7.0 6.5 7.4
2005 Jul 2005 Aug 2005 Sep 2005 Oct 2005 Nov 2005 Dec	2.3 2.4 2.5 2.3 2.1 1.9	2.5 2.6 2.6 2.5 2.3 2.1	2.3 2.3 2.4 2.3 2.1 1.8	2.9 2.8 2.7 2.5 2.4 2.2	2.4 2.3 2.5 2.4 2.3 2.0	2.5 2.3 2.5 2.3 2.3 2.0	3.1 3.0 3.3 2.6 2.3 2.4	2.2 1.9 2.1 1.4 1.3 1.7	13.9 12.8 10.5 8.9 13.6 17.9	8.6 7.5 5.7 7.0 9.6 12.1
2006 Jan 2006 Feb 2006 Mar 2006 Apr 2006 May 2006 Jun	1.9 2.0 1.8 2.0 2.2 2.5	2.1 2.1 1.9 2.1 2.3 2.6	1.9 2.0 1.7 2.0 2.2 2.4	2.4 2.4 2.4 2.6 3.0 3.3	2.3 2.3 2.1 2.4 2.9 3.1	2.3 2.3 2.2 2.3 2.8 3.2	2.9 2.5 2.5	1.8 1.8 1.9 2.3 2.5 2.9	15.8 15.4 13.0 15.2 13.6 11.1	10.3 10.7 10.0 10.0 8.6 8.7
2006 Jul 2006 Aug 2006 Sep 2006 Oct 2006 Nov 2006 Dec	2.4 2.5 2.4 2.4 2.7 3.0	2.4 2.6 2.6 2.7 3.0 3.2	2.3 2.4 2.3 2.3 2.6 2.9	3.3 3.4 3.6 3.7 3.9 4.4	3.1 3.3 3.2 3.2 3.4 3.8	3.2 3.4 3.3 3.3 3.6 3.9	1.9 1.6	2.5 2.3 2.1 2.6 2.6 2.6	10.5 8.0 5.1 4.7 3.3 2.1	8.2 7.8 7.0 6.1 4.7 2.8
2007 Jan 2007 Feb	2.7 2.8	2.9 2.9	2.6 2.6	4.2 4.6	3.5 3.7	3.7 3.9		2.5 2.7	-2.1 -1.0	1.6 1.3

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 threemonthly 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), selfemployment 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_tables

Fitle	Frequency of update	Updated since last month
UK economic accounts		
1.01 National accounts aggregates	М	V
1.02 Gross domestic product and gross national income	М	✓
1.03 Gross domestic product, by category of expenditure	М	✓
1.04 Gross domestic product, by category of income	М	✓
1.05 Gross domestic product and shares of income and expenditure	М	✓
1.06 Income, product and spending per head	Q	✓
1.07 Households' disposable income and consumption	М	✓
1.08 Household final consumption expenditure	М	✓
1.09 Gross fixed capital formation	М	✓
1.10 Gross value added, by category of output	М	✓
1.11 Gross value added, by category of output: service industries	М	✓
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 accou	nt Q	✓
1.15 Balance of payments: current account	М	✓
1.16 Trade in goods (on a balance of payments basis)	М	✓
1.17 Measures of variability of selected economic series	Q	•

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_tables

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

Prices

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

Selected output and demand indicators

4.01 Output of the production industries	М	~
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	Q	•
4.08 Retail sales, new registrations of cars and credit business	M	✓
4.09 Inland energy consumption: primary fuel input basis	М	✓

Selected financial statistics

5.01 Sterling exchange rates and UK reserves	M	✓
5.02 Monetary aggregates	M	V
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	V
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	А	•
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	Q	✓
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_tables

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	Α	•
6.15 Median earnings and hours by industry section	Α	•
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

B Biannually 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

- 020 7533 5866
- rpi@ons.gsi.gov.uk

Labour Market Statistics Helpline

- 020 7533 6094
- labour.market@ons.gsi.gov.uk

Earnings Customer Helpline

- 01633 819024
- arnings@ons.gsi.gov.uk

National Statistics Customer Contact Centre

- 0845 601 3034
- info@statistics.gsi.gov.uk

Skills and Education Network

- 024 7682 3439

DfES Public Enquiry Unit

0870 000 2288

For statistical information on

Average Earnings Index (monthly)

01633 819024

Claimant count

() 020 7533 6094

Consumer Prices Index

() 020 7533 5874

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

- 020 7533 6094
- labour.market@ons.gsi.gov.uk

Economic activity and inactivity

020 7533 6094

Employment

Labour Force Survey

- 020 7533 6094
- □ 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

- 020 7533 6094
- labour.market@ons.gsi.gov.uk

Labour Force Survey Data Service

- 01633 655732
- ☑ Ifs.dataservice@ons.gsi.gov.uk

New Deal

0114 209 8228

Productivity and unit wage costs

01633 812766

Public sector employment

General enquiries

020 7533 6178

Source and methodology enquiries

01633 812362

Qualifications (DfES)

0870 000 2288

Redundancy statistics

020 7533 6094

Retail Prices Index

- 020 7533 5874
- rpi@ons.gsi.gov.uk

Skills (DfES)

- 0114 259 4407
- Skill needs surveys and research into skill shortages
- 0114 259 4407

Small firms (DTI)

Small Business Service (SBS)

0114 279 4439

Subregional estimates

01633 812038

Annual employment statistics

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

Annual Population Survey,

local area statistics

020 7533 6130

LFS Subnational Data Service

020 7533 6135

snds@ons.gsi.gov.uk

Trade unions (DTI)

Employment relations

020 7215 5934

Training

Adult learning – work-based training (DWP)

0114 209 8236

Employer-provided training (DfES)

0114 259 4407

Travel-to-Work Areas

Composition and review

020 7533 6114

Unemployment

020 7533 6094

Vacancies

Vacancy Survey: total stocks of vacancies

020 7533 6162

ONS economic and labour market publications

ANNUAL

Financial Statistics Explanatory Handbook

2007 edition. Palgrave Macmillan, ISBN 1-4039-9783-7. Price £45.

