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A Marlanal Stafferday publication

# **Economic Trends**

ISSR 0013-0400

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## In Brief

#### Erratum

The article "An update on development of pilot UK health accounts", published in *Economic Trends* No. 579 February 2002, should have acknowledged two other authors of the article: Beverley Bissett and Genevra Woodgate-Jones, Health and Care Division, Office for National Statistics. The electronic copy of the article, available from the National Statistics website at <a href="http://www.statistics.gov.uk/themes/economy/Articles/General/extracts/downloads/pilot\_health\_accounts\_update\_on\_developmentpdf.pdf">http://www.statistics.gov.uk/themes/economy/Articles/General/extracts/downloads/pilot\_health\_accounts\_update\_on\_developmentpdf.pdf</a> has been amended.

#### **Articles**

This month we feature three articles.

David Baran of the ONS outlines the further developments to the Harmonised Index of Consumer Prices (HICP) from January 2002. This article is the latest in a series reporting on the development of the HICP. The main focus of this article is to describe the methodological developments that came into effect from January 2002. In particular, the extension to coverage of goods and services where financial services expressed as a proportion of the transaction value are included in the HICP for the first time.

Amanda Rowlatt, Tony Clayton and Prabhat Vaze of the ONS discuss where and how to look for the New Economy. First the main criteria that help define 'new economies' are set out and examples are given of changes from the 14th century onwards. The 'new economy' that we face at the start of the 21st century is defined in terms of three main areas:

- the infrastructure necessary to assemble, analyse, communicate and manage information that rests in 'computer mediated networks':
- electronic transactions for purchases of goods and services carried out electronically, including over the internet;
- non-purchase interactions between enterprises or individuals that add value in some way.

After next addressing some basic issues of measuring activity and output, the article discusses how the ONS is tackling specific methodology problems, in each of the three areas.

Brian Stockdale of the Department of Trade and Industry describes the UK Innovation Survey 2001, which is part of a wider third Community Innovation Survey (CIS) conducted by EU Member States. The article presents emerging results from the main survey covering the whole of the UK. The CIS complements other indicators of innovativeness by providing a regular snapshot of innovation inputs and outputs and the constraints faced by UK businesses in their innovation efforts. Most of the survey is concerned with the technological aspects, so innovation activity is first defined. Next, the factors that hamper innovation, the impact of innovation on the business and sources of information used are discussed. Finally aspects of non-technological innovation are mentioned such as the introduction of new management techniques.

### Changes

The article usually published annually in the April issue of *Economic Trends* as "The effects of taxes and benefits on household income" will be published in the May issue this year because of delays in processing Family Expenditure Survey data for 2000–2001.

It will however be released as a News and web release on April 19, 2002.

#### Recent economic publications

#### Quarterly

Consumer Trends: 2001 quarter 3. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p242.asp United Kingdom Economic Accounts: 2001 quarter 3. The Stationery Office, ISBN 0 11 621543 7. Price £26. UK Trade in Goods analysed in terms of industries (MQ10): 2001 quarter 3. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p731.asp

#### Monthly

Financial Statistics: February 2002. The Stationery Office, ISBN 0 11 621495 3. Price £23.50.

Focus on Consumer Price Indices: January 2002. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p867.asp

Monthly Review of External Trade Statistics (MM24): December 2001. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p613.asp

The Stationery Office publications are available by telephoning 0870 600 5522, fax 0870 600 5533, e-mail bookorders@theso.co.uk or online at www.clicktso.com

# Economic Update - March 2002

# Geoff Tily, Macroeconomic Assessment - Office for National Statistics

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#### Overview

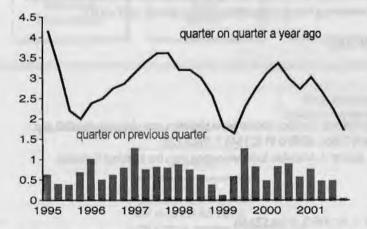
UK GDP growth weakened at the end of 2001 as the global environment continued to deteriorate. The UK manufacturing sector has been in recession for a year, driven strongly by the sharp contraction in the ICT sector but also by ongoing declines in most other industries. While service sector output has remained more robust, it has weakened moderately through 2001. Household demand grew strongly throughout 2001, but has been accompanied by a sharp rise in indebtedness. Investment is now seen to have fallen, and this comes against a background of falling measured profits and concerns again about the indebtedness of the company sector. Exports and imports show the largest declines for ten years. Labour market figures show deterioration over the start of 2001, but remain ambiguous about whether a turning point has been reached. Earnings have slowed substantially over 2001. Producer price data show no inflation at the factory gate, and while consumer prices increased into the latest month, RPIX remains very close to target.

## **GDP** activity

The office for national statistics now estimates that GDP did not grow between the third and fourth quarters of 2001, this follows growth of 0.5 per cent between the second and third quarters (figure 1). Growth comparing the fourth quarter of 2002 with a year ago was 1.7 per cent, the lowest figures since the second quarter of 1999.

On the output side the weaker GDP is mainly driven by a manufacturing sector that has been in recession throughout 2001, but also by a large declining in mining and quarrying (which includes oil and gas extraction) and slightly slowing services growth throughout the year. From the expenditure perspective, low GDP has been driven by falling investment and falling trade.

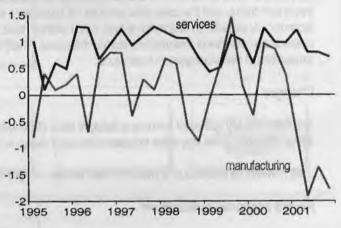
Figure 1 Gross Domestic Product growth



The slowdown in the UK comes alongside a deteriorating global environment. In the third and fourth quarters GDP declined or was weak in the world's three largest economies, Japan, the United States and Germany. From the corporate perspective, increasing numbers of

companies have announced profit warnings and redundancies, credit agencies have reported a higher level of debt default, spreads between corporate and government debt are at high levels and over the past year stock markets have seen large falls in value all over the world. The terrorist attacks on 11 September may have exacerbated a number of these trends, although the falls in stock markets in the wake of the attacks have rebounded to pre-attack levels.

Figure 2 Manufacturing & Services growth, quarter on previous quarter



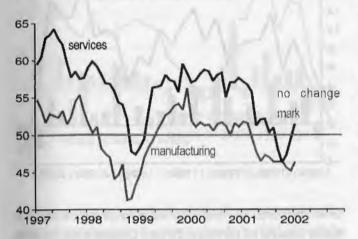
UK GDP growth has for some time been supported by robust growth in the service sector. In the fourth quarter services output grew by 0.7 per cent compared with the previous quarter, down from growth of 0.8 per cent in the third quarter, with the quarterly profile on figure 2 suggesting that growth may have slowed modestly across the year. Growth compared with the same period a year ago was 3.6 per cent, down from 4.5 per cent at the start of 2001.

As figure 2 also shows, declines to the manufacturing sector continue to dominate. UK manufacturing output fell in each quarter of 2001, and in the

fourth quarter output was 5.6 per cent below the level in the fourth quarter of 2000. This annual decline was the largest annual decline since the 1991 recession.

While the decline has been most vigorous in the so-called information and communications technologies sectors (ICT, proxied by the NS series 'electrical and electronic engineering'), which fell by 23 per cent in the year to the fourth quarter, it has not been confined to the ICT sector. Particularly vigorous declines in the year to the fourth quarter of 2001 have also been seen in the 'basic metals and metal products' industry (6.7 per cent), 'textiles, leather and clothing' (12.5 per cent) and the 'other manufacturing' category fell by 1.8 per cent. For these industries, the declines in 2001 follow longer periods of falling or only limited growth.

Figure 3 CIPS manufacturing & services balances



The overall deterioration to zero growth in the fourth quarter has also been influenced by particularly weak gas and oil extraction. Here NS figures show a decline of 6.9 per cent between the third and fourth quarters, and a decline of 1.8 per cent from between the fourth quarter of 2000 and the fourth quarter of 2001. Additionally, quarterly growth in construction output was also estimated as somewhat weaker than previous quarters in 2001, with a decline of 0.2 per cent following growth of over one per cent in each of the first three quarters.

External figures have tended to support weakness in both the manufacturing and services sectors, although some have focussed on improvements in the most recent January figures. Figure 3 shows the Chartered Institute of Purchasing and Supply's indicators for both the manufacturing and services sectors.

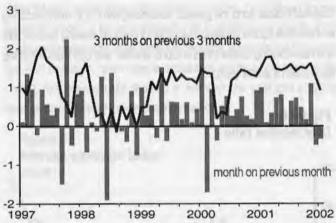
#### Domestic demand

In 2001 GDP growth has been supported by vigorous household demand throughout 2001. National Accounts figures for the fourth quarter showed

household final consumption expenditure increasing by 1.2 per cent, up slightly from growth of 1.1 per cent in the third quarter. Growth compared with the same quarter a year ago was 4.6 per cent.

Fourth quarter demand again appears to have been supported by ongoing high growth in borrowing. Bank of England data showed quarterly growth of gross consumer credit at 3.9 per cent in the fourth quarter, up on growth of 2.4 per cent in the third quarter. This continues the more general trend of strong growth in consumer demand being accompanied and perhaps to some extent sustained by high levels of borrowing. The Bank of England has recently emphasised how the stock of household debt through bank lending is at an unprecedented rate, and has questioned whether households have become too indebted. For example, credit debt figures as a share of disposable income are at close to double their share in 1994. From this perspective household demand is at least partly dependent on both bank and building societies' willingness to lend and to households continuing to be able to meet the interest payments on previous and new borrowing. Many emphasise that with interest rates low, these debt servicing costs continue to remain relatively low.

Figure 4
Retail sales index
growth

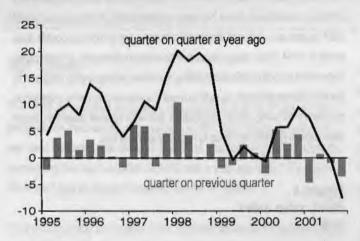


Given the possible sensitivity to borrowing and also to trends in the labour market, there is a possibility of some slowdown to this consumption growth. While this has not been seen in the aggregate national accounts data retail sales figures have shown a slight weakening. The latest figures have shown two consecutive monthly falls, although the first of these followed a particularly vigorous increase into November. The less erratic three-monthly growth rate showed that growth slowed to 0.9 per pent in the three months to January, down from figures that have been consistently above 1.3 per cent in each quarter of 2001 (figure 4).

In contrast to household demand, the latest figures suggest that business investment slowed into the first half of 2001 and started falling in the

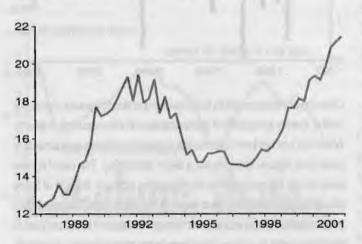
second half of the year. Business investment showed a quarterly decline of 3.2 per cent into the fourth quarter, following a decline of 0.7 per cent in the third quarter (figure 5). Compared with the fourth quarter of 2000, business investment fell by 7.6 per cent – the largest annual decline since the 1991 recession. Furthermore this decline was seen in both the manufacturing and services sectors, with declines in the year to the fourth quarter of 10.8 per cent and 9.2 per cent in manufacturing and services investment respectively.

Figure 5
Business investment growth



External indices echo the general weakness, with BCC manufacturing and services figures showing investment intentions slowing quite rapidly and deteriorating further into the fourth quarter, and CBI manufacturing figures with a similar story.

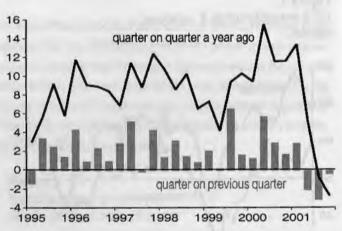
Figure 6 Debt income ratio



The weakening investment comes as profits of companies are in decline, with private non-financial corporations' gross operating surplus in the third quarter of 2001 standing 2.2 per cent below their level in the same quarter of 2000 and the weakness continuing into the fourth quarter. This

figure seems in line with external figures showing sharp increases in the volume of corporate profit warnings. There has also been concern over the overall indebtedness of the private non-financial corporate sector (PNFC). The Bank of England has focussed on gross liabilities as a share of corporate profits. Figure 6 shows overall PNFC liabilities excluding equity as a share of gross operating surplus, with figures showing such a measure of indebtedness at a historic high. It may be that investment is faltering as borrowing conditions become more stringent, and companies, as well as financial organisations, review the sustainability of overall indebtedness.

Figure 7 Import of goods growth



Government output saw quarterly growth of 0.2 per cent into the fourth quarter following 0.3 per cent in the third. Comparing with the same quarter a year ago growth was 2.8 per cent. This output figure remains considerably weaker than current price government expenditure, which grew by 6.4 per cent in the year to the fourth quarter. Apart from inflation, the figures diverge because present increases in cash expenditure are unlikely to have an immediate impact on government output. Reflecting the increased cash expenditure and also tax revenues that may be weakening a little, public sector net borrowing figures show that so far in 2001-02 the government surplus is less than it was in the same period of 2000-1. The net repayment in April 2001 – January 2002 was £4.5 billion compared with the repayment of £15.6 billion in the same period of the previous financial year.

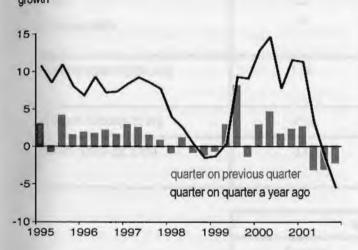
Finally on domestic demand, import data has showed a substantial decline. In the year to the fourth quarter imports fell by 2.8 per cent, the largest annual decline since the 1991 recession (figure 7). The quarterly decline in the fourth quarter at 0.2 per cent was an improvement on the decline of 2.5 per cent in the third quarter, but this was supported by very high and potentially erratic car imports and an increase in service imports due to British tourism overseas. Monthly figures for trade in goods also showed a relatively large fall into December.

#### Overseas demand

In line with the global deterioration, UK exports growth declined sharply throughout 2001, with sales falling to countries throughout the world.

In the year to quarter four overall exports declined by 5.4 per cent, the largest decline since the 1980-81 recession. As with imports the decline between the third and fourth quarters was weaker than previous declines (figure 8), but again this may have been due to erratic movements, with again particularly vigorous falls of goods exports into December.

Figure 8
Export of goods
growth



The medium term movements of imports and exports are such that the balance of trade has been on a widening trend since 1997, although the deficit narrowed slightly to £5.0 billion in the fourth quarter from £5.5 billion in the third quarter. The current account deficit also saw a recovery in the third quarter but this was largely due to a rebate from the European Union due to previous under-spending; third quarter figures show a current account deficit of £2.0 billion, down from 4.6 billion in the second quarter. More generally, the UK balance of payments has been negative in every year since 1985. The International Investment Position, reflecting the cumulative effect of these deficits, shows net financial liabilities of the UK at £69.8 billion, a relatively large figure historically speaking, although improved on figures of £133.4 billion in 1999.

#### Labour Market

The latest labour market data ontinues to send mixed messages about whether the labour market has reached a turning point.

According to the labour force survey data the number of people employed increased by 80,000 between the third and fourth quarters of 2001. Similarly the employment rate improved slightly from 74.5 to 74.6 per cent between the third and fourth quarters of 2001, however this rate was

below the rate at the start of the year (figure 9).

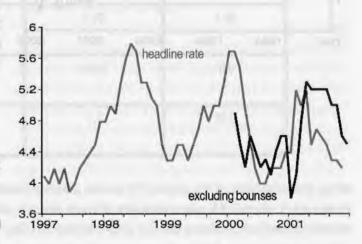
The ILO unemployment rate now shows two consecutive quarters of small increases to unemployment, with the rate increasing from 5.0 per cent in the second quarter to 5.2 per cent in the fourth quarter (figure 9 as well). The claimant count employment rate was 3.2 per cent in each month between October and January, up marginally from 3.1 per cent in August and September.

Figure 9 Labour Force Survey



Other figures broadly support a weakening position. Employment figures based on employer surveys showed a fall in employment into the third quarter, manufacturing employment is declining at its steepest rate since the 1991 recession, hours data recorded a fall into the latest three month period, redundancy data showed a rise over the year and external sources also reported a deteriorating position.

Figure 10
Average earnings index growth



The average earnings index shows slowing earnings, with the headline rate declining sharply into December to 3.3 per cent from 4.1 per cent in

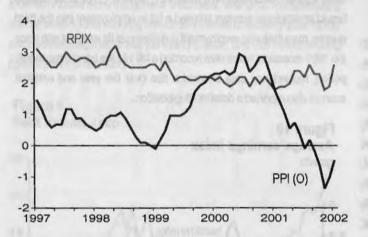
November. The figures excluding bonuses show earnings inflation also weakening (figure 10). While the low inflation is partly due to falling bonuses, particularly in the city, they may also indicate a less 'tight' labour market.

#### **Prices**

Figure 11 shows that price data was more mixed in January 2002. On one hand, producer price output inflation continued to show a fall of 0.5 per cent on the year, despite recent rises to oil prices. On the other hand, RPIX showed a sharp increase to 2.6 per cent from 1.9 per cent in December.

The weak producer price inflation follows perhaps from the deteriorating global conditions, with over-supply becoming a significant phenomenon. There is concern that the pick-up in RPIX inflation, even though it remains very close to target, may be a result of the ongoing strong household demand. It should be noted though that a number of the items that were behind the increase to RPIX, such as high vegetable prices, TV licence fee increases and gas price increases might be thought to be less closely related to high consumer demand.

Figure 11 Prices



# Forecasts for the UK Economy

# A comparison of independent forecasts, February 2002

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 2002 and 2003, updated monthly.

	Ind	ependent Forecasts for 200	2
	Average	Lowest	Highest
GDP growth (per cent)	1.9	0.4	2.7
Inflation rate (Q4: per cent) - RPI	2.3	1.3	4.0
- RPI excl MIPs	2.2	1.6	3.1
Unemployment (Q4, mn)	1.08	0.90	1.30
Current Account (£ bn)	-21.9	-30.9	-10.0
PSNB *(2001-02, £ bn)	8.4	-1.6	15.4
Marine State of the State of th	the second	Visioning the San	to the Alexand

Independent Forecasts for 2003								
Average	Lowest	Highest						
2.6	-0.1	3.4						
2.8	1.6 1.7	4.1 3.3						
1.07	0.73	1.35						
-23.0	-38.6	-8.0						
13.3	1.5	22.0						
	2.6 2.8 2.4 1.07	Average         Lowest           2.6         -0.1           2.8         1.6           2.4         1.7           1.07         0.73           -23.0         -38.6						

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 27 variables and is published monthly by HM Treasury, available on annual subscription, price £75. Subscription enquiries should be addressed to Miss B K Phamber, Public Enquiry Unit, HM Treasury, Room 88/2, Parliament Street, London SW1P 3AG (Tel: 020-7270 4558). It is also available at the Treasury's internet site: http://www.hm-treasury.gov.uk.

<sup>\*</sup> PSNB: Public Sector Net Borrowing.

# International Economic Indicators - March 2002

James Hope, Macroeconomic Assessment - National Statistics

Gladys Asogbon, Marcoeconomic Assessment - National Statistics

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#### Overview

The slowdown in the world's major economies is continuing, with several countries seeing unemployment increasing. Consumer price and producer price inflation fell considerably in the major economies in the third and fourth quarters of 2001. Quarterly GDP growth in the third quarter was negative in Germany and weak in Italy, although it picked up in France. The US economy showed positive quarterly GDP growth in 2001 quarter four after experiencing negative growth in the previous quarter. The Japanese economy remained weak in 2001 quarter three and GDP growth for the quarter was negative. Industrial production is in severe decline, unemployment is high and price deflation continues.

