

Economic Trends

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In Brief

Articles

This month we feature four articles.

Claire Hardwidge of ONS provides commentary, tables and charts to illustrate changes in Jobs in the Public and Private Sectors of the United Kingdom from the 1960s to 2001. The General government and Public non-financial corporations sectors are defined and details of changes in coverage from 1998 provided.

Caroline Sheerin of ONS outlines UK Material Flow Accounting. A material flow account can be drawn up by measuring the physical movement of materials between the economy and the environment. This balances the inputs (extraction of natural resources from the environment, and imports of goods) with the outputs (wastes, emissions and exports) and accumulation of stock (in terms of new buildings, etc) within the economy. After presenting some of the main results, the article concludes by reviewing the merits of the various indicators of material flows, and by identifying some areas where the accounts and associated indicators could be improved.

Tony Clayton of ONS and Chiare Criscuolo of the Centre for Research into Business Activity, discuss Electronic Commerce and Business change. The article first summarises the types of change brought about by Electronic Commerce. The next section discusses measuring the impact of e-commerce and electronic business processes and considers both macro-economic studies and the micro approach matching the results of business surveys and comparing them. After considering links between e-commerce use and business performance measures, the article concludes by setting out future work to be undertaken.

Rob Pike and Steve Drew of ONS, set out the progress made since the launch of the Experimental monthly index of services in December 2000. The article first covers the background to the introduction of an experimental IoS and the conceptual basis. Next, the achievements since the launch are summarised including published outputs and indicator developments. Finally, future plans are discussed for scheduling future industry reviews, taking on more monthly data and improving timeliness.

Recent economic publications

Quarterly

Consumer Trends: 2001 quarter 4. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p242.asp

United Kingdom Economic Accounts: 2001 quarter 4. TSO, ISBN 011 621544 5. Price £26.

UK Trade in Goods analysed in terms of industries (MQ10): 2001 quarter 4. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p731.asp

Monthly

Financial Statistics: May 2002, TSO, ISBN 0 11 621498 8. Price £23.50.

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

Monthly Review of External Trade Statistics (MM24): March 2002. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p613.asp

TSO 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 - June 2002

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Overview

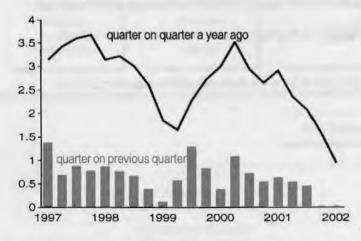
UK data shows GDP has not grown over the past two quarters, despite some optimism as to global conditions. Ongoing slow growth was driven by continued falls in production sector output, and weaker growth in the service sector. The UK manufacturing sector has been in recession for five quarters, driven strongly by the sharp contraction in the ICT sector but also by ongoing declines in most other industries. Service sector growth weakened through 2001 and into the first quarter of 2002. Household demand weakened a little in the first quarter of 2002, but remains fairly robust with indebtedness remaining high. Investment demand is weak, set against a background of falling measured profits and concerns again about the indebtedness of the corporate sector. Exports and imports show very large falls on the year, but some moderation of declines into 2002. Headline labour market figures remain flat, although manufacturing and private sector service jobs show falls. Earnings growth has slowed. Producer price data show deflation coming into the factory and only slight inflation coming out. RPIX remains close to target.

GDP activity

ONS estimates of GDP now show zero growth in both the fourth quarter of 2001 and the first quarter of 2002. Growth comparing the first quarter of 2002 with the same quarter a year ago was 1.0 per cent, the lowest figure since the economy emerged from the 1990-91 recession (figure 1).

On the output side the weaker GDP has been driven by manufacturing sector, which has been in recession throughout 2001, and in more recent quarters by weaker growth in the services sector. From the expenditure perspective, low GDP has been driven by weak investment and falling trade.