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

Foreign Direct Investment (MA4)

2005 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)

2005 edition

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

Share Ownership

2004 edition

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

United Kingdom Balance of Payments (Pink Book)

2006 edition. Palgrave Macmillan, ISBN 1-4039-9387-4. Price £45.

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

United Kingdom National Accounts (Blue Book)

2006 edition. Palgrave Macmillan, ISBN 1-4039-9388-2. Price £45.

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

First releases

- Annual survey of hours and earnings
- Business enterprise research and development
- Foreign Direct Investment
- Gross domestic expenditure on research and development
- Low pay estimates
- Regional gross value added
- Share Ownership
- UK trade in services
- Work and worklessness among households

QUARTERLY

Consumer Trends

2006 quarter 4

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

United Kingdom Economic Accounts

2006 quarter 4. Palgrave Macmillan, ISBN 978-0-230-52617-4. Price £32.

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

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

2006 guarter 4

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

First releases

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

MONTHLY

Financial Statistics

March 2007. Palgrave Macmillan, ISBN 978-0-230-52586-3. Price £45.

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

Focus on Consumer Price Indices

February 2007

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

Monthly review of external trade statistics (MM24)

February 2007

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

Producer Price Indices (MM22)

February 2007

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

First releases

- Consumer Price Indices
- Index of distribution
- Index of production
- Labour market statistics
- Labour market statistics: regional
- Producer Prices
- Public Sector Finances
- Retail Sales Index
- UK Trade

OTHER

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

Recent articles

All authors are from the Office for National Statistics unless stated.

OCTOBER 2006

Economic Trends

UK environmental taxes: classification and recent trends *lan Gazley*

Concentration ratios for businesses by industry in 2004 Sanjiv Mahajan

Taxes and subsidies within the production boundary, 1992–2004 Sanjiv Mahajan

Labour Market Trends

Foreign labour in the UK: current patterns and trends *John Salt and Jane Millar, UCL*

NOVEMBER 2006

Economic Trends

Including finance lease liabilities in Public Sector Net Debt: PFI and other Adrian Chesson

Export shares of goods and services, 1992–2004 Sanjiv Mahajan

Import penetration of goods and services, 1992–2004 Sanjiv Mahajan

Labour Market Trends

Comparison of statistics on jobs: June 2006 Annette Walling

Earnings data: a brief guide to sources and outputs *Catrin Ormerod*

DECEMBER 2006

Economic Trends

Experimental quality-adjusted labour input measure, 1996–2005 Peter Goodridge

Revisions to quarterly GDP growth and its production (output), expenditure and income components

David Obuwa and Heather Robinson

ICT deflation and productivity measurement Gavin Wallis

Labour Market Trends

The new urban/rural indicator in the LFS Catherine Barham and Nasima Begum

Public sector employment 2006

Donna Livesey, Andrew Machin, Bryce Millard and Annette Walling

JANUARY 2007

Economic & Labour Market Review

Official statistical publications and economic statistics Mavis Anagboso, Allan Flowers, Geoff Tily and Gavin Wallis The personal inflation calculator Matthew Powell and Jim O'Donoghue

Inflation – experience and perceptions *Jim O'Donoghue*

Keeping the RPI and CPI basket of goods and services up to date Jim O'Donoghue

Earnings: summary of sources and developments Robert Hayes, Catrin Ormerod and Felix Ritchie

Time series analysis of the Labour Force Survey longitudinal data sets *Catherine Barham and Nasima Begum*

FEBRUARY 2007

Economic & Labour Market Review

Treating research and development as a capital asset Emma Edworthy and Gavin Wallis

Ethnicity data for Jobseeker's Allowance claimants *Karen Grierson*

The ageing workforce: A health issue? Dr Ulrike Hotopp

Understanding statistics on full-time/part-time employment Annette Walling

Patterns of pay: results of the Annual Survey of Hours and Earnings, 1997 to 2006 Clive Dobbs

Regional economic indicators, February 2007 Claire Swadkin and David Hastings

MARCH 2007

Economic & Labour Market Review

Regional analysis of public sector employment Bryce Millard

Linking ASHE and LFS: can the main earnings sources be reconciled? Catrin Ormerod and Felix Ritchie

The measurement and role of government procurement in macroeconomic statistics

Sumit Dey-Chowdhury and Geoff Tily

The launch of the Index of Services as a National Statistic Steve Drew and Darren Morgan

Market sector GVA productivity measures Catherine Marks

Methods explained: Index numbers Peter Goodridge

Future articles

List is provisional and subject to change.

MAY

Revisions to workforce jobs

Characteristics of public sector workers

New measures of UK private sector software investment

Revisions analysis to quarterly current account balance of payments data

Improving the measurement of banking services in the UK National Accounts

JUNE

- Labour disputes in 2006
- Measuring low pay: a summary of developments
- The effects of taxes and benefits on household income
- 100 years of the ABI
- Workshop on measurement of non-market output in education and health