#### **EU15**

EU GDP growth remained weak, with quarterly growth of 0.3 per cent in the third quarter of 2001, up slightly on the 0.2 per cent growth rate seen in the second quarter.

Demand data shows the main source of the slowdown has been a sharp deterioration in investment compared with the previous year, accompanied by sharp weakening in both exports and imports.

Index of Production data shows the potential source of the slowdown from the output perspective, with quarterly growth continuing to contract, down 0.8 per cent in 2001 quarter three, after a fall of 1.1 per cent in the previous quarter. The monthly figures are more erratic, with an increase of 1.0 per cent in August, followed by falls of 0.5 per cent, 1.1 per cent and 0.6 per cent, in September, October and November respectively. Growth on an annual basis was negative at minus 0.9 per cent in the third quarter, down further from the weak growth of just 0.3 per cent in the second quarter.

The fourth quarter of 2001 saw a fall in producer prices, down 1.1 per cent, after growing by 0.7 per cent in the third quarter. Growth in consumer prices remained weak, with the rate dropping from 2.5 per cent in the third quarter to 2.0 per cent in the fourth quarter. Latest monthly figures indicate that deflationary pressures on the producer side strengthened in November and remained strong in December. On the consumer side, inflation in November and December was just below the ECB target of 2 per cent, which, if sustained, might offer room for interest rate cuts.

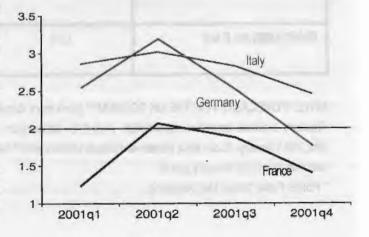
EU employment data continues to show growth but, the rate continues to fall, annual growth in the year to the third quarter was 0.9 per cent, well below the rates seen in 1999 and 2000. Unemployment edged up to 7.8 per cent in the fourth quarter. Reflecting this more subdued labour

market, EU average earnings growth fell to 2.5 per cent in the third quarter of 2001, their lowest level since the second quarter of 1999.

### Germany

German GDP fell in the third quarter by 0.1 per cent after zero growth in the second quarter. The weakness was evident amongst all components of GDP except exports. Households made a negative contribution of 0.1 per cent to growth, as did government, whilst investment made a negative 0.2 per cent contribution. Stocks resumed their decline after pausing in the previous quarter and made a large negative contribution of 0.8 per cent. Trade was the only area supporting German GDP in the third quarter. Exports made a positive contribution of 0.4 per cent, but imports, by declining contributed the most, adding 0.7 per cent to GDP growth in the third quarter. All told, trade contributed 1.1 per cent to growth against a negative 1.2 per cent from the other components. Echoing weakness in household demand, third quarter growth in sales was negative, falling by 0.7 per cent on the previous quarter, on an annual basis they were only up 0.7 per cent.

Figure 1 CPI Germany, France & Italy percentage change, quarter on quarter a year ago



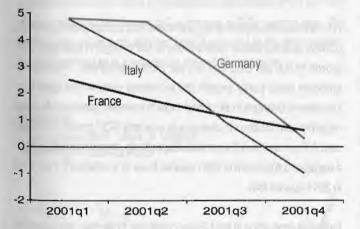
The decline in production slowed in the third quarter of 2001, with a fall of 0.3 per cent following a decline of 1.7 per cent in the previous quarter. On an annual basis growth was negative, declining by 1.2 per cent, the largest decline since the fourth quarter of 1995.

Perhaps reflecting the slowdown in activity but likely to be compounded by oil price falls, producer and consumer prices saw further significant falls in 2001 quarter four. Consumer price inflation slowed to 1.8 per cent, down from 2.5 per cent in quarter three (figure 1). This is the first quarter since the third quarter of 2000 that consumer price inflation has been within the ECB target zone. Producer price inflation saw a larger fall from 2.6 per cent in quarter two to just 0.3 per cent in 2001 quarter four (figure 2).

The slowdown in output in 2001 appears to be feeding through into the unemployment figures. Unemployment rose by a perhaps modest 0.1 per cent, for the third quarter in a row and is now at 8.0 per cent in the fourth quarter (figure 3). Similarly, employment growth was very weak in the third quarter, up only 0.1 per cent on the same quarter a year ago.

In line with a deteriorating labour market, annual earnings growth weakened further. Earnings grew by just 1.1 per cent in the third quarter which, after accounting for inflation in the quarter, implied a fall in real earnings (figure 4).

Figure 2
PPI Germany, France & Italy
percentage change, quarter on quarter a year ago



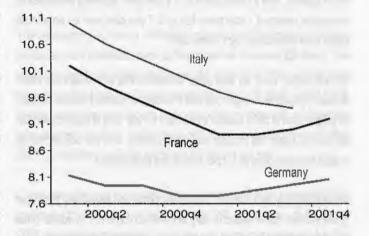
#### France

Data for the third quarter of 2001 show the French economy picking up slightly after two weaker quarters. Quarterly GDP growth in 2001 quarter three was up 0.5 per cent after only growing by 0.2 per cent in the second quarter.

A strong 0.6 per cent contribution from household consumption mainly

drove the 2001 quarter three performance. Government contributed 0.2 per cent, while the investment contribution was 0.1 per cent and stocks made a negative contribution of 0.4 per cent. Trade made a 0.1 per cent contribution, with a 0.3 per cent negative contribution of exports being offset by a 0.4 per cent fall in the contribution of imports. On the other hand, sales continue to fall, down by 0.6 per cent in the fourth quarter having declined by 0.7 per cent in the third quarter.

Figure 3 Unemployment: Germany, France & Italy percentage of total workforce



Following GDP, growth in quarterly industrial production improved in 2001 quarter three, growing by 0.5 per cent, an improvement on the previous quarter which saw a decline of 0.1 per cent. Annual growth was down to 1.1 per cent in the third quarter. Overall, France's production continues to remain higher than its main competitors.

The inflationary position in France has improved, with respect to the ECB target, in the fourth quarter. Consumer price inflation fell to 1.4 per cent, down from 1.9 per cent in the previous quarter (figure 1). Producer price inflation was 0.6 per cent in the fourth quarter, down from 1.1 per cent in the third quarter (figure 2).

Despite the recent slight pick-up seen in quarter three GDP growth, unemployment in France may now be deteriorating. Unemployment rose for the second successive quarter and this time by 0.2 percentage points, taking the rate to 9.2 per cent in the fourth quarter of 2001 (figure 3). Employment growth continued its slowdown in the third quarter of 2001, with the annual rate of 1.5 per cent the lowest since the third quarter of 1998.

Reflecting the general slowdown, annual earnings growth remained at 4.2 per cent in the third quarter, although falling inflation meant that real wages grew more in the third quarter than in the second quarter of 2001 (figure 4).

### Italy

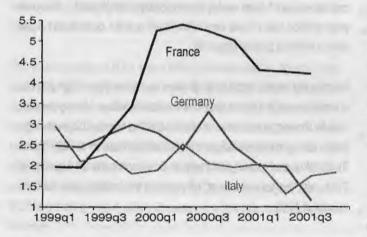
The Italian economy grew by just 0.2 per cent in the third quarter of 2001, after posting zero growth in the previous quarter. However, this was driven only by an increase in stockbuilding.

Households, government and investment all failed to contribute to growth in the third quarter. Trade continued to be weak, with a negative contribution of 0.3 per cent due to a particularly large decline in the contribution of exports. Inventories were the only real driver of growth in the quarter, with a contribution of 0.4 per cent. Echoing weakness in consumer demand, retail sales fell by 0.7 per cent and on an annual basis they were down by 1.9 per cent.

On the output side, as with other countries this slowdown has been driven by production. Again, as with France the quarterly decline slowed, to 0.5 per cent in 2001 quarter three from 1.7 per cent in quarter two. On an annual basis the decline has deteriorated, with the contraction in output now standing at 1.2 per cent in the third quarter.

As in Germany and France, consumer price and especially producer price inflation have eased in Italy at the end of 2001. Consumer price inflation fell to 2.5 per cent in the fourth quarter (figure 1). Producer price inflation has seen an even more pronounced slowdown, with prices falling by 1.0 per cent in the fourth quarter (figure 2). Latest monthly data shows consumer price inflation remaining steady at 2.4 per cent in January 2002.

Figure 4
Earnings: Germany, France & Italy quarter on quarter a year ago



Reflecting the weakening activity, annual growth in employment slowed further, to 1.1 per cent in the fourth quarter of 2001 from 1.8 per cent in quarter three. The rate for 2001 as a whole was, at 2.0 per cent, up slightly on the 1.9 per cent rise recorded in 2000. On the other hand, unemployment was down to 9.4 per cent of the workforce in the third

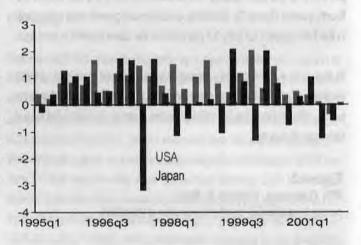
quarter and the rate in October was lower still, at 9.3 per cent, but this data is now increasingly out of date (figure 3).

Annual earnings growth continues to be weak, with growth in the fourth quarter of 2001 of 1.8 per cent, although this is the second successive quarter of slightly rising earnings growth (figure 4).

#### USA

2001 quarter four data shows the US economy returning to positive quarterly GDP growth of 0.1 per cent after negative growth of 0.3 per cent in the third quarter (figure 5). Annual growth for 2001 as a whole was 1.1 per cent compared to 4.1 per cent the previous year.

Figure 5
GDP: USA & Japan
percentage change, quarter on previous quarter



Private final consumption and government final consumption both made positive and increased contributions to the change in quarterly GDP growth of 0.9 per cent and 0.2 per cent respectively. The war on terrorism could partly explain the increased government spending. Investment, changes in stock and exports however, continued to make negative contributions to changes in quarterly GDP growth of 0.3 per cent, 0.6 per cent and 0.4 per cent respectively. Imports increased from a negative 0.6 per cent in 2001 quarter three to a negative 0.1 per cent in 2001 quarter four.

Industrial production in the US has continued to decline, with quarterly growth in 2001 quarter four of negative 1.9 per cent. 2001 quarter on quarter a year ago industrial production growth shows a decline of 6.0 per cent for quarter four, the largest decline since 1984 quarter four. Annual industrial production figures show a decline of 3.7 per cent for 2001 having grown by 4.5 per cent the previous year. Continuing falls in manufacturing output, low capacity utilisation undercutting the incentive for new investment and previous over-investment may be reasons for these sharp declines.

Retail sales continues to show considerable improvement, with quarterly growth in 2001 quarter four of 4.2 per cent compared with 0.6 per cent in the previous quarter. Cheap finance deals on cars appear to be partly responsible for this increased consumption. Month on month a year ago figures also reflects this, with growth in December of 6.9 per cent. In spite of this, inflationary pressures remain subdued. Consumer prices continued to slow, with annual consumer prices slowing from 1.8 per cent in 2001 quarter three to 1.6 in quarter four and producer prices still negative and increasingly so, declining by 1.6 per cent in 2001 quarter three and 2.2 per cent in the fourth quarter.

Having declined considerably in the second half of 2001, unemployment figures are showing a slight improvement, with the rate now standing at 5.6 per cent in January 2002 down from 5.8 per cent in December 2001(figure 6). Earnings growth that had remained subdued for 2001 has also improved significantly from 3.4 per cent in the last seven months of the year to 4.2 per cent in January 2002.

#### Japan

The latest quarter three data show that the Japanese economy contracted by 0.5 per cent following a decline of 1.2 per cent in 2001 quarter two (figure 5). Private final consumption made a very large negative contribution to change in GDP of 0.9 per cent as consumers refuse to spend in the face of persistent price deflation and job losses (echoed by a very substantial decline in retail sales). Exports and changes in stock also made negative contributions of 0.3 per cent and 0.1 per cent respectively. The position is moderated slightly by the positive contribution made by investment expenditure of 0.4 per cent from a negative contribution of 0.5 per cent in 2001 quarter two. The contribution of imports declined by 0.4 per cent in the third quarter, having declined by 0.2 per cent in the previous quarter.

Figure 6 Unemployment: USA & Japan percentage of total workforce



Japanese industrial production is still in decline, although the latest data shows that the rate of decline may have slowed. The quarterly figures show that the decline eased to a contraction of 2.3 per cent in 2001 quarter four, from a contraction of 4.0 per cent in the previous two quarters. However, the monthly figures still show a contraction in the twelve months to December 2001 of 12.8 per cent from a decline of 13.1 in the previous month. This substantial deterioration may reflect the structure of the Japanese economy. The economy's dependence on the high tech industry make it particularly vulnerable to the vagaries of that industry and with the present downturn in many other economies, it is likely to experience difficulties in its trade position.

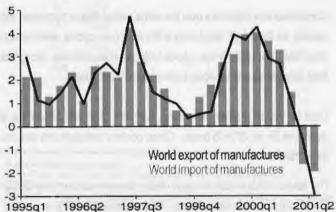
The weakening economy, reflected mainly by deteriorating industrial production and persistent price deflation has led to severe job loses. The unemployment rate presently stands at 5.6 per cent of the workforce in December 2001 (figure 6), unprecedented since at least before 1960. Subsequently, earnings growth also contracted considerably with negative annual growth in 2001 quarter four of 0.5 per cent, slightly worse than 2001 quarter three, where earnings fell by 0.4 per cent.

Consumer and producer prices continue to fall and at an increasing rate, continuing the deflation that began in mid-1998. Annual growth figures for 2001 quarter four show that consumer and producer prices declined by 1.0 per cent and 1.5 per cent respectively.

#### World Trade

With national figures showing weakness, world trade figures are now showing contraction in global trade, albeit at a lag due to later production of these figures. Total trade in manufactures for 2001 quarter two contracted by 2.4 per cent and total trade in goods contracted by 1.9 per cent compared with contractions of 1.1 per cent and 0.6 per cent respectively in the previous quarter.

Figure 7
World import & export of manufactures
percenatges changes, quarter on previous quarter



A closer look at the breakdown of the total trade figures show that total export of manufactures contracted by 2.9 per cent in 2001 quarter two, following a decline of 0.6 per cent in the first quarter of 2001 (figure 7). OECD exports of manufactures declined by a significant 3.3 per cent compared to quarter one where the decline was only 0.2 per cent. Export of manufactures by non-OECD countries declined by 1.7 per cent in the same period. Exports of goods also show a similar picture of increasing contraction for both OECD and non-OECD countries.

Imports have also contracted considerably. Total imports of manufactures contracted by 1.6 per cent in 2001 quarter one and 1.9 per cent in 2001 quarter two (figure 7). OECD imports of both manufactures and goods declined by 2.4 per cent and 1.8 per cent respectively in the second quarter of 2001. The contraction for non-OECD imports of manufactures eased slightly in 2001 quarter two to 0.5 per cent from a decline of 1.0 per cent in the previous quarter.

On a general note, the slowdown in trade for both OECD and non-OECD countries in recent quarters reflects the sharp slowdown of the US economy, the fragility of the Japanese economy and the slowdown in Europe.

#### Notes

The series presented here are taken from the OECD's Main Economic Indicators and are shown for each of the G7 (except the UK) economies and for the European Union (EU15) countries in aggregate. The definitions and methodologies used conform to SNA 93.

Comparisons of indicators over the same period should be treated with caution, as the length and timing of the economic cycles varies across countries. For world trade, goods includes manufactures, along with food, beverages and tobacco, basic materials and fuels.

Data for EU15, France, Germany, Italy, the USA and Japan are all available on an SNA93 basis. Cross country comparisons are now more valid.

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			C	ontribution	to change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk <sup>†</sup>	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage c	hange on	a year ear	lier											2000
1995	ILGB 2.5	HUDS 1.1	HUDT 0.2	HUDU 0.6	HUDV 0.2	HUDW 2.3	HUDX 2.0	ILGV 3.7	ILHP -0.3	HYAB 3.1	ILAI 4.5	ILAR 3.9	ILIJ 0.6	GADR 10.7
1996	1.7	1.2	0.3	0.4	-0.5	1.5	1.2	0.5	0.6	2.5	0.7	3.8	0.5	10.8
1997	2.6	1.3	0.2	0.7	0.1	3.1 2.1	2.7 3.1	4.0 3.7	1.5	1.8	0.9 -0.4	3.1 2.8	1.0	10.6
1998 1999	2.9 2.6	1.9	0.3	1.3	-0.2	1.8	2.3	1.8	2.0	1.2	-0.4	2.7	1.7	9.2
2000	3.5	1.8	0.4	1.0	51	4.1	3.7	4.7	2.3	2.5	4.8	3.3	1.7	8.2
1998 Q4	2.1	2.0	0.4	1.1	0.1	0.9	2.4	1.3	2.9	1.4	-1.7	1.8	2.0	9.6
1999 Q1	2.0	2.1	0.5	0.9	-0.3	0.7	1.9	0.5	2.3	1.2	-1.8	2.8	1.8	9.5
Q2	2.2	1.9	0.4	0.9	-0.2	1.1	1.9	0.6	1.2	1.1	-1.0	1.8	1.7	9.3
Q3	2.7	2.0	0.4	1.0	-0.3	2.1	2.5	2.1	1.9	1.2	0.5	2.7	1.9	9.1
Q4	3.5	2.0	0.5	1.1	-	3.2	3.2	4.2	2.8	1.6	2.4	3.6	1.7	8.8
2000 Q1	3.7	1.8	0.4	1.1	-0.1	3.8	3.3	4.2	2.4	2.1	4.1	2.7	1.6	8.6
Q2	3.9	2.1	0.4	1.2	0.1	4.1	4.0	5.7	3.1	2.3	4.9	3.6	1.8	8.3
Q3 Q4	3.3	1.7	0.3	1.0 0.9	-0.2	4.2	4.0 3.7	4.8	2.1 1.6	2.8	5.1 5.1	3.5 3.5	1.6	8.1 7.9
2001 Q1 Q2	2.6 1.9	1.3	0.4	0.5	-0.3	3.2 1.8	1.3	3.8 0.3	1.8	2.7	3.3 2.5	3.5 3.4	1.6	7.8
Q3	1.6	1.3	0.4	-0.1	-0.3	0.2	-0.2	-0.9	1.2	2.5	0.7	2.5	0.9	7.7
Q4	**		4.		- 55		**	**	34	2.0	-1.1			7.8
2001 Feb			10			**		3.9	0.9	2.7	3.4			7.8
Mar			**	17	**		hw	2.7	2.8	2.6	2.9	,,		7.7
Apr May	.,	**	**		"		14	0.7 -0.5	1.8	2.8	2.9			7.7 7.7
Jun					20			1.0	2.8	2.9	2.1			7.8
Jul								-1.0	0.9	2.7	1.2			7.7
Aug	**	**	**		Ţ.a	**		-0.3	1.8	2.7	0.9		**	7.7 7.7
Sep	44	41						-1.2	0.9	2.3	0.1		**	7.7
Oct	14	**	+1	"	e4//C	.41	••	-2.4 -3.8	0.9	1.9	-0.7 -1.3	.,	- 22	7.8
Nov Dec		**	**	14			.,	-3.0	0.0	1.9	-1.1			7.8 7.8
2002 Jan		*1		1+	+=		.,	**			**	**		
Percentage c	hange on	previous	guarter											
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ				ILIT	
1998 Q4	0.2	0.5	0.1	0.2	T	-0.3	0.4	-0.3	0.3				0.3	
1999 Q1	0.7	0.7	0.2	0.3	-0.2	0.4	0.6	0.2	0.7			17	-0.3	
Q2	0.7	0.1	-	0.2	-	0.9	0.5	0.9	-0.7				1.1	
Q3 Q4	1.1	0.6	0.1	0.4	-0.2 0.3	1.1	1.0	1.3	1.6				0.9	
2000 Q1 Q2	0.9	0.6	0.1	0.3	-0.3	1.0	0.7	0.3	0.3				-0.4	
Q3	0.9 0.5	0.4	0.1	0.3	0.2 -0.2	1.1	1.2	0.4	0.6				0.7	
Q4	0.6	0.2	0.1	0,1	0.1	8.0	0.7	1.2	0.6				0.3	
2001 Q1	0.6	0.5	0.1	-0.1	-0.1	-	-0.2	-0.2	0.9				-0.6	
Q2	0.2	0.4	0.1	100	-0.1	-0.3	-0.1	-1.1	-0.4				0.7	
Q3 Q4	0.3	0.2	0.1	-	-0.2	-0.4	-0.5	-0.8	-				0.5	
	hanaa an	nroulaus.	month.	"		**								
Percentage c	nange on	previous	month					ILKF	ILKP					
2001 Jan Feb								-1.1 0.7	0.9 -0.9					
Mar								-0.4	0.9					
Apr May								-1.0	-0.9					
May Jun								-0.3 0.7	0.9					
Jul								-1.6	-0.9					
Aug Sep								1.0 -0.5	0.9 -0.9					
Oct								-1.1	-0.9					
Nov								-0.6	1.8					
Dec	,								**					
2002 Jan									**					

GDP = Gross Domestic Product at constant market prices GDP = Gross Domestic Product at constant market prices
PFC = Private Final Consumption at constant market prices
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ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
Imports = Imports of goods and services
Imports = Impute tial Production

Sales = Retail Sales Volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage
and treatment vary among countries
Empl = Total Employment not seasonally adjusted

Unempl = Standardised Unemployment rates: percentage of total labour force

			Co	ntribution to	change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empt <sup>1</sup>	Unempl
Percentage c	hange on	a year ear	lier											
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1995	1.8	1.3	0.3	-0.1	0.3	1.4	1.3	0.9	1.1	1.7	1.9	4.0	0.1	8.2
1996 1997	0.8	0.5	0.3	-0.1 0.2	-0.4	1.3	0.8	0.7	-1.1	1.4	-1.2	3.5	-0.4	8.9
1998	1.5	0.4	0.1	0.5	0.5	2.9 1.7	2.0	3.7 4.1	-1.7 1.0	1.9	1.1 -0.4	1.5 1.8	-0.3 1.5	9.9
1999	1.7	1.7	0.3	0.8	-0.4	1.5	2.3	1.6	0.3	0.6	-1.0	2.6	0.8	8.6
2000	3.2	0.9	0.2	0.7	0.3	4.2	3.1	6.2	1.2	1.9	3.4	2.7	0.5	7.9
1998 Q4	0.6	1.4	0.5	-	0.2	0.1	1.6	1.1	2.0	0.4	-1.7	2.2	2.0	8.9
1999 Q1	0.7	1.8	0.4	0.3	-0.4	0.1	1.6	-0.5	1.4	0.3	-2.4	2.5	1.1	8.8
Q2	1.0	1.7	0.2	0.7	-0.5	0.7	1.9	0.5	-0.6	0.5	-1.7	2.4	0.3	8.7
Q3	2.0	1.7	0.3	1.0	-0.5	2.0	2.5	2.0	-0.4	0.7	-0.7	2.7	1.4	8.6
Q4	3.0	1.6	0.4	1.2	-0.4	3.3	3.0	4.2	0.9	1.0	0.6	3,0	0.7	8.4
2000 Q1	2.9	0.6	0.3	0.9	-0.5	4.3	2.6	5.2	-0.3	, 1.7	2.3	2.8	0.4	8.1
Q2	4.3	1.8	0.4	0.8	0.3	4.0	2.8	6.7	4.1	1.6	2.6	2.4	0.6	7.9
Q3	3.2	1.0	0.1	0.6	0.3	4.2	3.0	7.1	1.4	2.0	3.7	3.3	0.3	7.9
Q4	2.5	0.4	0.2	0.4	1.1	4.5	4.1	6.0	-0.2	2.4	4.5	2.4	0.5	7.7
2001 Q1	1.8	0.9	0.3	-0.4	0.3	2.9	2.2	5.6	0.8	2.5	4.8	2.0	0.4	7.7
Q2	0.6	0.7	0.3	-0.8	-0.4	2.4	1.6	1.3	0.1	3.2	4.7	2.0	0.2	7.8
Q3	0.4	0.7	0.3	-1.2	-1.1	1.7	-	-1.2	0.7	2.5	2.6	1.1	0.1	7.9
Q4				.,	*1	**	++	н	**	1.8	0.3			8.0
2001 Feb								6.0	-1.7	2.6	4.7			77
Mar					**	**	**	3.6	2.0	2.5	4.9			7.7 7.8
Apr					**	**	**	1.4	0.1	2.9	5.0	**	**	7.8
May				**			44	0.2	-0.6	3.5	4.6			7.8
Jun		14	.,	**		**		2.2	0.7	3.1	4.3	-4		7.9
Jul								40		0.0				-
Aug		"	"	4.9			**	-1.9 -0.1	0.4	2.6	3.1 2.7		**	7.9
Sep	**	**			**	**		-1.5	0.9	2.1	1.9	**		7.9 7.9
Oct						**		-3.2	-1.5	2.0	0.6	**	**	8.0
Nov	**				44	**		-4.1	_	1.7	0.1	**		8.0
Dec				.,		**	**	**	++1	1.7	0.1	•	P1	8.0
2002 Jan	**		34.	**	**		**	**	**		**		**	
Percentage c	hange on	previous	uarter											
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ	
1998 Q4	-0.1	0.6	-	-0.2	-	-0.4	0.1	-1.0	0.5				1.2	
1999 Q1	1.1	1.2	0.2	0.6	-0.3	0.4	0.9	0.3	0.7				4.5	
Q2	-0.2	-0.5	-0.1	0.0	-0.3	1.1	0.9	1.0	-2.9				-1.5	
Q3	1.2	0.5	0.2	0.4	-0.2	0.9	0.6	1.7	1.3				0.7	
Q4	0.8	0.4	0.1	_	0.2	0.8	0.6	1.1	1.8				0.5	
0000 04	4.0	0.0												
2000 Q1 Q2	1.0	0.2	0.1	0.3	-0.4 0.7	1.4	0.5	1.2	-0.5 1.5				-1.8	
Q3	0.1	-0.2	-0.1	0.1	-0.1	0.8	1.0	2.5	1.5				0.9	
Q4	0.2	-0.3	0.2	-0.2	0.9	1.1	1.6	2.1	-1.3 0.1				0.7	
2001 01		0.7	0.0											
2001 Q1 Q2	0.4	0.7	0.2	-0.5 -0.3	-1.2	-0.1	-1.3	0.9	0.5				-1.8	
Q3	-0.1	-0.1	-0.1	-0.2	-0.8	0.3	0.4 -0.7	-1.7 -0.3	0.8				0.7	
Q4			-0.1	-0.2	-0.0	0.4	-0.7	-0.3	-0.7				0.6	
Percentage c	hange on	nrevious	nonth											
	ilange on	providuo i						ILKC	ILKM					
2001 Jan								1.1	0.9					
Feb Mar								0.1	-1.6					
Apr								-1.5 -0.8	1.6					
May								-0.0	0.6					
Jun								0.2	-0.5					
Test														
Jul Aug								-1.3	-0.6					
Sep								2.0 -1.4	0.5					
Oct								-1.4	-0.8 -2.0					
Nov				L.				-1.3	1.9					
Dec														
2002 Jan														

GDP = Gross Domestic Product at constant market prices PFC = Private Final Consumption at constant market prices
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Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries

Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce

			Co	ntribution t	o change In	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI <sup>1</sup>	Earnings	Empl <sup>2</sup>	Unempl
Percentage c	hange on a	year earl	ler							****				0.00
	ILFZ	HUBK	HUBL	HUBM 0.4	HUBN 0.5	HUBO 1.7	HUBP 1.6	ILGT 2.4	ILHN	HXAA 1.7	ILAG 5.2	ILAP 2.4	ILIH 0.9	GABC 11.9
1995 1996	1.9	0.8	0.5	0.4	-0.6	0.7	0.3	0.9	-0.3	2.0	-2.7	2.6	0.1	12.4
1997	1.9	0.1	0.5		0.1	2.8	1.5	3.8	1.0	1.2	-0.6	2.6	0.7	12.3
1998	3.5	2.0	0.5	1.3	8.0	2.1	2.6	5.3	2.6	0.8	-0.9 -1.6	2.2	1.5	11.8
1999	3.0	1.7	0,5	1.2	-0.4									
2000 2001	3.5	1.6	0.5	1.2	0.4	3.5	3.7	3.4	0.6 -0.2	1.7	2.1 1.5	5.2	2.6	9.7 9.0
1998 Q4	2.8	2.0	-	1.3	0.6	0.6	1.7	2.4	2.7	0.4	-2.3	2.0	1.8	11.7
1999 Q1	2.7	1.8	0.3	1.4	-0.1	0.1	0.7	0.8	3.3	0.2	-2.7	2.0	1.9	11.7
Q2	2.5 2.9	1.5	0.4	1.1	-0.4 -0.8	0.4	0.5	0.5	1.8	0.4	-2.3 -1.6	2.7	2.0	11.4
Q3 Q4	3.7	1.7	0.6	1.1	-0.2	2.1	1.8	4.2	2.0	1.0	-	3.4	2.4	10.6
2000 Q1	3.7	2.0	0.5	1.1	0.2	3.1	3.1	4.3	2.1	1.5	1.2	5.2	2.5	10.2
Q2	3.7	1.8	0.5	1.2	0.1	3.7	3.6	3.8	1.4	1.5	2.1	5.4	2.7	9.8
Q3	3.4	1.5	0.6	1.2	1.0	3.3 4.0	4.2	3.5	-1.4	1.9 1.9	2.7	5.2 5.0	2.6 2.6	9.5
Q4	3.2	1,1	0.6											
2001 Q1	2.8	1.5	0.5	1.1	-0.7 -0.4	2.7	1.0	1.7	1.4 -0.4	1.2	2.5 1.8	4.3	2.4 1.9	8.9
Q2 Q3	2.1 1.9	1.4	0.5	0.6	-1.2	-0.1	-0.6	1.1	-0.4	1.9	1.1	4.2	1.5	9.0
Q4	**		"	14		••	10		0.7	1.4	0.6	**		9.2
2001 Feb			**			,.		2.3	0.3	1.3	2.6			8.9
Mar			**			.,		1.7	1.8 -0.5	1.2	2.4		**	8.9
Apr May	"				"			1.8	-2.4	2.3	1.8			8.9
Jun	**		14	**	"		**	1.8	1.9	2.1	1.7	4+		8.9
Jul	**	**		**		**		1.4	-1.0	2.1	1.3	14		9.0
Aug	**	+4			*1	**	.,	1.4	-0.1 -1.2	1.9	1.1		44	9.0
Sep Oct	**					**		-0.5	-1.1	1.8	0.6		.,	9.1
Nov			**				"	-0.9	-0.5	1.2	0.6		49	9.2
Dec	**	"	**				.,		-0.6	1.4	0.4	**	++	9.3
2002 Jan		**	**	**	++	,	**	hē.		••	i.	**		***
Percentage c	hange on p	revious q HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
1998 Q4	0.3	0.5	0.1	0.1	0.2	-0.6	-	-0.3	1,1				0.4	
1999 Q1	0.8	0.2	0.2	0.4	-0.3	0.2	2	0.2	0.5				0.6	
Q2	0.9	0.5	0.1	0.3	-0.1	0.5	0.4	1.0	-0.4				0.5	
Q3	0.9	0.6	0.1	0.2	-0.5	1.2	0.6	1.4	1.1				0.7	
Q4	1.1	0.5	0.2	0.2	0.7	0.2	0.7	1.5	8.0				0.7	
2000 Q1	8.0	0.3	0.1	0.4	0.1	1.2	1.2	0.3	0.6				0.7	
Q2 Q3	0.9	0.3	0.2	0.4	-0.2 0.4	1.2 0.8	1.0	0.5	-1.0 -0.3				0.7	
Q4	0.9	0.1	0.2	0.3	-0.1	0.8	0.6	0.4	-0.7				0.7	
2001 Q1	0.4	0.7	0.1	0.1	-0.9	-0.1	-0.5	0.3	3.4				0.6	
Q2	0.2	0.2	0.1	-0.1	0.1	-0.5	-0.3	-0.1	-2.8				0.1	
Q3 Q4	0.5	0.6	0.2	0.1	-0.4	-0.3	-0.4	0.5	-0.7 -0.6				0.2	
Percentage c														
2001 Jan								ILKD 0.2	ILKN 3.4					
Feb								**	-1.0					
Mar								0.2	1.5					
Apr May								-0.5 0.4	-4.7 0.5					
Jun								0.1	3.3					
Jul								0.7	-3.0					
Aug								-	0.9					
Sep								-0.9	-1.4					
Oct								-0.8	-0.9 1.5					
Nov														
Nov Dec								**	-0.3					

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PFC = Private Final Consumption at constant market prices
GFC = Government Final Consumption at constant market prices
GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
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Sales = Retail Sales volume

Sales = Hetail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage
and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce

			Co	ntribution t	o change In	GDP			1;					
Freeze	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage :						Valence			0.110				13.	0.155
1995	ILGA 2.9	HUCI 1.0	HUCJ -0.4	HUCK 1.1	HUCL 0.2	HUCM 3.1	HUCN 2.1	ILGU 5.8	ILHO 0.6	HYAA 5.3	ILAH 7.9	ILAQ 3.1	-0.6	GABE 11.6
1996 1997	1.1	0.7 1.9	0.2	0.7 0.4	-0.7 0.3	0.2	-0.1 2.3	-1.6 3.8	1.2	4.0	1.8	3.1	0.5	11.7
1998	1.8	1.8	0.1	0.8	0.3	1.0	2.2	1.5	1.1	2.0	0.1	2.8	1.2	11.8
1999	1.6	1.4	0.3	0.9	0.4	-	1.3	-0.1	1,1	1.7	-0.2	2.3	1.2	11.4
2000 2001	2.9	1.8	0.3	1.2	-1.0	2.9	2.2	4.1	-0.6	2.5 2.7	6.0 1.9	2.1 1.7	1.9 2.0	10.5
1998 Q4	0.7	2.0	0.1	0.2	0.4	-0.6	1.5	-2.2	1.0	1.7	-1.2	3.0	1.5	11.7
1999 Q1	0.9	1.9	0.2	0.5	0.4	-1.3	0.8	-1.3	1.3	1.4	-1.8	3.0	1.2	11.6
Q2 Q3	1.2	1.2	0.2	0.7 1.0	1.2 -0.1	-0.9 0.2	1.1	-2.4 0.4	0.3	1.4	-1.4	2.1 2.3	1.3	11.5 11.2
Q4	2.8	1.1	0.3	1.5	-0.1	2.0	2.0	3.1	2.3	2.1	2.2	1.8	1.4	11.1
2000 Q1	3.4	1.4	0.3	1.4	-0.5	2.1	1.3	3.4	-0.6	2.4	4.7	1.9	1.2	11.0
Q2 Q3	3.1 2.6	2.0 1.8	0.3	1.4 1.3	-0.3 -1.5	2.3 4.0	2.6 3.2	5.7 3.5	-0.3	2.6 2.6	6.2	2.5	1.5 2.1	10.6 10.3
Q4	2.5	1.8	0.2	0.7	-1.6	3.2	1.8	3.5	-1.3	2.6	6.5	1.9	2.8	10.0
2001 Q1 Q2	2.5 2.1	1.0	0.2	0.5	→0.6 −1.0	3.7 2.4	2.3	2.5 -0.8	-0.3 -1.0	2.9	4.8	2.0 1.3	3.1	9.7 9.5
Q3 Q4	1.9	0.6	0.1	-	1.4	-1.0	-0.8	-1.2	-1.9	2.8	0.9	1.7	1.8	9.4
2001 Feb		**			.,	.**	"		**	2.5	-1.0	1.8	1.1	
Mar	**		**	**		**	**	1.8	_	3.0 2.8	5.0 4.2	2.0	**	9.7 9.6
Apr May		**	10			**		-1.7	-1.0 -1.0	3.1	4.3	1.6	**	9.5 9.5
Jun					**	44		-0.6	-1.0	3.0	2.4	1.1	"	9.5
Jul			- "		**		**	-0.7	-2.9	2.9	1.3	1.7	.,	9.5
Aug Sep	**	**			**	**		-1.0 -2.1	-2.9	2.8 2.6	1.2 0.4	1.8	11	9.4
Oct Nov	,.		**	**			**	-1.5 -5.9	-1.0 -1.9	2.5	-0.6 -1.3	1.7		9.3
Dec	.,	77	,-	-1	.,		**			2.4	-1.3	1.8	**	
2002 Jan	44					**			47	2.4	**		**	**
Percentage of	change on	previous q HUCO	uarter HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS	
1998 Q4	-0.4	0.5	0.1	-	0.3	-0.7	0.7	-1.4	-0.6				-0.3	
1999 Q1	0.3	0.5	0.1	0.4	0.2	-0.2	0.6	0.2	1.0				-1.0	
Q2 Q3	0.7	-0.1 0.4	0.1	0.2	0.1 -0.7	0.4	0.1	-0.5 2.1	_				1.2	
Q4	0.9	0.3	0.1	0.5	0.3	1.1	1.3	1.3	1.3				-0.1	
2000 Q1	0.9	0.8	0.1	0.3	-0.2	-0.1	-0.1	0.5	-1.9				-1.2	
Q2 Q3	0.4 0.4	0.5	0.1	0.2	0.3 -1.9	0.6	1.3 0.6	1.7 -0.1	0.3				1.5	
Q4	0.8	0.3	-	-0.1	0.3	0.3	-0.1	1.4	-				0.6	
2001 Q1 Q2	0.9	0.3	-	0.2 -0.1	0.7	0.4 -0.6	0.4 -0.3	-0.5 -1.7	-1.0 -0.3				-0.8	
Q3	0.2	-	-	-	0.4	-1.1	-0.8	-0.5	-0.7				0.5 1.6	
Q4				**				**					-0.1	
Percentage o	change on	previous m	ionth					ILKE	ILKO					
2001 Jan Feb								-2.1 -0.2	-1.0 1.0					
Mar Apr								0.4 -2.1	-1.0					
May								0.4	-					
Jun								0.1	-					
Jul Aug								-0.7 0.6	-1.0 1.0					
Sep								-0.9	-1.0					
Oct Nov								-0.2 -2.6	1.0					
Dec								**	"					
2002 Jan												1		

Sales = Retail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage
and treatment vary among countries

GDP = Gross Domestic Product at constant market prices
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GFCF = Gross Fixed Capital Formation at constant market prices

			Co	ntribution to	change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl <sup>1</sup>	Unempl
Percentage c	hange on a	year earli	er	HIID	HUDI	HIDK	HUDL	ILGW	ILHQ	ILAA	HAI	ILAS	ILIK	GADO
1995	ILGC 2.7	HUDG 2.0	HUDH	HUDI 0.9	HUDJ -0.5	HUDK 1.0	0.9	4.8	4.1	2.8	ILAJ 2.9	2.6	1.5	5.6
1995	3.6	2.1	0.1	1.5	-	0.9	1.0	4.6	5.6	2.9	2,3	3.3	1.4	5.4
1997	4.4	2.4	0.3	1.6	0.4	1.4	1.7	7.0	4.9	2.3	0.3	3.2	2.3	4.9
1998	4.3	3.2	0.2	2.0	0.2	0.3	1.6	5.1	7.1	1.6	-1.1	2.5	1.5	4.5
1999	4.1	3.3	0.3	1.6	-0.2	0.4	1.5	3.7	9.0	2.1	1.8	2.9	1.5	4.2
2000 2001	4.1 1.1	3.3 2.1	0.4	1.4 -0.2	-0.1 -1.2	1.1 -0.6	2.0 -0.4	4.5 -3.7	6.5 4.5	3.4 2.8	4.1 0.7	3.6 3.2	1.3 -0.2	4.0 4.8
1998 Q4	4.8	3.4	0.3	2.1	0.2	0.3	1.5	3.5	8.5	1.5	-0.9	1.9	1.3	4.4
1999 Q1	4.0	3.3	0.4	1.8	-0.3	0.1	1.3	3.4	9.6	1.7	-	1.8	1.7	4.3
Q2	3.9	3.3	0.1	1.6	-0.1	0.3	1.4	3.2	8.2	2.2	1.1	2.4	1.4	4.3
Q3 Q4	4.0	3.4	0.3	1.6	-0.4 0.1	0.6	1.7	3.7	9.7 8.5	2.4	2.4 3.2	3.7	1.4	4.2
2000 Q1	4.2 5.2	3.6	0.3	1.6	-0.6 0.5	1.0	2.0	4.8 5.9	8.6 7.0	3.2	4.6	4.2 3.6	1.6 1.6	4.0
Q2 Q3	4.4	3.3	0.4	1.4	0.1	1.3	2.2	4.8	6.3	3.5	3.9	2.9	1.1	4.1
Q4	2.8	2.8	0.2	1.1	-0.5	0.8	1.8	2.6	4.2	3.4	3.4	3.5	1.0	4.0
2001 Q1	2.5	2.4	0.4	0.6	-0.6	0.5	0.9	-0.4	2.7	3.4	2.1	2.6	0.7	4.2
Q2	1.2	2.2	0.3	-	-1.3	-0.2	-0.1	-3.5	4.0	3.4	2.1	3.2	-0.1	4.5
Q3 Q4	0.5 0.1	1.6	0.4	-0.5 -0.9	-1.2 -1.8	-1.2 -1.4	-1.2 -1.3	-4.8 -6.0	3.4 7.6	2.7 1.8	0.6 -1.7	3.4	-0.2 -1.0	4.8 5.6
		2.0	0.0	0.0	101									
2001 Feb Mar	-	**		**	**		**	-0.3 -1.3	2.6	3.6	2.0	2.6 2.6	0.7	4.2 4.3
Apr				**	**		**	-2.4	4.4	3.3	2.3	2.6	-0.1	4.5
May							**	-3.4	3.7	3.6	2.6	3.5	0.1	4.4
Jun	.,	••		**		.,	**	-4.7	3.9	3.3	1.2	3.4	-0.2	4.6
Jul			**			**		-4.1	4.3	2.7	0.4	3.4	0.2	4.6
Aug	.,			**			**	-4.6	4.5	2.7	0.9	3.4	-0.6	4.9
Sep		**	**	**	***	**		-5.7 -6.0	1.4 9.1	2.6	0.7 -1.0	3.4	-0.1 -0.6	5.0
Oct Nov		**	**		**	**		-6.1	6.7	1.8	-1.6	3.4	-1.0	5.4 5.6
Dec			,.		"	**		-5.8	6.9	1.6	-2.2	3.4	-1.4	5.8
2002 Jan	**	- 1		*1	10		***	**	40	.,		4.2	-1.8	5,6
Percentage c	hange on p													
1998 Q4	ILGM 1.6	0.8	HUDN 0.2	HUDO 0.5	HUDP 0.1	HUDQ 0.4	HUDR 0.4	ILHG 0.8	3.3				0.2	
1999 Q1	0.8	0.8	-	0.4	-	-0.2	0.3	0.9	2.6				-0.6	
Q2	0.4	0.9	-	0.3	-0.6	0.1	0.5	0.7	1.7				1.2	
Q3	1.1	0.7	0.2	0.3	0.1	0.3	0.5	1.2	1.9				0.6	
Q4	2.0	0.9	0.2	0.3	0.6	0.3	0.4	1.5	2.1				0.3	
2000 Q1	0.6	1.0	-0.1	0.6	-0.7	0.3	0.6	1.4	2.6				-0.5	
Q2	1.4	0.6	0.3	0.3	0.5	0.4	0.6	1.7	0.1				1.2	
Q3 Q4	0.3	0.7	-0.1 0.1	0.1	-0.3 -0.1	0,3 -0.1	0.5	0.2 -0.7	1.3 0.1				0.1	
2001 Q1	0.3	0.5	0.2	0.2	-0.8		-0.2	-1.6	1.2				-0.7	
Q2	0.3	0.4	0.1	-0.3	-0.1	-0.4	-0.4	-1.4	1.4				0.4	
Q3	-0.3	0.2	0.1	-0.4	-0.3	-0.6	-0.6	-1.2	0.6				-	
Q4	0.1	0.9	0.2	-0.3	-0.6	-0.4	-0.1	-1,9	4.2				-0.6	
Percentage c	hange on p	revious m	onth					ILKG	ILKQ				ILLA	
2001 Jan		1						-0.9	1.4				-1.2	
Feb Mar								-0.2	-0.1				0.2	
Apr								-0.4 -0.6	1.4				-0.1	
May Jun								-0.3 -0.9	0.1				0.6	
Jul Aug								-0.3	1.0				0.4	
Sep								-1.1	-2.6				-1.1	
Oct								-0.7	7.7				-	
Nov Dec								-0.4	-2.8				-0.4	
2002 Jan								-0.1	0.3				-0.1	
													-1.6	

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Empl = Total Employment not seasonally adjusted

			Co	ntribution to	change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP <sup>1</sup>	Sales	CPI	PPI	Earnings <sup>2</sup>	Empl	Unempl
Percentage 1995 1996 1997 1998	iLGD 1.5 3.6 1.8 -1.0	9 year earl HUCU 0.8 1.3 0.5 0.1	HUCV 0.6 0.4 0.2 0.3	HUCW - 2.0 0.2 -1.2	HUCX 0.6 0.3 - -0.6	HUCY 0.3 0.6 1.1 -0.2	HUCZ 0.9 1.0 0.1 -0.6	ILGX 3.0 2.2 4.0 -6.7	0.6 -2.1 -6.0	ILAB -0.1 0.1 1.7 0.7	ILAK -0.7 -1.7 0.6 -1.3	ILAT 2.9 2.6 2.8 -0.8	0.5 1.0 -0.6	GADP 3.1 3.4 3.4 4.1
1999	0.7	0.6	0.7	-0,2	-0.3	0.1	0.2	1.0	-2.6	-0.3	-1.4	-0.7	-0.8	4.7
2000	2.2	0.2	0.7	0.9	-0.1	1.3 -0.6	-0.6	5.2 -6.7	-1.1 -5.2	-0.7 0.5	0.1 -2.0	1.7 -0.7	-0.3 -1.0	4.7
1998 Q4 1999 Q1 Q2 Q3 Q4	-1.3 -1.2 1.3 2.1 0.6	0.7 -0.4 1.3 1.6	0.4 0.8 0.8 0.7	-0.7 -0.3 0.1 0.1	-0.9 -0.6 -0.3 -0.3 -0.2	-0.3 -0.1 0.3 0.7	-0.3 0.2 0.3 0.8	-3.7 0.3 2.7 5.1	-4.6 -2.5 -2.2 -1.1	-0.1 -0.3 -1.0	-2.2 -1.7 -1.3 -0.5	-0.7 -1.1 -0.4 -0.5	-1.2 -1.1 -0.7 -0.2	4.6 4.7 4.7 4.7
2000 Q1 Q2 Q3 Q4	3.6 2.3 0.7 2.3	1.7 0.3 -1.4 0.2	0.8 0.8 0.7 0.7	0.6 0.7 0.9 1.3	-0.1 -0.1 - 0.1	1.3 1.4 1.2 1.0	0.7 0.8 0.7 0.9	4.3 6.6 5.3 4.4	-2.2 -1.5 -0.4 -0.4	-0.6 -0.7 -0.6 -0.8	0.1 0.3 0.2 -0.1	2.0 2.3 1.6 1.1	-0.5 -0.4 -0.4 0.2	4.8 4.7 4.7 4.8
2001 Q1 Q2 Q3 Q4	1.4 -0.6 -0.5	0.8  -0.2	0.6 0.5 0.5	0.4 -0.2 0.2	-0.1	0.2 -0.7 -1.1	0.7 0.2 -0.3	0.6 -5.2 -10.4 -12.7	2.3 -1.1 -2.6 -3.4	-0.5 -0.7 -0.8 -1.0	-0.4 -0.6 -1.0 -1.5	0.5 0.6 -0.4 -0.5	0.5 -0.4 -0.8 -1.3	4.8 4.9 5.1 5.5
2001 Feb Mar Apr May Jun	44 74 44 14 44		**		15 41 11	**	**	1.8 -1.4 -3.9 -4.8 -6.9	2.2 2.3 - -1.1 -2.2	-0.3 -0.7 -0.7 -0.7 -0.8	-0.4 -0.4 -0.6 -0.6 -0.7	0.8 0.5 - -0.2 2.1	0.7 0.5 -0.2 -0.4 -0.6	4.7 4.7 4.8 4.9 4.9
Jul Aug Sep Oct Nov Dec		**			 		***	-8.6 -11.3 -11.1 -12.2 -13.1 -12.8	-2.2 -3.3 -2.2 -3.4 -2.2 -4.5	-0.8 -0.7 -0.8 -0.8 -1.0 -1.2	-0.8 -1.0 -1.0 -1.3 -1.6 -1.7	0.6 -1.2 -0.6 -0.5 0.5 -1.6	-0.6 -0.6 -1.3 -1.6 -1.1 -1.2	5.0 5.0 5.3 5.4 5.5 5.6
2002 Jan				**		**	***	**	.,	**		**		
Percentage	change on ILGN 0,2	Previous of HUDA 0.3	HUDB 0.1	HUDC -0.1	HUDD -0.1	HUDE -0.2	HUDF -0.2	ILHH -1.1	ILIB -1.8				1LIV -1.1	
1999 Q1 Q2 Q3 Q4	-1.0 2.1 0.8 -1.3	-1.3 1.6 1.0 -1.3	0.1 0.4 0.1 0.1	0.4 -0.2	-0.1 0.1 -0.2 -0.1	0.1 0.3 0.2	0.2 0.2 0.2 0.2	1.4 -0.3 2.7 1.2	0.4 -0.4 -0.4 -0.7				-1.8 2.2 - -0.6	
2000 Q1 Q2 Q3 Q4	2.0 0.8 -0.7 0.3	0.4 0.2 -0.7 0.3	0.2 0.4 -	0.8 0.1 0.3	0.1 -0.1	0.7 0.3 0.1	0.1 0.3 0.1 0.4	0.6 1.9 1.5 0.3	-0.7 0.4 0.8 -0.7				-2.1 2.3 -	
2001 Q1 Q2 Q3 Q4	1.0 -1.2 -0.5	1.0 -0.6 -0.9	0.2 0.3 -	-0.5 0.4	-0.1 	-0.2 -0.5 -0.3	-0.2 -0.4	-3.1 -4.0 -4.0 -2.3	1.9 -2.9 -0.8 -1.5				-1.8 1.4 -0.4 -0.5	
Percentage	e change on	previous	month					ILKH	ILKR				ILLB	
2001 Jan Feb Mar Apr May Jun								-3.7 0.6 -2.0 -2.0 -1.0 -0.7	2.2 -1.1 -2.2 -				-1.2 -0.1 0.4 0.7 0.8 -0.2	
Jul Aug Sep Oct Nov Dec								-2.3 0.3 -3.3 0.1 -1.5 2.1	-1.1 -1.1 1.2 -2.3				-0.2 -0.1 -0.7 0.1 0.4 -1.1	Δ.
2002 Jan									**					

GDP = Gross Domestic Product at constant market prices
PFC = Private Final Consumption at constant market prices
GFC = Government Final Consumption at constant market prices
GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services

Sales = Retail Sales volume

CPI = Consumer Prices, measurement not uniform among countries

PPI = Producer Prices (manufacturing)

Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries

Empl = Total Employment not seasonally adjusted

Lingman = Standardised Lingman product rates; percentage of total workforce

	Expor	t of manufactu	ures	Impor	t of manufact	ures	Ex	port of god	ods	lm	port of go	ods	Total tr	ade
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufact- ures	goods
Percentage c	hange on a	vear eartler												
election a	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	الباا	ILJJ	ILJK	ILJL	ILJN
1992	4.3	3.3	8.6	5.3	4.3	8.3	4.2	3.7	5.9	5.1	4.2	7.8	4.8	4.
1993	4.8 12.0	2.2 9.9	15.3 19.9	11.9	1.0 12.3	12.5	10.6	9.4	9.1	10.9	11.0	10.3	12.0	10.
1994 1995	9.6	10.0	8.6	10.9	10.4	12.4	8.9	9.4	7.8	9.9	8.9	12.2	10.3	9.
1996	6.7	6.4	7.7	7.5	7.9	6.6	6.8	6.4	7.6	6.4	7.0	4.9	7.1	6.
		44.4	1				40.0							
1997	11.5	11.9	10.3	10.8	11.2	9.5	10.6	11.1	9.2	9.5 5.9	9.7	8.9	11.1	10.
1998 1999	6.1 6.4	6.3 5.9	5.3 7.9	6.8 7.8	9.6	-0.4 0.8	5.8	5.6	6.4	6.4	8.7	-0.4	6.4 7.1	5
2000	14.1	12.6	19.4	14.5	13.9	16.3	12.9	12.1	15.1	12.9	11.9	16.0	14.3	12
2001		**				**					**	**		
	67		6.2	7.2	6.2	10.3	6.1	6.0	6.6	6.3	5.0	9.7	7.0	6.
1995 Q4	6.7	6.8	6.3	7.3		10.3	0.1	0.0			5.0	9.1	7.0	0.
1996 Q1	5.8	5.6	6.6	7.5	7.3	8.0	5.5	5.1	6.8	6.3	6.2	6.7	6.6	5
Q2	5.6	5.2	7.0 7.9	6.4 7.8	· 6.6 8.7	5.9 5.5	5.5 7.2	4.9 7.0	7.2	5.3	5.8 7.7	4.0 3.6	6.0 7.4	5.
Q3 Q4	7.1 8.4	6.8 8.1	9.4	8.4	9.0	7.0	8.8	8.8	8.7	7.5	8.3	5.3	8.4	В
1997 Q1	8.5	8.0	10.3	8.2	8.1	B.2	8.1	7.6	9.4	7.2	7.2	7.4	8.3	7.
Q2 Q3	12.5 13.1	13.1 14.0	10.6	11.5 11.7	12.3 12.4	9.5	11.9	12.5 13.0	9.2	10.2	10.6	9.1 9.6	12.0 12.4	10
Q4	11.8	12.4	9.8	11.6	12.1	10.1	10.5	11.2	8.7	10.2	10.4	9.5	11.7	10
	40.0			110	13.2	5.6	9.9	11.0	6.8	9.9	11.5	5.7	40.0	
1998 Q1 Q2	10.6 6.7	11.4 6.8	8.1 6.3	11.0 7.2	9.5	1.4	5.9	6.2	5.3	6.5	8.3	1.7	10.8	9
Q3	4.1	4.0	4.2	4.9	7.8	-2.7	3.5	3.3	3.9	4.3	6.8	-2.6	4.5	3
Q4	3.1	3.2	2.6	4.0	7.7	-5.8	2.6	2.5	2.9	3.0	6.4	-6.0	3.5	2
1999 Q1	2.5	2.5	2.5	4.1	7.0	-3.9	2.2	1.7	3.6	3.1	6.0	-5.1	3.3	2
Q2	4.1	3.8	4.8	6.3	8.9	-1.3	4.0	3.6	5.0	4.8	7.5	-2.9	5.2	4
Q3	7.8	7.2	9.6	9.0	11.3	2.1	7.1	7.1	7.1	7.3	9.5	0.8	8.4	7
Q4	11.2	10.2	14.5	11.9	13.7	6.5	10.0	9.9	10.1	10.3	11.8	5.7	11.5	10.
2000 Q1	15.2	14.0	19.5	14.3	15.2	11.7	13.7	13.6	14.1	12.7	13.0	11.7	14.8	13.
Q2	15.7	14.0	21.5	15.3	15.1	16.1	14.0	13.2	16.3	13.7	12.9	16.2	15.5	13.
Q3	14.3	12.4	20.7	15.5	14.2	19.7	13.1	11.8	16.7	14.0	12.4	19.1	14.9	13.
Q4	11.3	10.0	15.8	12.8	11.3	17.6	10.7	9.6	13.4	11.3	9.5	17.0	12.1	11.
2001 Q1	6.1	5.7	7.7	6.7	5.5	10.6	6.1	5.8	7.0	6.5	5.2	10.5	6.4	6.
Q2	0,1	-0.3	1.2	1.0	-0.3	4.9	0.9	0.5	1.9	1.6	0.4	5.3	0.5	1.
Q3	**		- 14	**.		,,		**	**					
Q4		**	***	**.			**	***	**	**	••	•	**	
Percentage c		revious quar											7.00	
1995 Q4	ILJN 1.4	1LJO 1.5	الياP 1.3	ILJQ 1.7	ILJR 1.9	ILJS 1.1	ILJT 1.4	1.3	1.6	1.2	1LJX 1.4	ILJY 0.8	1LJZ 1.6	ILK 1.
	1.07								,		1.3	0.0	1,0	
1996 Q1	2.2	2.2	2.0	2.3	2.7	1.3	2.2	2.3	1.8	1.8	2.3	0.5	2.2	2
Q2 Q3	1.0	0.6 2.3	2.0	1.0	· 1.0	1.2	1.1	0.7 2.5	2.0	1.1	1.3	0.6	1.0	1
Q4	2.7	2.7	2.7	2.3	2.2	2.5	2.8	3.0	2.4	2.1	1.9	1.6 2.5	2.4	2.
1007.04	0.0	0.0	2.0		4.0	0.5		4.0						
1997 Q1 Q2	2.2 4.7	2.0 5.5	2.9 2.4	2.1 4.2	1.9 4.9	2.5	1.5	1.2 5.3	2.4	1.6	1.3	2.5	2.1	1
Q3	2.9	3.1	2.0	2.7	2.9	2.3	2.7	3.0	1.9	2.4	4.5 2.5	2.1	4.5 2.8	2
Q4	1.5	1.3	2.2	2.1	2.0	2.5	1.5	1.4	2.0	1.9	1.8	2.3	1.8	1
1998 Q1	1.2	10	1.3	1.6	2.8	-1.7	0.9	1.1	0.0		0.0	10		
Q2	1.0	1.2	0.6	0.6	1.5	-1.7	0.9	0.7	0.6	1.4	1.6	-1.0 -1.6	1.4	1 0
Q3	0.4	0.5	-	0.5	1.3	-1.8	0.3	0.2	0.6	0.2	1.1	-2.3	0.4	0
Q4	0.5	0.5	0.6	1.2	1.9	-0.7	0.6	0.5	1.0	0.7	1.4	-1.2	0.9	0
1999 Q1	0.6	0.4	1.2	1.7	2.2	0.3	0.6	0.3	1.3	1.4	1.9	-0.1	1.2	1
Q2	2.5	2.4	2.9	2.7	3.3	0.9	2.4	2.6	2.0	2.4	3.0	0.7	2.6	2
Q3	3.9	3.8	4.6	3.0	3.5	1.5	3.3	3.6	2.6	2.6	2.9	1.5	3.5	3
Q4	3.7	3.3	5.2	3.9	4.0	3.5	3.3	3.1	3.9	3.5	3.5	3.6	3.8	3
2000 Q1	4.3	3.9	5.6	4.0	3.6	5.2	4.0	3.7	4.9	3.6	3.0	5.6	4.1	3
Q2	2.9	2.4	4.6	3.6	3.2	4.9	2.7	2.2	3.9	3.3	2.9	4.7	3.3	3
Q3	2.7	2.3	3.8	3.2	2.8	4.7	2.5	2.4	3.0	2.9	2.5	4.0	3.0	2
Q4	1.0	1.1	0.9	1.4	1.3	1.7	1.0	1.1	1.0	1.1	0.8	1.8	1.2	1
2001 Q1	-0.6	-0.2	-1.8	-1.6	-1.8	-1.0	-0.2	-	-1.0	-0.9	-1.1	-0.3	-1.1	-0
Q2	-2.9	-3.3	-1.7	-1.9	-2.4	-0.5	-2.4	-2.9	-1.1	-1.4	-1.8	-0.2	-2.4	-1
Q3						**	**							

<sup>1</sup> Data used in the World and OECD aggregates refer to Germany after unification

# CORPORATE SERVICES PRICE INDEX (EXPERIMENTAL) - 4th QTR 2001

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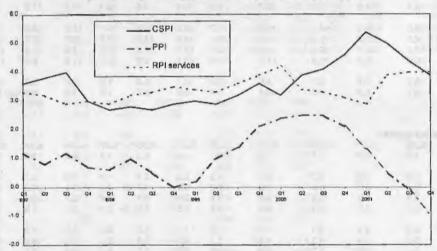
This summary contains the latest quarter's results for the experimental Corporate Services Price Index (CSPI) and the industry-level indices it encompasses. "Corporate services" are those services purchased by businesses and government from other businesses to support them in their usual line of activity. Broadly, the CSPI is the services sector equivalent of the manufacturing Producer Price Index (PPI).

An article published in the July 2000 issue of Economic Trends contained background details of the development of the CSPI (also available at www.statistics.gov.uk/cspi). The main uses of the CSPI are as:

- a key indicator of inflation in the services sector;
- a deflator of service sector output for use in calculating GDP and the Index of Services; and
- an information tool for business itself.

N.B. Measurement of service sector prices is inherently difficult and challenging. When viewing the results it should be borne in mind that the indices shown are regarded as experimental, particularly those that have been added to the series most recently. Therefore some of the results will be subject to revision before the completion of the CSPI development project. The top-level index should also be viewed as experimental.

# Experimental top-level CSPI compared with the Retail Price index (RPI) for services and the PPI for manufactured products: percentage change on same quarter a year ago



# Results for Quarter 4, 2001

The top-level CSPI is constructed by weighting together the currently available industry-level indices. Coverage is now around 50 per cent of the total turnover of the targeted corporate services sector.

The graph above shows that the annual rate of increase for the CSPI reduced to 3.9 per cent in Q4 2001, compared to 4.4 for the previous quarter. (It should be noted that the prices collected are the average prices for each quarter) The top-level quarterly results are shown in the table on the next page. Results are also shown with *property rental* payments excluded, due to its relatively high weighting within the top-level index (just under a third).

As a reminder, this summary includes revisions to the indices for business telecoms and technical testing which were first incorporated into the results for quarter 3 2001. These have had a minor effect on the top-level CSPI.

Experimental corporate services price index (CSPI), quarterly index values and percentage changes:

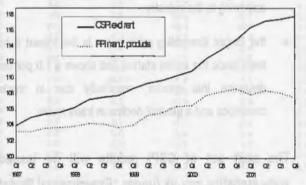
S 15. M7 16	and the	Quarterly CSPI inde	x values (1995=100)	previous	e on same quarter in s year (%)
		Including rent	Excluding rent	Including rent	Excluding rent
1996	Q1	100.5	100.2	0.7	0.2
	Q2	101.3	101.0	1.3	1.0
	Q3	101.6	101.2	1.7	1.4
	Q4	103.0	102.9	2.7	2.7
1997	Q1	104.2	104.2	3.6	4.0
	Q2	105.1	105.2	3.8	4.1
	Q3	105.7	105.6	4.0	4.3
	Q4	106.1	105.8	3.0	2.9
1998	Q1	107.0	106.4		2.2
	Q2	108.0	107.4	2.8	2.2
	Q3	108.5	107.7	2.7	1.9
	Q4	109.1	107.9	2.9	2.0
1999	Q1	110.2	108.8	3.0	2.2
	Q2	111.1	109.5	2.9	1.9
	Q3	112.0	109.8	3.2	2.0
	Q4	113.0	110.4	3.6	2.3
2000	Q1	113.8	111.0	3.2	2.0
	Q2	115.4	112.6	3.9	2.9
	Q3	116.7	113.7	4.1	3.5
	Q4	118.2	115.0	4.6	4.1
2001	Q1	120.0	116.6	5.4	5.0
	Q2	121.2	117.4	5.0	4.2
	Q3	121.8	117.6	4.4	3.4
	Q4	122.7	118.0	3.9	2.6

In Q4 2001, the CSPI (including property rental payments) rose by 0.8 per cent. The key rises contributing to this were for property rental payments and road freight. Smaller impacts on the top-level CSPI were due to increases for business airfares and decreases for freight forwarding.

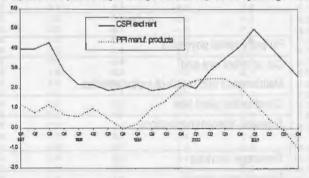
The top-level CSPI (excluding property rental payments) is compared to the net sector output PPI for manufactured products in the top graph on the right. Prices of corporate services covered by this inquiry have shown a relatively smooth upward path since 1997 but have been rising at a greater rate over this period than that of the PPI (which has begun to fall in recent quarters).

The annual increases have been slowing for both CSPI and PPI in recent quarters. Increases in the CSPI have almost always been higher than PPI from 1997 onwards.

Experimental top-level CSPI and PPI for manufactured products: index values (1995=100)



Experimental top-level CSPI and PPI for manufactured products: percentage change on same quarter a year ago



# Industry-specific indices

The tables on the next 4 pages contain the series for the 28 industries for which indices of corporate services prices are currently available. The weighting for each index is shown separately for when property rentals are included and excluded. Some key points to note are:

- bus and coach hire show a 3.0 per cent increase over the year for Q4 2001. Increases in fuel bills and drivers' wages remain the major factors, according to the industry
- a 1.2 per cent price increase is shown for road freight in the latest quarter although prices are still 4.7 per cent higher than a year ago – apparently mainly due to higher fuel costs;
- sea and coastal water freight prices show a decrease of 4.6 per cent this quarter. This decline is due to increasing competition in the market, according to the industry;
- price increases for long-haul flights have been the main cause for the 2.0 increase shown over last quarter for business airfares (10 per cent higher than a year ago), according to the industry;
- the freight forwarding price index is the lowest it has been since the series started and shows a 1.0 per cent decrease this quarter, reportedly due to market conditions and a general decline in trade levels.

- increases in fuel bills and drivers' wages are again reported to have been the main cause of a 3.7 per cent increase for courier services over the last year, although the annual rate of increase has slowed.
- property rental payments are 6.5 per cent higher than a year ago; rental prices of office property were the main factor, as reported by data suppliers, IPD;
- price rises for car contract hire through 1999 and early 2000 have been offset by falls in recent quarters and prices are now at their lowest level since 1997. This is apparently the net result of: an upward effect from the end of 1998 to the end of 2000 caused by leasing companies expecting lower sale values of their cars at the end of the lease; and the continued downward trend in new car prices from June 2000;
- security services has shown an increase of 2.4 per cent over the previous quarter (and 3.9 per cent higher than a year ago) mainly due to the increase in the minimum wage, according to the industry.
- adult education has shown an increase of 1.6 per cent,
   4.1 per cent higher than a year ago, to reflect increases in course costs at the start of the educational year, according to the industry;
- charges for waste disposal have been affected in recent years by increases in the rate of Landfill Tax following its introduction in quarter 4 1996. The latest quarter shows a 0.2 per cent increase and prices are now 5.2 per cent higher than a year ago;

The next set of CSPI results will be issued on 17th May 2002 via the National Statistics website www.statistics.gov.uk (under "Experimental Statistics").

Note to the main table: There are external sources for the indices denoted by an asterisk, as follows:

Index	Source
Property rental payments	Investment Property Databank (IPD)
Car contract hire and Maintenance and repair of motor vehicles	Yewtree.com Ltd
Construction plant hire	Construction Plant-hire Association (CPA)
Business telecommunications	Published sources: Tarifica Telecom Pricing Intelligence and What Cellphone magazine
Sewerage services	Ofwat (Office of the Water Regulator)
National post parcels	Parcelforce

# Corporate Services Price Indices (EXPERIMENTAL) (1995=100)

		Maintenance		-	reignt trans	port by road		Sea and	
210/02)		and repair of motor vehicles*	Canteens and catering	Bus and coach hire	Total	International component	Commercial vehicle ferries	coastal water freight	Busines air fare
SIC(92): 1995 net sector	weighte (%)	50.20	55.50	60.23/1	60.24		61.10/1	61.10/2	62.10/
	roperty rentals)	3.95	0.78	0.59	19.80		0.51	0.50	4.0
	roperty rentals)	5.71	1.13	0.86	28.63		0.74	0.59 0.85	1.9
Annual				2127			0,, 4	0.00	2.0
	1995	100.0	4+	100.0	100.0	100.0	14	**	
	1996	99.8		103.0	103.8	101.1	iii.	10	103.
	1997	104.5	440.0	108.5	110.4	105.2	96.9	95.4	115.
	1998	106.0	112.0	115.2	113.4	105.4	96.4	88.6	123.
	1999	108.0	114.7	119.7	116.5	101.4	101.9	79.6	127.
	2000 2001	110.0 112.6	115.9 120.3	130.5 135.6	123.6 132.6	103.4	101.3	82.1	135.
Percentage cha		on previous yes		133.0	132,0	104.6	101,2	84.9	153.
	1996	0.2		3.0	3.8	1.1			
	1997	4.7	4.	5.4	6.3	4.0	**	**	11.
	1998	1.4		6.1	2.7	0.2	-0.4	-7.2	7
	1999	1.9	2.5	3.9	2.7	-3.8	5.6	-10.2	3
	2000	1.9	1.0	9.1	6.1	1.9	-0.6	3.2	6.
	2001	2.4	3.8	3.9	7.3	1.2	-0.1	3.4	13
Secondards approx		the additional add							
Ruarterry resul	Its (not seasona 1997 Q1	104.2		106.8	100.2	101.7	00.0	05.0	4.4%
	Q2	104.4	**	108.4	108.3 110.5	101.7 106.3	99.2 98.0	95.2	112
	Q3	104.8	111.0	109.2	111.3	106.3	95.8	95.4 95.7	113 116
	Q4	104.8	110.8	109.8	111.4	106.3	94.4	95.5	117
	1998 Q1	105.4	110.8	111.9	112.2	105.2	97.0	93.7	119
	Q2	106.4	111.9	115.5	113.3	105.8	96.3	88.4	124
	Q3	106.3	112.4	116.2	113.9	108.0	95.9	88.1	124
	Q4	106.1	112.8	117.1	114.3	104.6	96.6	84.0	125
	1999 Q1	107.0	113.9	118.4	114.8	104.3	103.8	81.8	125
	Q2	107.9	114.9	119.6	115.5	100.6	102.7	81.2	127
	Q3	108.2	115.1	120.1	116.8	100.5	101.5	77.1	127
	Q4	108.9	115.1	120.5	119.0	100.4	99.6	78.0	128
	2000 Q1 Q2	109.2 109.5	115.1 116.1	126.6	119.3	102.3	102.1	79.6	129
	Q3	110.1	116.2	130.8 131.9	121.9 124.9	102.3 102.9	101.5 101.4	81.9	132
	Q4	111.2	116.3	133.0	128.3	106.1	100.3	83.1 83.8	135 143
	2001 Q1	111.9	119.6	134.2	131.1	106.1	103.7	85.8	150
	Q2	112.6	120.5	135.1	132.1	106.3	101.9	87.3	150
	Q3	113.1	120.4	136.1	132.8	102.2	100.2	85.2	154
	Q4	112.8	120.7	137.0	134.4	104.0	98.9	81.2	157
orcontago che	ange latest ava	rter on previous	auartor.						
ercentage cha	1997 Q1	3.4	quarter	2.4	2.3	-0.8	-1.7	4.4	3.
	Q2	0.2	:./	1.5	2.0	4.6	-1.2	-1.1 0.2	0
	Q3	0.4	11	0.8	0.6	0.0	-2.3	0.3	2
	Q4	0.0	-0.1	0,5	0.1	0.0	-1.4	-0.2	ō
	1998 Q1	0.6	0.0	1.9	0.8	-1.1	2.7	-1.9	2
	Q2	0.9	1.0	3.2	0.9	0.6	-0.8	-5.7	3
	Q3	-0.1	0.5	0.6	0.5	0.2	-0.4	-0,3	0
	Q4	-0.2	0.4	0.8	0.3	-1.3	0.8	-4.6	0
	1999 Q1	0.8	0.9	1.1	0.5	-0.3	7.4	-2.6	0
	Q2	0.8	0.9	1.0	0.6	-3.6	-1.1	-0.7	1
	Q3 Q4	0.4	0.2	0.5	1.2	-0.1	-1.2	-5.1	0
	2000 Q1	0.6	-0.1 0.0	0.3 5.1	1.9 0.3	-0.1 1.9	-1.8 2.5	1.1	
	Q2	0.3	0.9	3.3	2.2	0.0	-0.6	2.1 2.8	1 2
	Q3	0.5	0.1	0.8	2.5	0.6	-0.1	1.5	2
	Q4	1.0	0.1	0.8	2.7	3.1	-1.1	0.9	
	2001 Q1	0.6	2.8	0.9	2.2	0.0	3.4	2.4	2
	Q2	0.6	0.8	0.7	0.8	0.2	-1.7	1.7	
	Q3	0.5	-0.1	0.7	0.5	-3.8	-1.7	-2.4	2
	Q4	-0.3	0.2	0.7	1.2	1,8	-1.3	-4.6	2
ercentage cha	ange, latest qua	rter on correspon	nding quarter o	f previous year					
orcentage one	1997 Q1	5.1	numg quarter o	4.8	5.9	0.1			11
	Q2	5.0		5.9	7.0	6.3	**		11
	Q3	4.9	.,	5.5	7.4	6.1	-7.4	-1.6	14
	Q4	4.0		5.3	5.1	3.8	-6.5	-0.8	8
	1998 Q1	1.1	-	4.8	3.6	3.4	-2.2	-1.5	6
	Q2	1.9		6.6	2.5	-0,5	-1.8	-7.3	8
	Q3	1.4	1.3	6.4	2.4	-0.3	0.1	-7.9	7
	Q4	1.3	1.8	6.6	2.6	-1.6	2.3	-12.0	6
	1999 Q1	1.5	2.8	5.8	2.3	-0.9	7.0	-12.7	4
	Q2	1.4	2.7	3.5	1.9	-4.9	6.6	-8.1	2
	Q3	1.8	2.4	3.4	2.6	-5.2	5.8	-12.5	2
	Q4	2.7	2.0	2.9	4.1	-4.1	3.1	-7.2	3
	2000 Q1	2.0	1.1	6.9	3,9	-1.9	-1.6	-2.7	3
	Q2 Q3	1.5 1.7	1.0	9.3 9.8	5.6 7.0	1.7	-1.1	0.8	3
	Q4	2.1	1.1	10.4	7.9	5.7	-0.1 0.6	7.7 7.4	11
	2001 Q1	2.5	3.9	6.0	9.9	3.7	1.5	7.8	16
	Q2	2.8	3.8	3.3	8.4	3.9	0.4	6.6	13
	Q3	2.8	3.6	3.2	6.3	-0.6	-1.2	2.5	14
	Q4	1.4	3.8	3.0	4.7	-1.9	-1.4	-3.1	10

# Corporate Services Price Indices (EXPERIMENTAL) (1995=100) - continued

		Freight forwarding	National post parcels*	Courier	Business telecomm- -unications*	Property rental payments*	Real estate agency activities	Car contract hire*	Construction Pla
IC(92):		63.40	64.11	64.12	64.20	70.20	70,30	71.10	71.3
995 net sector w		5.78	4.28	0.97	7,40	30.84	1.18	1.34	1.9
(including pro) (excluding pro		8.35	6.19	1.40	10.71	0.00	1.71	1.94	2.6
innual	perty remais)	0.00	0,19	1.40	10.71	0.00	1.71	1.04	2.0
uniuai	1995	4.			**	100.0			
	1996	-6	100.0	100.4	**	102.2			98
	1997	103.9	103.7	101.4	86.1	105.4		96.4	96
	1998	99.2	110.5	105.6	83.4	110.0	119.5	97.5	99
	1999	95.5	113.3	107.0	81.7	116.0	125.5	99.2	103 109
	2000	96.1 96.0	118.6 122.3	110.1 116.5	77.7 75.6	122.6 130.5	134.5 139.0	97.0	113
orcentage chan	nge, latest year on p		122.0	110.0	13,0	100.0	100.0	07.0	, 10
ercentage chan	1996	evious yeur				2.2			
	1997	14	3.7	1.0	4+	3.1			-1
	1998	-4.5	6.6	4.2	-3.2	4.3		1.2	3
	1999	-3.7	2.5	1.3	2.1	5.4	5.0	1.7	4
	2000	0.6	4.7	2.9	-4.9	5.7	7.2	3.0	5
	2001	-0,1	3.1	5.9	-2.6	6.5	3.3	-5.1	4
Summarke manualta	. (not consonally adi	iuntad)							
tuarterly results	s (not seasonally adj 1997 Q1	103.5	100.0	101.2	88.3	104.2		96.1	98
	Q2	103.7	104.9	101.5	86.1	105.1	C119	96.7	96
	Q3	104.0	104.9	101.2	85.6	105.7	.,	96.2	94
	Q4	104.4	104.9	101.7	84.4	106.7		96.5	96
	1998 Q1	102.2	104.9	102.7	83.5	108.4	117.0	97.6	10
	Q2	99.7	112.4	105.8	83.1	109.3	119.0	98.4	99
	Q3	98.1	112.4	106.8	83.5	110.5	120.9	96.9	99
	Q4	96.7	112.4	107.3	83.5	111.7	121.3	97.3	99
	1999 Q1	97.4	112.4	107.3	83.5	113.4	121.9	97.8	10
	Q2	94.7	113.6	106.9	83.0	114.9	124.6	98.1	103
	Q3	94.5	113.6	106.9	81.5	116.9	126.6	99.6	103
	Q4	95.4	113.6	107.0	78.7	118.7	128.8	101.4	10
	2000 Q1	95.2	113.6	108.5	79.1	120.1	131.8	102.3	10
	Q2	95.7	120.3	108.6 109.3	78.7 77.0	121.7 123.3	133.9 135.2	102.7 102.2	11
	Q3	96.3	120.3 120.3	114.0	75.9	125.2	137.2		110
	2001 Q1	97.1 98.0	120.3	114.0	75.9	125.2	138.6	99.5	11
	Q2	97.0	122.9	116.2	75.5	129.6	139.1	96.6	111
	Q3	94.9	122.9	116,9	75.5	131.4	139.2		114
	Q4	94.0	122.9	118.3	75.6	133,3	139.1	95.7	111
ercentage char	nge, latest quarter of	n previous qu		0.6		0.0		2.1	
	1997 Q1 Q2	0.2	0.0 4.9	0.6	-2.5	0.9		0.6	-1
	Q3	0.2	0.0	-0.4	-0.6	0.6		-0.5	
	Q4	0.4	0.0	0.5	-1.4	0.9	·	0.3	
	1998 Q1	-2.1	0.0	1.0	-1.1	1.6	10	1.1	
	Q2	-2.5	7.1	3.1	-0.4	0.9	1.7		-
	Q3	-1.6	0.0	0.9	0.4	1.1	1,6	-1.5	-
	Q4	-1.4	0.0	0.5	0.0	1.1	0.4		
	1999 Q1	0.7	0.0	0.0	0.0	1.5	0.5		
	Q2	-2.8	1.1	-0.4	-0.5	1.3	2.2		
	Q3	-0.2	0.0	0.0	-1.8	1.8	1.6		
	Q4	0.9	0.0	0.1	-3.5	1.5	1.7		
	2000 Q1	-0.2	0.0	1.4	0.5	1.2	2.3		
	Q2	0,5	5.8	0.1	-0.5	1.3	1.6		
	Q3	0.6	0.0	0.6	-2.1 -1.4	1.3	1.0		
	2001 Q1	1.0	0.0	0.7	0.0	1.9	1.0		
	Q2	-1.0	2.2	1.2	-0.6	1.5	0.4		
	Q3	-2.1	0.0	0.7	0.0	1.4	0.0		
	Q4	-1.0	0.0	1.1	0.1	1.5	0.0		
ercentage char	nge, latest quarter o	The same of the sa			•	2.2			
	1997 Q1 Q2	a contraction of	0.0 4.9	1.5	10	2.8 3.2		3.5	
	Q3		4.9	0.3		3.3		3.2	
	Q4		4.9	1.1	021	3.3		2.5	
	1998 Q1	-1.2		1.4	-5.5	4.0		1.5	
	Q2	-3.8	7.1	4.2	-3.5	4.1		. 1.8	
	Q3	-5.7	7.1	5.5	-2.4	4.5		. 0.8	
	Q4	-7.3	7.1	5.5	-1.1	4.8		. 0.8	
	1999 Q1	-4.7		4.5	0.0	4.7	4.2		
	Q2	-5.0		1.0	-0.1	5.1	4.8		
	Q3	-3,6		0.1	-2.4	5.8	4.7		
	Q4	-1.3		-0.3	-5.8	6.2	6.1		
	2000 Q1	-2.3		1.1	-5.3	5.9	8.1		
	Q2	1.0		1.6	-5.3	5.9	7.4		
	Q3	1,8		2.2	-5.5	5.4	6.8		
	Q4	1.7		6.6	-3.5	5.5	6.5		
	2001 Q1	3.0		5.8 7.0	-3.9 -4.1	6,3 6,5	5.2		
	Q2 Q3	1.4		7.0	-2.0	6.6	2.9		

# Corporate Services Price Indices (EXPERIMENTAL) (1995=100) - continued

U. P. Carlo	Market research	Technical testing	Employment Agencies	Security Services	Industrial cleaning	Commercial film processing	Contract
SIC(92):	74.13	74.30	74.50	74.60	74.70	74.81/9	74.82
995 net sector weights (%): (including property rentals)	1.28 1.85	1.21 1.75	6.32 9.14	1.15 1.66	2.27 3.29	0.09 0.12	0.49
(excluding property rentals)	1.05	1.75	9,14	1,00	3.29	0.12	0.71
1995	-11	-44	1.		100.0	100.0	1
1996		. 36		99.4	99.4	101.7	
1997	100		108.9	99.5	98.8	104.7	44
1998	440.0	106.7	114.9	100.3	101.3	105.5	400 4
1999	112.2 116.1	109.1 110.2	120.6 124.4	103.0 105.0	101.8 102.0	105.8 106.3	109.4
2000	120.9	111.3	128.7	107.8	101.8	107.6	112.7 112.9
Percentage change, latest year on pr		,,,,,,	12.0.1	101.0	101.0	107.0	112.0
1996		:49	**	,,	-0.6	1.7	
1997	**	.,		0.1	-0.5	2.9	
1998	- 11		5.5	0.9	2.5	0.8	
1999 2000	3.5	2.2 1.0	4.9 3.1	1.9	0.5 0.1	0.1	3.0
2001	4.1	1.0	3.5	2.7	-0.1	1.2	0.2
Quarterly results (not seasonally adj	usted)						
1997 Q1		**	107.0	98.9	98.8	104.4	,
Q2	16	B (B) / r.	108.4	99.2	98.6	104.4	,
Q3 Q4			109.9 110.4	99.7	98.9 99.0	104.7 105.3	
4000.04	31	106.1	112.9	100.3	100.8	105.5	
1998 Q1 Q2	4.00	106.7	114.1	99.8	101.3	105.5	
Q3	106.8	106.7	115.3	100.4	101.5	105.5	
Q4	108.6	107.4	117.5	100.8	101.7	105.5	
1999 Q1	111.7	109.1	119.4	101.4	101.8	105.5	109.2
Q2	112.0	109.1 109.0	120.7 121.0	102.5 103.9	101.9	105.6 105.6	109.5
Q3 Q4	112.4 112.8	109.0	121.3	104.3	101.7	105.6	109.5
2000 Q1	115.2	109.5	121.9	104.3	102.0	105.9	112.0
Q2	115.7	110,3	124.4	104,4	102.1	105.9	112.
Q3	116.5	110.6	125.1	105.6	102.0	106.5	113.
Q4	117.1	110.6	126.0	105.7	101.7	107.0	113.0
2001Q1	120.5	109.9	128.4	106,8	101.6	106.8	112.6
Q2	121.0	111.2	129.3	107.2	101.7	107.0	112.0
Q3 Q4	120.7 121.4	111.8	128.5 128.5	107.3 109.8	101.4 102.7	108.2 108.4	113.2
Percentage change, latest quarter on	previous quar	ter					
1997 Q1		**	1.2	0.2	0.0	0.3	
Q2		**		0.3	-0.2	0.0	
Q3 Q4	- "		1.4 0.5	0.5	0.3	0.3 0.6	
1998 Q1		1.5	2.2	0.3	1.8	0.2	
Q2		0.5	1,1	-0.5	0.5	0.0	
Q3		0.0	1.0	0.6	0.2	0.0	
Q4	1.6	0.7	1.9	0.3	0.1	0.0	
1999 Q1	2.9	1.6	1.6	0.6	0.1	0.0	-
Q2	0.3	0.0	1.0	1.1	0.1	0.1	0.
Q3 Q4	0.4	-0.2 0.3	0.2	1.4	0.0 -0.2	0.0	0.
2000 Q1	2.1	0.3	0.5	0.0	0.3	0.3	2.
Q2	0.5	0.7	2.0	0.1	0.1	0.0	O.
Q3	0.7	0.3	0.6	1.1	-0.2	0.5	1.
Q4	0.6	0.0	0.7	0.2	-0.2	0.4	-0,
2001 Q1	2.9	-0.7	1.9	1.0	-0.1	-0.2	-0.
Q2	0.4	1.2	0.8	0.4	0.1	0.2	0.
Q3 Q4	-0.2 0.6	0.5 0.6	-0.6 0.0	0.0 2.4	-0.2 1.2	1.2 0.2	0. -0.
Percentage change, latest quarter or	corresponding	g quarter of pr	evious year				
1997 Q1				-1.0	-1.3	3.0	
Q2		41	**	-1.1	-1.2	3.3	
Q3		- 11	**	1.0 1.3	0.2	4.5	
Q4 1998 Q1		**	5.5	1.4	0.3 2.1	1.1	
Q2			5.3	0.6	2.8	1.1	
Q3	**		4.9	0.7	2.6	0.8	
Q4	,,	**	6.4	0.8	2.6	0.2	
1999 Q1	1 4.	2.8	5.8	1.1	0.9	0.0	
Q2	***	2.3	5.7	2.6	0.6	0.1	
Q3	5.2	2.1	4.9	3.4	0.4	0.1	
Q4	3.9	1.7	3.2	3.5	0.1	0.1	2
2000 Q1	3.1	0.3 1.0	2.1 3.1	2.9 1.9	0.2	0.4 0.3	2 2
Q2 Q3	3.6	1.5	3.5	1.6	0.0	0.8	3
Q4	3.9	1.2	3.9	1.4	0.0	1.3	3
2001 Q1	4.6	0.3	5.3	2.4	-0.4	0.8	0
00	4.6				-0.5	1.0	
Q2 Q3	3.6	1.0	4.0 2.7	2.7 1.6	-0.5	1.6	-0.

# Corporate Services Price Indices (EXPERIMENTAL) (1995=100) - continued

		Direct marketing &	Translation &	A-1-14	0	146-2	Commercial	TOP-LEVE	
NC(02)-		secretarial services	Interpretation services	Adult Education 80.42	Sewerage services 90,00/1	Waste disposal 90.00/2	washing & dry cleaning 93.01	property	Excluding propert rental
995 net sector	r weights (%):	74.83 (part)	74.83 (part)	00.42	90,0071	90,00/2	83.01	rentals	remai
	property rentals)	0.19	0.15	0.58	1.33	2.39	0.58	100.00	
(excluding)	property rentals)	0.27	0.21	0.84	1.92	3.46	0.83		100.0
nnual	4005			400.0	400.0	400.0		100.0	400
	1995 1996	t e		100.0 103.4	100.0 105.5	100.0	4.	100.0 101.6	100. 101.
	1997	94	7	108.5	109.9	126.8	25	105.3	105.
	1998	108.0	106.9	111.1	114.1	129.0	108.9	108.2	107.
111	1999	109.9	108.5	114.7	118.1	138.1	112.1	111.6	109.
	2000	109.5	108.6	118.8	107.8	145.2	114.8	116.0	113.
	2001	107.3	107.7	123.5	105.6	149.9	116.2	121.4	117.
ercentage ch	nange, latest year o	on previous y	eat	3.4	5.5	11.3	,,	1.6	1
	1997		**	4.9	4.2	13.9	**	3.6	3
	1998			2.4	3,8	1.8	**	2.8	2
	1999	1.8	1.5	3.2	3.4	7.0	2.9	3.2	2
	2000	-0.3	0.0	3.6	-8.7	5,2	2.4	4.0	3
	2001	-2.0	-0.8	4.0	-2.0	3.3	1.2	4.7	3
arterly resu	ults (not seasonally	v adjusted)				•			
	1997 Q1			107.2	106.8	126.4	**	104.2	104
	Q2	.,		107.3	111.0	125.9		105.1	105
	Q3		106.5	108.8	111.0	126.8	106.5	105.7	105
	1009 01	100.4	106.6 106.9	110.7 111.1	111.0 111.0	128.0 128.5	107,7 107,3	106.1 107.0	105 106
	1998 Q1 Q2	106.4	106.9	110.9	111.0	129.2	107.3	108.0	107
	Q3	109.1	106.9	110.7	115.2	128.9	109.8	108.5	107
	Q4	108.2	107.1	111.9	115.2	129.3	109.4	109.1	107
	1999 Q1	109.3	108.5	113.9	115.2	130.9	110.5	110.2	108
	Q2	110.4	108.6	114.4	119.0	139.6	112.5	111.1	109
	Q3	109.7 110.0	108.5 108.5	115.0	119.0 119.0	140.8 140.9	112.4 112.9	112.0 113.0	109 110
	Q4 2000 Q1	110.0	109,1	115.4 117.6	119.0	141.7	114.6	113.8	111
	Q2	109.8	109.1	117.6	104.0	147.3	114.9	115.4	112
	Q3	110.2	108.2	119.7	104.0	146.2	115.3	116.7	113
	Q4	107.8	107.9	120.4	104.0	145.5	114.4	118.2	115
	2001 Q1	106.9	107.9	122.1	104.0	145.5	115.6	120.0	116
	Q2	106.8	108.0	123,3	106.1	148.7	116.2	121.2	117
	Q3 Q4	107.6 107.7	107.7 107.3	123.4 125.4	106.1 106.1	152.5 153.2	116.1 116.9	121.8 122.7	117 118
				120.4	100.1	100,2	110.5	1 Section 1	110
ercentage ch	nange, latest quart 1997 Q1	er on previou	s quarter	3.0	0.0	2.2	**	1.2	1.
	Q2			0.1	3.9	-0.4		0.9	1.
	Q3			1.4	0.0	0.7	12	0.5	0
	Q4 1998 Q1		0.1	1.7	0.0	0.9	1.1	0.4	0
	1998 Q1 Q2	1.7	-0.1	-0.2	3.8	0.4	1.7	0.9	0
	Q3	0.9	0.2	-0.2	0.0	-0.2	0.6	0.5	C
	Q4	-0.8	0.2	1.1	0.0	0.3	-0.4	0.5	0
	1999 Q1	1.0	1,3	1.8	0.0	1.2	1.0	1.0	0
	Q2		0.0	0.4	3.3	6.7	1.8	0.8	0
	Q3		0.0	0.5	0.0	0.8	-0.1	0.8	0
	Q4 2000 Q1	0.3	0.0 0.5	0.4 1.9	0.0	0.1	0.5 1.5	0.9	
	Q2		0.0	0.0	-12.6	4.0	0.2	1.4	
	Q3		-0.8	1.8	0.0	-0.8	0.4	1.1	(
	Q4	-2.2	-0.2	0.6	0.0	-0.4	-0.7	1.3	1
	2001 Q1	-0.8	0.0	1.4	0.0	-0.1	1.0	1.5	1
	Q2		0.0	0.9	2.0	2.2	0.5	1.0	0
	Q3 Q4		-0.2 -0.4	0.1 1.6	0.0	2.5 0.4	-0.1 0.7	0.5	0
manta							778	Description of	1
rcentage ci	hange, latest quart 1997 Q1		onding quarter	4.5	5.3	20.0		3.6	4
	Q2		**	3.7	3.9	17.6		3.8	4
	Q3			5.1	3.9	16.1	**	4.0	4
	Q4 1998 O1			6.4	3.9 3.9	3.4	-31	3.0 2.7	
	1998 Q1 Q2			3.6 3.3	3.8	1.6 2.6	**	2.8	
	Q3		0.4	1.7	3.8	1.7	3.1	2.7	
	Q4		0.4	1.1	3.8	1.1	1.5	2.9	
	1999 Q1	2.8	1.6	2.5	3.8	1.9	3.0	3.0	- 1
	Q2	2.1	1.7	3.2	3.3	8.1	3.0	2.9	
	Q3		1,5	3.8	3.3	9.2	2.3	3.2	
	Q4		1.4	3.1	3.3	8.9	3.2	3.6	
	2000 Q1 Q2		0.5 0.5	3.2 2.8	3.3 -12.6	8.2 5.5	3.7 2.1	3,2 3.9	3
	Q2 Q3		-0.3	4.1	-12.6	3.8	2.6	4.1	2
	Q4		-0.6	4.4	-12.6	3.3	1.3	4.6	4
	2001 Q1		-1.0	3.8	-12.6	2.7	0.9	5.4	5
	Q2	-2.7	-1.0	4,8	2.0	0.9	1.2	5,0	4
	Q3 Q4		-0.4	3.1	2.0	4.3	0.7	4.4 3.9	3
			-0.6	4.1	2.0	5.2	2.1		

# Harmonised Index of Consumer Prices: Methodological developments and extensions of coverage from January 2002

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#### Summary

This article is the latest in a series reporting on the development of the Harmonised Index of Consumer Prices (HICP). The main focus of this article is to describe the methodological developments which came into effect from January 2002. In particular, the extension to coverage of goods and services where financial services expressed as a proportion of the transaction value are included in the HICP for the first time.

#### Background

The HICP has been developed, as required by the Maastricht Treaty, by the National Statistical Institutes of Member States of the European Union, in conjunction with Eurostat (the European Communities' Statistical Office). It was used in the assessment of countries' eligibility to join Monetary Union in 1998 and, since January 1999, has been used by the European Central Bank to measure inflation in the European Monetary Union area. It is also used to measure inflation in the European Union as a whole and, more generally, for comparisons of inflation between countries.

This is the latest in a series of articles reporting on the development of the HICP. Earlier articles in *Economic Trends* (1-4) presented:

- the background to the HICP and its uses; how it is constructed and how it compares with the UK Retail Prices Index (RPI);
- historical estimates of the UK HICP from 1988 to 1995, with indicative figures for 1975–1987;
- an update on methodological developments since the launch of the HICP and, in particular, the significant changes which came into effect from January 2000;
- further methodological developments and extensions to coverage, which came into effect from January 2001.

The rules to be followed in constructing the HICP are laid down in a

between Member States and Eurostat, setting out recommended practices). An initial Council Regulation, establishing the framework for the HICP, was passed in October 1995. This has been followed up with a series of detailed implementing measures.

# Changes coming into effect with the January 2002 index published in February

The following implementing measures came into effect with the index for January 2002:

- service charges expressed as a proportion of the transaction value;
- extensions to the coverage of goods and services to include financial services expressed as a proportion of the transaction value;
- · minimum standards for revisions of the HICP.

# Treatment of service charges expressed as a proportion of the transaction value and extension to the coverage of 12.6.2 – Other financial services n.e.c<sup>5</sup>

This Regulation<sup>6</sup> states that service charges, which are expressed as a proportion of the transaction value, should be included in the HICP. These charges largely relate to financial services provided by banks, building societies, and other financial service providers. They include certain bank charges, e.g. overdraft fees, stockbrokering and unit trust charges, and financial advice services, etc. Charges made by estate agents to tenants in connection with rental transactions are also included. Prior to this regulation, only services which were charged at a flat rate or fee were included in the HICP.

Implementation of this regulation in the UK HICP required the coverage of COICOP class 12.6.2 – Other financial services n.e.c – to be extended to cover financial services expressed as a proportion of the transaction value. This extension to coverage required the

particular for bank charges, foreign currency exchange, unit trust, and stockbrokering fees.

This extension came into effect with the index for January 2002. It is the last extension to coverage envisaged under the current regulatory framework. The overall effect of the extension to coverage has been to increase the proportion of household expenditure covered by the HICP by about 2 per cent.

#### Minimum standards for revisions of the HICP

Officially published HICP series may be revised. This Regulation<sup>7</sup> establishes harmonised rules concerning revisions to the HICP that are consistent with the rules underlying the construction of the HICP which are sufficient in scope and definition to ensure the comparability, reliability and relevance of the HICP.

The regulation defines 'revisions' to be *ex-post* changes in an HICP series, index level, weight, or rate of change that have been made publicly available by the European Commission and which affect the results to one decimal place. A 'mistake' is an unintentional breach of an established rule affecting at least one HICP series. A 'provisional' result is a result which is subject to revision which is expected to be finalised in a later month.

Implementation of this Regulation requires no changes to the UK HICP.

#### Future development of the HICP

Eurostat and Member States are also considering the possibility of extending the coverage of the HICP to include owner-occupier housing costs, using the "net acquisitions" approach. Under this approach, the weight for owner-occupied housing is calculated as the net cost of dwellings acquired by households from other sectors of the economy. This approach is considered to be consistent with the conceptual basis of the HICP. In effect, it would mean the weight being calculated as total expenditure on acquiring newly built or newly converted dwellings, plus purchases of council homes from Local Authorities. Member States have agreed in principle to develop a

net acquisition index on an experimental basis. After a period of time, the pilot time series will be analysed, and the methodological and measurement issues arising considered, before a decision is taken on whether the index should be incorporated into the HICP.

#### Other developments

Starting from the January 2002 index published in February, Table 5 of the Consumer price indices first release has been expanded to include HICP indices for 'all goods' and 'all services'. Details of how the HICP classifies goods and services is given in an article, 'Harmonised index of consumer prices: Goods and services indices', which can be found on the National Statistics website www.statistics.gov.uk/HICP

#### References

- O'Donoghue J and Wilkie C (1998). Harmonised Indices of Consumer Prices. Economic Trends No. 532, pp. 33–44.
- O'Donoghue J (1998). Harmonised Indices of Consumer Prices: Historical estimates. Economic Trends No. 541, pp. 49–55.
- O'Donoghue J (2000). Harmonised Indices of Consumer Prices: Update on methodological developments. *Economic Trends* No. 556, pp. 63–72.
- O'Donoghue J (2001). Harmonised Index of Consumer Prices: Methodological Improvements from January 2001. Economic Trends No. 576, pp. 44–47.
- 5. Not elsewhere covered.
- Commission Regulation (EC) No. 1920/2001 of 28 September 2001. Laying down detailed rules for the implementation of Council Regulation (EC) No 2494/95 as regards minimum standards for the treatment of service charges proportional to transaction values in the harmonised index of consumer prices and amending Regulation (EC) No 2214/96; OJ L 261; 29.9.2001; p.46.
- Commission Regulation (EC) No. 1921/2001 of 28 September 2001. Laying down detailed rules for the implementation of Council Regulation (EC) No 2494/95 as regards minimum standards for revisions of the harmonised index of consumer prices and amending Regulation (EC) No 2602/2000; OJ L 261; 29.9.2009; p.49.

# Where, and how, to look for the New Economy

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## What is a new economy?

There have always been 'new economies' – the concept is not tied to time or technology. For centuries there have been periods when changes in technology or social organisation brought:

- radical changes to market boundaries, expanding scope to exploit intellectual capital;
- access to new products and services for major sections of society as new consumers;
- significant changes in the interactions and operating processes of enterprises;
- redefinition of the relationships between customers and suppliers.

#### Examples include:

- printing, permitting knowledge to be reproduced and accessed in the 14th century;
- steam power, enabling knowledge embedded in engineered products to replicate itself on a mass production scale in the 19th century;
- canals and railroads, which created large integrated markets in many countries, opening access to products to millions of people previously restricted to subsistence living;
- birth of mass media and organised sport in the 19th century, bringing entertainment as a 'product' to a huge new audience;
- TV as a one-way medium of communication, giving individuals a global view of products and services;
- and now developments in information communication and technology (ICT), which have the potential to make global information, entertainment and access to products available on an individual, interactive, basis.

Each of these events changed both the structure of economies and relationships in society; none of them was a purely 'economic' phenomenon. But each one enabled the commercial exploitation of intellectual capital, brought new products or services to new consumers, changed the way enterprises work, and changed both economic and social behaviour. In the examples above, the sequence leads from an initial step, making available a limited amount of intellectual capital to a small but growing audience, to a state where information can be made available to all. Where the 'next step' leads is an interesting question, but our task for the moment is to help explain this one.

#### What is this new economy?

The 'new economy' we face at the start of the 21st century has three main aspects, which present a challenge to measurement and understanding:

- the infrastructure necessary to assemble, analyse, communicate and manage information, which rests in 'computer mediated networks';
  - transactions for the purchase of goods and services which are carried out by electronic means either by Electronic Data Interface which has been around for 25 years between firms, or over the Internet which brings electronic purchasing to individual consumers;
  - interactions which transfer information between enterprises or individuals, which are not themselves purchases, but which add value in some way.

In measuring this new economy there are specific methodology problems, which ONS is tackling in each of these areas:

- how to define and measure the infrastructure investment in products (both physical and intangible) which are changing rapidly as technology changes, and whose prices fall as capabilities rise?
- how to measure transactions for goods and services which do not go through traditional markets or channels of distribution, and whose suppliers are often not tied to specific countries?
- how to gauge the economic impact of a large volume of new activity which goes on within firms, between firms, between firms and consumers, and involving government, which are not purchase transactions but which support commercial activities or deliver valuable information?

This three-way split in measuring the ICT new economy, first set out by the US Centre for Economic Studies<sup>1</sup>, has been developed in a number of ways, by OECD and Eurostat, and forms the basis for work now under way by ONS. We will cover each of the areas in turn, after first addressing some of the basic issues of measuring activity and output.

### **Activity and output**

#### Output

The ONS is improving the coverage of its output measures for new economy industries. This has meant increasing the detail and definition of some industries, and also improving the way measures are constructed.

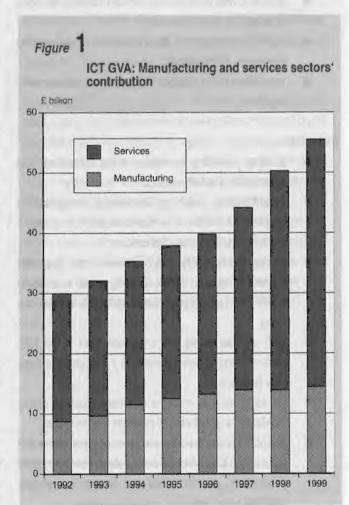
Many important new economy industries are classified as services, such as telecommunication, and computer services. The figure below indicates the growth in ICT services. The ONS currently uses turnover deflated by a combination of the average earnings index for general business services, and the RPI excluding mortgage interest payments. This data is used in the output measure of GDP and in the newly developed experimental monthly Index of Services (IoS). IoS is a programme by the ONS to improve data sources and methods used to measure output in the service sector. At the same time, development work is proceeding on the deflators for these industries. The work on both output and deflators has taken the form of an industry-by-industry review of data sources and methods used and then suggesting improvements. Recommendations from the review process should be implemented at the time of the *Blue Book* 2003.

Output measures also depend on the methodology for weighting together the volume measure indices of component industries (carried out at 4 digit SIC level). The weights used reflect the share

base year, currently 1995, updated at approximately five-yearly intervals in a process called rebasing. The fixed base method tends to overestimate aggregate volume measures in the latest periods<sup>2</sup> because growth estimates are affected by industries in which the rate of price fall is faster than the rate of volume increase.

Research³ has shown that a fixed-base estimate is particularly sensitive to industries with rapid growth in volumes. ICT industries have undergone dramatic growth and changes in shares of value added. The ONS will be publishing volume measures calculated using annual chain-linking from the *Blue Book* 2003 onwards for both the output measure and expenditure measure of deflated GDP.⁴ Annual chain-linking is effectively rebasing every year rather than after several years. A forthcoming article⁵ will explore the impact of this methodological improvement, with particular reference to the new economy sectors.

Another important issue relating to the new economy is the potential need for changes in classifications. For example, the viewing of films on products classified as goods (videos or DVDs) may be entirely transferred to media currently classified as services. Current economic statistics then gauge both the output and the consumption of the product in a very different way. The ONS, as part of a major



international statistical exercise, is addressing the classification of goods (the Standard Industrial Classification) for a major international revision in 2007. Thus will include definition and scope of intangible assets. The real 'product' in the previous example is not the medium through which the consumer views the film — it is the intellectual product that delivers value for which the consumer pays. Similar issues affect computer software. Defining and measuring 'intangible products' underlying output is a challenging issue, on which a significant amount of work remains to be done.

#### Prices and quality adjustments

In 2001 ONS published an article<sup>6</sup> outlining the issues surrounding computer deflation and the sensitivity of UK growth estimates to the measures used to deflate the output of and expenditure on computers and other ICT goods. The standard price index matches the same product each month in order to track price changes. However, for new economy goods, this is not possible as products change or are replaced very quickly. These changes are usually improvements and a price index must make adjustments for this improvement. There has been research in this area across many statistical and international agencies and ONS has been involved in both OECD and Eurostat programmes to ensure international comparability of price indices.

Over the last year, ONS has made progress on quality adjustment of UK price indices. Alternative methods used to adjust for quality have been investigated, particularly for personal computers. The ONS currently adjusts these goods for quality changes using the method of option costing for the consumer prices and manufacturer costing for producer prices. Alternative methods of quality adjustment – particularly the hedonic approach – have been tested. ONS has analysed scanner datasets, comparing this census data of product sales with the results of the traditional matched model adjusted for quality change. More details about the techniques are available and results of ONS research will be published in 2002.

#### The Infrastructure

#### Capital stock

Over the last year, the ONS has been developing new measures of the capital stock which better track its productivity. The published gross capital stock measure aggregates the different assets in terms of their replacement cost, to represent national wealth. But in assessing the economic impact of infrastructure on the production process, it is the flow of services that assets provide which is useful to analysts. There is a link between the value of an asset and the flow of services the asset will provide during the rest of its life. Until

recently, the wealth and the services measures moved very similarly, but more recent years have seen a divergence.<sup>7</sup>

A reason for the divergence is that the new economy infrastructure contains large investments in assets with short life lengths, such as computers. Typically, a computer delivers services over a few years. This means that annual services: asset value ratios are greater for computers than for assets with a longer life-length, such as a building. The latest supply-use tables showed the growth in investment in information and communication technology (ICT) products.<sup>8</sup>

The ONS will be reporting the results of its development of a measure of capital services later in 2002 on an experimental basis. This work has brought an expansion in the number of different asset types identified. The main three asset types underlying the wealth measure are buildings, plant and machinery and vehicles. In the capital services measure, the plant and machinery series has been further split to show computers, software and other ICT investments separately from other plant and machinery.

Alongside the work on capital services, research is being done to improve the wealth measures of capital stock. Wealth measures published in the *Blue Book* derive from the ONS perpetual inventory model (PIM), which uses data on investment and deflators, together with assumptions about the working lives of the invested assets. This research work involves the introduction of new processing software, a review of the data used to check its accuracy, the introduction of the extra asset types used in the experimental capital services estimates and a review of the asset life assumptions.

### Computing services

In 2001, ONS published much greater detail on the output of the computer services industry from the successful SERVCOM inquiry; this provided data on the output by product of this large and growing industry. It identified the UK computer services sector as accounting for £32bn in output, with IT consultancy, facilities management and systems integration as its largest elements.

Much of the output of this industry is intermediate consumption, for example when manufacturing firms outsource data processing to specialists in computer services. However, with the introduction of the 1995 version of the European System of Accounts, much more of the output of computing services was classified as investment, so adding to GDP. The precise distinction between that part which is investment and that part recorded as intermediate consumption is blurred by the differing treatment of software by company accountants.

In December 2001, the results of the quarterly capital expenditure survey were published. Recent surveys have asked specifically for firms to give their investment in computer software and hardware, distinguishing these two assets from plant and machinery. This disaggregation was previously only collected in annual surveys. The quarterly survey improves the information available on business expenditures on 'new' economy assets. Some countries (notably the US) use the product breakdown of computing services to infer the proportion of output to capitalise. This is in contrast to the UK approach which asks firms' assessment of whether to capitalise computing services.

The ONS is also looking at the international comparability of treatment of software and the output of computing services. This is being undertaken in Eurostat and OECD taskforces, where ONS is an active participant. Important issues include the types of licences under which software are currently sold. Different types of licences result in the capitalisation of software in different parts of the national accounts. Treatment of software copies and intellectual property and the definition of large databases are subjects being considered. The taskforces are collating the methods that various countries currently are or could adopt to estimate the different types of software such as purchased, customised or produced for own account. All of these issues will affect economic assessment and valuation of 'infrastructure'.

#### **Electronic Transactions**

### E-commerce for business

The first UK stand-alone survey of business e-commerce activity was run in early 2001, using a common format developed with Eurostat and other EU national statistics offices. It was sent to 9,000 firms, and achieved a response rate over 80 per cent – the highest of all the EU participating countries. The survey collected a wide range of data on firms' ownership and use of IT, the use of electronic processes for purchasing and sales, and the value of transactions.

The results showed that e-commerce transactions account for 2 per cent of UK business turnover – including a much higher proportion in the financial services sector, and that e-commerce is growing rapidly across all sectors. About one third of firms in the survey bought or sold over the Internet, and a majority of these had started doing so over the past year. UK business was shown to be among the heaviest users of e-commerce for buying and selling among the five large economies of the EU.

The survey is now in the process of being repeated with a larger sample, including a larger group of small enterprises, with the extra funding and compliance cost underwritten by DTI. Additional questions in the second survey cover the links between electronic transactions and other business processes, such as production scheduling, logistics and marketing. This will provide raw material for assessing the business impact of electronic processes. New results will be available in May 2002.

During 2001, a new survey has been launched, based on monthly information collected from Internet Service Providers. The purpose is to track the growth of Internet subscriptions, showing both traditional and broadband access, as an indicator of infrastructure for the new economy. This was first published in December 2001 as the "Index of Connectivity" following a twelve-month period over which the data was quality assured.

#### Internet use and e-commerce for households and individuals

The ONS has been measuring the penetration and uses of the Internet in households since early 2000. The two main sources of data have been the Expenditure and Food Survey (previously Family Expenditure Survey) for household data, and the National Statistics Omnibus Survey for individual level data. Figure 2 shows the growth of household Internet access starting to level off in 2001 after steady increases in the previous two years.

A core set of Internet related questions have also been put on the National Statistics Omnibus Survey on a quarterly basis since July 2000. The questions asked have, again, been developed in consultation with international organisations and drawing on the experience of other National Statistics organisations, including Statistics Canada and the Australian Bureau of Statistics. As with the business survey, Eurostat has been working on a model survey to permit the collection of internationally comparable results. The ONS will use the NS Omnibus for two quarters in 2002 to enable collection of this information.

Major areas covered in the Internet access module include individual use of the Internet, methods of connection to the Internet, reasons for and barriers to use. Extensive use has been made of these statistics to measure government policies to promote Internet access and usage, especially the assessments which have been made of the 'digital divide' – showing substantial differences in use of the new technology between different sub-groups of the population.

Over the last six months data have begun to be published on individual expenditure over the Internet, including both amounts and goods purchased. Results from October 2001 showed that over a third of adults in Great Britain who have accessed the Internet also purchased goods or services through it. One of the targets for the coming year is to compare data on what households buy against

Figure 2 Proportion of households with home access to the internet; April-June 1998 to July-September 2001 United Kingdom Per cent 35 30 25 20 10 5 Apr-Jun Jul-Sep Oct-Dec Jan-Mar Jul-Sep Oct-Dec Jan-Mar Jan-Mar Apr-Jun Jul-Sep Oct-Dec Apr-Jun Apr-Jun 1998 1999 2000 2001

Source: Family Expenditure Survey (April 1998 to March 2001); Expenditure and Food Survey (April 2001 onwards)

that on business sales, in order to get a better understanding of the impact of e-commerce on the pattern of economic activity.

# Measures beyond transactions and the impact of e-commerce

#### E-commerce benchmarking

In 2001, ONS was commissioned by the e-envoy to develop internationally comparable measures of the UK's attractiveness as a place to do e-business, and to make a pilot assessment. Working with DTI, and the Internet Age Partnership, we have developed methodology for comparing across different stages in the adoption process for e-commerce, and for presenting the results in ways which will support policy management.

Much of the work has centred on collecting and collating a wide range of data on enablers for electronic access to goods and services, involving enterprises, households and government, drawing on national statistics organisations, on the extensive international surveys undertaken by DTI, as well as surveys by Eurostat. The exercise has highlighted a number of areas where development is needed to improve international comparability of data, and these conclusions have been published. The results are now being used as an input to comparison work on policy levers.

#### E-commerce impact - Business

In response to a request by the e-envoy for evidence on the economic impact of e-commerce on UK industry, a study is under way to investigate productivity and growth performance using micro-data. The programme of work to do this depends on the 2001 e-commerce survey now in the field, which gathers information on electronic business processes as well as on transactions.

E-commerce survey results will be linked to business performance data from firms in the Annual Business Inquiry, and to related data on innovation and management from the Community Innovation Survey (collected by ONS for DTI). In addition, we plan to access data on ICT investment at business level to help analysis of productivity. Eurostat has also contracted to support this work, since it will be the pilot analysis of its type among EU member states.

Business data linking work may be extended during 2002, if it proves possible to acquire data on skills and working practices within firms, and to relate it to electronic business processes and ICT investment. Work elsewhere suggests that the combination of technology and changes in skills and working practices can make a powerful contribution to understanding productivity. The Social Directorate within ONS is also looking at changing characteristics of the labour market to see where e-commerce is having a measurable impact.

#### Internet impact - households and individuals

Over the coming year ONS will undertake a cross-cutting programme to form a coherent picture of how increased use of ICT and the Internet have influenced social and economic change. Work has begun on the feasibility of using the Omnibus surveys to support more in-depth analysis.

An important area to be explored is the effect of Internet and related activities on the labour market. The growth of new ICT-related occupations has been an important contributor to revisions in the Standard Occupational Classification used for household surveys. The new classification (SOC2000) published in June 2000 distinguishes between occupations concerned with ICT development and implementation and those concerned with service delivery and data support. In most areas, survey results show that the numbers employed in ICT-related occupations are growing at an accelerating rate – most notably for ICT technology managers, and IT strategy and planning professionals. Further work is needed to explore complex relationships between skills, training needs and technological advances to determine their impact on employment changes.

Other areas to be looked at in cross-cutting work include:

- the impact on those who are excluded from using the Internet;
- the use of government and financial services via the internet;
- measuring differences between Internet and conventional shopping patterns; and
- the development and consequences of internet use for leisure and cultural activities.

Both the General Household Survey and the Time Use Survey collect information on Internet and ICT penetration which will be used to validate findings in these areas, and improve analysis of time spent on-line.

#### Conclusions

The ONS is engaged on a wide-ranging programme of work to improve measurement of the new economy. This article provides an overview of the work that has been done, and also summarises future plans. In 2002, ONS plans to publish work in a wide range of areas, as outlined below.

On the output side, reviews of certain new economy sectors will be carried out during 2002 as part of the Index of Services work programme. Complementing this, a forthcoming article will explore

the impact of chain linking on the new economy sectors, amongst others. The ONS will also publish the results of research on different techniques for quality adjusting computer prices.

Turning to the measurement of infrastructure, in 2002 ONS will produce experimental estimates of a measure of capital services. The ONS will also provide reports of progress on the research programme to improve the wealth measures of capital stock. The task forces on software will tackle the issue surrounding the treatment of this product in the National Accounts and the practical measurement issues.

The ONS will continue to publish the current wide range of data on electronic transactions and Internet use. Publication of the new "Index of Connectivity" survey of Internet Service Providers will continue, and in May 2002, ONS will publish the second UK stand-alone survey of business e-commerce activity. On the household side, ONS will continue to collect and publish data on Internet usage from the Expenditure and Food Survey, in the National Statistics Omnibus Survey and in the First Release series "Internet Access: households and individuals."

With an increasing body of data on Internet use and e-commerce, ONS is starting work to investigate the impact of e-commerce. During 2002, e-commerce survey results will be linked to other data sets on firm level performance in order to relate e-commerce activity to developments in productivity. The ONS will also carry out a programme of work to investigate how ICT usage and the Internet have influenced social and economic change.

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#### References

- Mesenbourg T. Measuring Electronic Business: Definitions, Underlying Concepts, and Measurement Plans. www.census.gov/epcd/www/ebusines.htm
- Young A H (1992). Alternative measures of change in real output and prices. Survey of Current Business (US), pp. 32–48.
- Schreyer P (2000). The contribution of Information and Communication Technology to Output Growth: A study of the G7 countries. STI Working Paper. OECD: Paris.
- Tuke A and Reed G (2001). The effects of annual chain-linking on the output measure of GDP. Economic Trends No. 575, pp. 37–53.

- Tuke A (2002). Analysing the effects of annual chain-linking on a modelled output measure of GDP. Economic Trends, forthcoming.
- Vaze P (2001). ICT Deflation and Growth: A Sensitivity Analysis. Economic Trends No. 572, pp. 45–52.
- Oulton N (2001). ICT and productivity growth in the United Kingdom. Working Paper No 140. Bank of England: London.
- Office for National Statistics (2001). United Kingdom Input-Output Analyses. The Stationery Office: London.
- Williams M (2001). E-commerce Inquiry to Business 2000. Economic Trends No. 572, pp. 29–36.
- Office for National Statistics (2000); Beerten R et al (2001).
   Changing to Standard Occupational Classification (SOC 2000)
   dual coding on the Labour Force Survey. Labour Market Trends
   Vol. 109 No. 7 pp. 357–369.

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### Summary

The results of this survey show that 66 per cent of enterprises in the UK were innovation active (as defined below) in the three-year period 1998–2000.

The main constraint on innovation was direct cost closely followed by the cost and availability of finance.

The major impact of innovation activities was on the quality of goods and services produced or supplied.

internal and market were the most frequently cited sources of information for innovation. Technical and other formal standards were also important sources.

#### Introduction

This article presents emerging results from the UK Innovation Survey 2001, covering the three-year period from 1998 to 2000. This is part of a wider third Community Innovation Survey (CIS) conducted by EU Member States (CIS 2 was in 1997). The UK survey was carried out in two parts: the main survey covering the whole of the UK, and a smaller top-up survey for the English regions. This article contains results from the main survey only (detailed regional results will be available in summer 2002).

Business innovation is a vital ingredient in raising the productivity, competitiveness and growth potential of modern economies. Providing the right economic conditions for, and using appropriate policy instruments to encourage innovation in the UK is a central objective for the Department of Trade and Industry (DTI). Measuring the level of innovation activity in the UK and identifying where policy might be best targeted contributes to the pursuit of that objective. The Community Innovation Survey complements other indicators of innovativeness by providing a regular snapshot of innovation inputs and outputs and the constraints faced by UK businesses in their

innovation efforts, across the range of UK industries and business enterprises. It has the additional benefit of providing the basis for some comparisons with other European countries.

The majority of the survey is concerned with the technological side of innovation and we begin here by defining what is meant by innovation activity. We then discuss the factors which hamper innovation, the impact of innovation on the business and the sources of information used. Finally, we touch briefly on aspects of nontechnological innovation such as the introduction of new management techniques.

## Innovation activity

Innovation takes place through a wide variety of business practices and a range of indicators can be used to measure its level within the enterprise or in the economy as a whole. These include the levels of effort employed (measured through resources allocated to innovation) and of achievement (the introduction of new or improved products and processes). This section reports on the types and levels of innovation activity over the three-year (1998–2000) sample period.

We define innovation activity here as whether enterprises:

- have introduced a new or significantly improved good, service or process;
- were engaged in innovation projects not yet complete or abandoned;
- engaged in longer-term innovation activity such as basic R&D or technology watch;
- had expenditure in areas such as internal research and development, training, acquisition of external knowledge or machinery and equipment linked to innovation activities;
- formally co-operated on innovation activities with other enterprises or institutions.

Overall, 66 per cent of enterprises were classed as being innovation active in the period. Large enterprises were more likely to engage in some sort of innovation activity, with 78 per cent innovation active as opposed to 66 per cent of small and medium-sized enterprises (SMEs).<sup>1</sup>

In total, 18 per cent of enterprises had introduced new or significantly improved goods or services in the sample period, and 15 per cent had introduced a new process. The level of product and process innovation is considerably greater in large firms.

Table 1 Enterprises who are innovation active, by type of activity

Per cent of all enterprises

	66 78 6 17 41 1		
	SMEs	Large	All
Innovation active	66	78	66
Product innovator	17	41	18
Process innovator	14	34	15
Innovation incomplete	43	46	43
Innovation-related expenditure	38	57	39
Longer term innovation activities	8	27	7
Innovation co-operation	7	27	8

Table 2 Partners for innovation co-operation

Forty-three per cent of enterprises had innovation projects which were incomplete (either ongoing, abandoned or planned but not started) during the period. This demonstrates the continuous nature of innovation, not necessarily resulting in a new good, service or process in the sample period.

The large proportion of enterprises with some innovation-related expenditure (39 per cent) shows that firms recognise the need to allocate resources to innovation. The majority of those with innovation expenditure purchased machinery and equipment in connection with innovation (74 per cent of all firms with some expenditure) while some 20 per cent had in-house research and development expenditure.

Only 8 per cent of enterprises had co-operation arrangements on innovation activities. Seventy-one per cent of these "collaborators" had agreements on a national level. The most likely partners for co-operation agreements were suppliers (58 per cent of enterprises with co-operation agreements) followed by clients or customers (at 51 per cent). Around one third of collaborators included UK universities amongst their partners.

Firms in production and construction industries were more likely to be innovation active than those in distribution and service based industries. The difference between these types of firm is marginal at the SME level but more pronounced in larger firms.

Table 3 Enterprises who are innovation active

Per cent of all enterprises

	Size of enterprise					
	SMEs	Large	All			
Production and construction	66	83	67			
Distribution and services	65	71	65			
All	66	78	66			

Per cent of enterprises with co-operation arrangements

			Reg	ion		
Type of partner	Local	National	Europe	US	Other	Any
Other enterprises within enterprise group	13	19	15	14	6	46
Suppliers	13	39	17	10	6	58
Clients or customers	14	35	16	11	6	51
Competitors	6	11	5	4	1	18
Consultants	9	19	2	3	1	28
Commercial laboratories/R&D enterprises	4	11	3	3	0	18
Universities/ higher education institutes	13	19	5	2	1	34
Sovernment research organisations	4	9	2	1	1	12
Private research institutes	2	8	2	2	0	13
Any	39	71	36	28	15	100

Large firms are more likely to engage in every form of innovation activity, the difference in production and construction based firms being the greater. For example, large production and construction enterprises were three times more likely to introduce new or improved products than SMEs in the same industry, compared with twice as likely in the distribution and service sector.

### Factors hampering innovation

An important dimension of policy analysis is the extent to which market or other factors constrain the ability of enterprises to innovate successfully. These can be obstacles that the enterprise encounters while carrying out innovation activities as well as factors preventing innovation.

The survey asked about a range of constraining factors and the strength of any effect on the ability to innovate. Table 4 shows the proportion of respondents who each indicated a high importance for each constraint category.

Cost factors were the most cited, including the direct resource costs of innovation activities and the cost and availability of finance. In particular, obtaining affordable finance was more often a problem for SMEs than for larger enterprises.

More enterprises felt constrained by economic circumstances than by internal factors, although the lack of qualified personnel was viewed as one of the more important factors constraining innovation. The impact of regulations and standards was also thought to be a substantial barrier to innovation, particularly for SMEs.

It should be noted that in all of these categories the hampering factors were rated high more often by enterprises who were innovation active than those who were not. This implies that these specific constraints were a relatively small element in explaining complete absence of innovation activity.

#### Effects of innovation

Enterprises innovate to improve competitiveness, leading to enhanced profitability. The survey sought information about the intermediate effects of innovation, on the market position and internal processes and costs.

Respondents were asked to rank a number of potential effects as having no impact or grade the impact as low, medium or high. The proportion of innovation active respondents who answered high in each category is shown in Table 5.

The striking feature of the results is the spread of responses across the range of impacts, with no single type predominating. Generally, product-related impacts were more often cited than process (cost) impacts, with quality enhancements top rated. This suggests a strongly customer-focused approach to innovation. More large enterprises than SMEs attributed a high impact to their innovation activities, possibly due to economies of scale.

The least cited impact was reducing materials and/or energy per produced unit, although this was over twice as important for large firms than for SMEs. For large enterprises, their innovation activities had least impact on improving environmental or health and safety aspects.

Table 4 Enterprises grading innovation inhibiting factors as high

Per cent of respondents

			Size of enterprise	
		SMEs	Large	All
Economic Factors	Excessive perceived economic risk	17	17	17
	Direct innovation costs too high	23	21	23
	Cost of finance	20	11	20
	Availability of finance	17	11	17
Internal Factors	Organisation rigidities	7	10	7
	Lack of qualified personnel	13	9	13
	Lack of information on technology	6	3	6
	Lack of information on markets	7	5	7
Other Factors	Impact of regulations or standards	18	13	17
	Lack of customer responsiveness	12	13	12

Figure 1

Enterprises grading importance of innovation-inhibiting factors as high

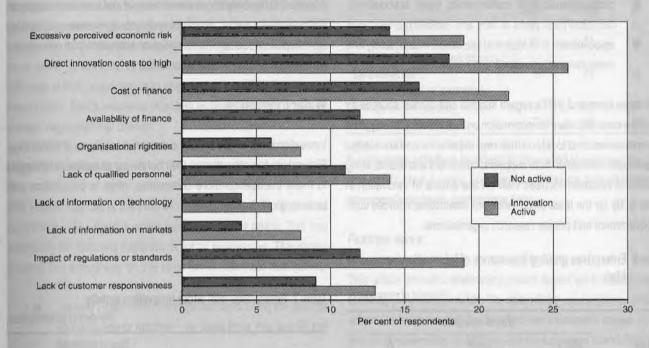


Table 5 Enterprises grading impact of innovation as high

Per cent of innovation active respondents

	Effect		Size of enterprise	
		SMEs	Large	All
Product oriented	Increased range of goods or services	12	13	12
	Opened new market or increased market share	12	13	12
	Improved quality of goods or services	16	17	16
Process oriented	Improved production flexibility	9	12	9
	Reduced unit labour costs	7	12	8
	Increased capacity	10	12	11
Other	Reduced materials and/or energy per produced unit Improved environmental impact or health and	4	8	4
ouici	safety aspects	6	7	6
	Met regulations or standards	10	11	10

## Sources of information

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

Respondents were asked to rank a number of potential sources on a scale from no relationship to high importance. The proportion who answered high in each category is used in the table. These sources are:

- internal: from within the enterprise itself or other enterprises within the enterprise group;
- market: from suppliers, customers, clients, consultants, competitors, commercial laboratories or research and development enterprises;

- institutional: from the public sector such as government research organisations and universities or private research institutes;
- professional: from conferences, trade associations, technical/trade press or fairs and exhibitions;
- specialised: from technical standards, health, safety and environmental standards and regulations.

Both large firms and SMEs regard internal and market sources as being the most important for information on innovation. This suggests that enterprises tend to rely on their own experience and knowledge coupled with information from suppliers, customers and clients, fitting in with the customer-focused view on the effects of innovation in Table 5. By far the least employed were institutional sources such as government and private research organisations.

Table 6 Enterprises grading importance of information sources as high

Per cent of respondents

		Size of enterprise	
Source	SMEs	Large	All
Internal	20	39	21
Market	22	34	22
Institutional	3	4	3
Professional	9	11	9
Specialised	14	18	14

Of all the sources used, those from within the enterprise itself were most important (19 per cent of enterprises). Each of the specialised sources were rated highly with health and safety standards (at around 10 per cent) narrowly above environmental and technical standards. Of the market sources, suppliers and customers were considerably more important sources of information on innovation than consultants, competitors or commercial laboratories.

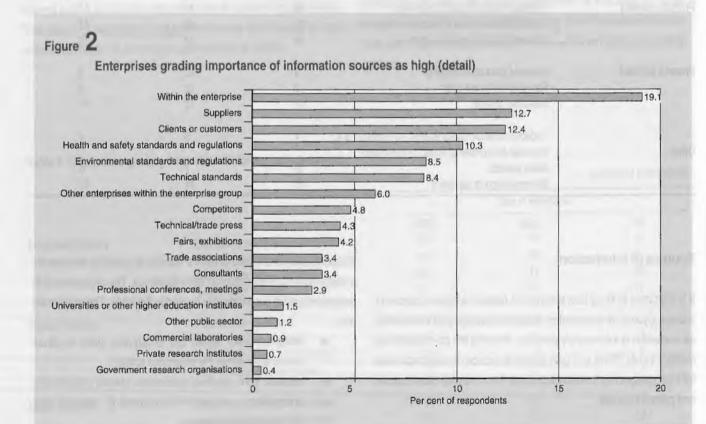
#### Wider innovation

Innovation is not wholly about the development or use of technology. Enterprises can also change their behaviour or business strategies to make themselves more competitive, often in conjunction with technological change.

Table 7 Enterprises with wider innovation activity

Per cent of all enterprises

		ALL THE PARTY OF T			
Size of enterprise					
SMEs	Large	All			
35	68	36			
29	60	30			
30	70	32			
40	68	41			
	SMEs 35 29 30	SMEs Large 35 68 29 60 30 70			



Enterprises were asked whether they have made major changes to their business structure and practices in the three-year period 1998–2000. As would be expected, a far greater proportion of large firms engaged in some sort of wider innovation than SMEs. Overall, a change in marketing strategy was most often cited with the introduction of advanced management techniques the least. Large firms were most likely to adopt new organisational structures, although a high proportion also engaged in the other three areas listed below. SMEs were less than half as likely to have introduced a major organisational change.

### Use of e-business

The widespread use of the Internet – including for electronic-based commerce – has been a major feature of recent years. This has potentially far reaching implications for all businesses. The survey touched in a limited way on this large issue. The main findings are:

- around 79 per cent of enterprises were using the Internet in some way or another – for large firms this was 94 per cent;
- its most popular uses were for gathering information and having a presence on the Web in the form of a website or page. Less common was the use of the Internet as a medium to sell goods or conduct commerce with other businesses.

Table 8 Use of e-business

Per cent of all enterprises

and the successful of his	Size of enterprise  SMEs Large All 60 68 60 60 77 60			
THE REAL PROPERTY AND ADDRESS OF	SMEs	Large	All	
Basic internet presence	60		60	
Internet used for information	60	77	60	
Customers can place orders through the internet site	15	23	15	
Commerce with other businesses through the internet site	16	21	17	
One or more of the above	79	94	79	

E-commerce activity in business is measured in detail by the ONS in a dedicated survey (see www.statistics.gov.uk/themes/economy/articles/e\_commerce.asp).

## Further work

This article provides preliminary results based on the main survey covering the whole of the UK. The data will be used for policy analysis within Government and for research on innovation issues by the academic community. In addition, the top-up survey (conducted after the main survey) should allow analyses on a regional basis. The results of the full survey will be published in the summer.

# **ANNEX A - Methodology**

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

The UK Innovation Survey is part of a wider Community Innovation Survey (CIS) covering the EU. The survey is based on a core questionnaire developed by the European Commission (Eurostat) and Member States. This is the third iteration of the survey - CIS 2 was carried out in 1997 and the results form part of various EU benchmarking exercises (see www.cordis.lu/innovation-smes/scoreboard/home.htm).

The UK Innovation Survey 2001 was carried out in two parts. The first sampled 13,340 enterprises and covered the whole of the UK, whilst the second was an England-only top up to allow the construction of regional indicators. This article only includes results from the main part of the survey. More detailed regional and industry results incorporating the top-up survey data will be available in summer 2002.

The survey was voluntary and conducted by means of a postal questionnaire. A copy of the questionnaire used can be found on www.dti.gov.uk/tese/science.htm.

#### Coverage

The survey covered enterprises with 10 or more employees in sections C–K of the Standard Industrial Classification (SIC) 1992. All SIC production and construction divisions are included, i.e. sections C (mining and quarrying), D (manufacturing), E (electricity, gas and water supply) and F (construction). In distribution and services only SIC 51 (wholesale trade except of motor vehicles) is included from section G (wholesale and retail trade; repair of motor vehicles and personal and household goods) with section H (hotels and restaurants) excluded completely. Sections I (transport, storage and communication), J (financial intermediation) and K (real estate, renting and business activities) are included in their entirety.

## Table 9 Summary of sample frame

## Sampling

The sample was drawn from the ONS Inter-Departmental Business Register (IDBR) on 16 March 2001. The unit of analysis was the enterprise - for larger firms this is usually a business unit (which must be a legal entity and have a certain degree of autonomy), for smaller firms it is often the whole company.

The survey was stratified by country (England, Scotland, Wales and Northern Ireland), industry (31 SIC groupings) and employment (5 size bands). The sample was drawn using optimal allocation (based on the proportion of innovators from CIS 2) with a minimum cell size for each country (equivalent to 31 for the UK). Almost 12 per cent of the targeted 115,000 enterprises in the population were sampled.

### Response and weighting

The questionnaires were distributed on 2 April 2001. Enterprises not responding received written reminders in mid-May and mid-June with the second reminder also including a copy of the questionnaire. Finally, around 1,000 non-responding enterprises were contacted by telephone in an effort to further boost response rates.

Of the 13,315 enterprises selected, 5,908 valid responses were received (along with a small number of returned questionnaires from enterprises which had ceased trading) to give a response rate of 44 per cent. The population and achieved sample are summarised below.

The results in this article are based on weighted data in order to be representative of the population of firms. The responses were weighted back to the population using the inverse sampling proportion in each stratum, i.e. the weight attributed to each enterprise was the number of enterprises in the population divided by the number of responses in that stratum. On average each respondent represents 23 enterprises in the population.

#### Footnote

 Small and medium sized firms (SMEs) are defined here as having less than 250 employment. They are not necessarily independent companies in their own right.

Number of enterprises

	Population			Achieved sample		
	SMEs	Large	All	SMEs	Large	All
Production and construction	55,035	3,113	58,148	2,686	452	3,138
Distribution and services	54,461	1,873	56,334	2,502	268	2,770
All	109,496	4,986	114,482	5,188	720	5,908