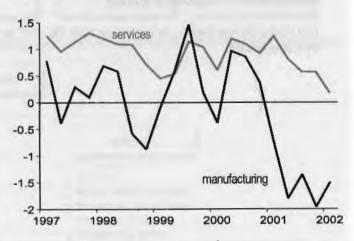
Figure 1 Gross Domestic Product growth



The UK slowdown in 2001 came 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. However flat growth in the UK in the first quarter of 2002 contrasts with an upturn in quarterly growth in some of the UK's major competitors.

UK GDP growth has for some time been supported by robust growth in the service sector, but latest figures show this appears to have weakened in the second half of 2001 and into 2002. In the first quarter of 2002 services output grew by 0.2 per cent compared with the previous quarter, down from growth of 0.5 per cent in the fourth quarter (figure 2); growth compared with the same period a year ago was 2.1 per cent, the weakest figure since the fourth quarter of 1992. A broad industrial breakdown shows that the more general slowdown in the service sector has been driven by a sharp slowdown to post and telecommunications, and declines in transport and storage and hotels and restaurants. These were to some extent offset by stronger growth in distribution and business services. In the particular case of the first quarter, weakness is dominated by changes in the hitherto strongly growing sectors, with retailing growth weakening and business services showing a small decline on the quarter

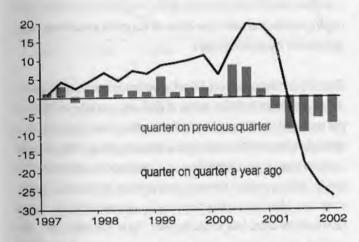
Figure 2
Services & manufacturing
growth, quarter on previous quarter



The manufacturing sector continued to decline in the first quarter, albeit by slightly less than in the previous quarter. The quarterly decline was 1.5

per cent in the first quarter, down from a decline of 2.0 per cent in the fourth quarter of 2001; comparing with the same quarter a year ago the annual decline was 6.5 per cent, the largest decline since 1981. Comparing manufacturing output in the three months to February 2002 with the same period a year ago shows an annual decline of 6.4 per cent, again the largest decline since the recession of 1990-91. Quarterly data hides the monthly changes. Here an improvement into February was more than offset by a decline into March. Within the manufacturing sector, the information and telecommunications technologies industries (ICT, proxied by the ONS series, 'radio, TV and telecommunications') continue to decline at a very sharp pace. In the first quarter the quarterly decline was 6.8 per cent following a decline of 5.3 per cent in the previous quarter; in the year to the first quarter the decline was 26.4 per cent (figure 3).

Figure 3 ICT industries growth



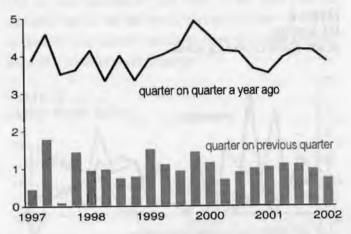
ONS data sits potentially at odds with figures from external sources, which almost across the board show improvements into the first quarter for both the manufacturing and services sector. The interpretation of these diverging messages is difficult, although for example the Monetary Policy Committee have drawn attention to a potential for the confidence figures to be improving partially as a response to interest rate cuts as well as noting that in some surveys, while optimism has increased, it remained to be seen whether the optimism would be translated into actual output growth.

Domestic demand

GDP growth was supported by vigorous household demand throughout 2001, however, figures for the first quarter of 2002 show a slight slowdown.

National Accounts figures for household final consumption expenditure in the first quarter of 2002 show quarterly growth of 0.7 per cent, down a little on 0.9 per cent in the fourth quarter; growth in the year to the first quarter was 3.8 per cent (figure 4). This slowdown was driven by weaker retail sales growth as well as a reduction in motor vehicle purchases.

Figure 4
Household final consumption expenditure growth



At this stage it is clearly not known whether this slowdown reflects a substantive change to the economy, as so far figures for April have indicated growth increasing again. In particular ONS retail sales figures rose into April, with the three month on previous three month growth rate sharply up at 1.8 percent, compared with 1.0 per cent in March. External indices of retailing show opposing messages, with April figures from the CBI rising sharply and BRC data falling sharply.

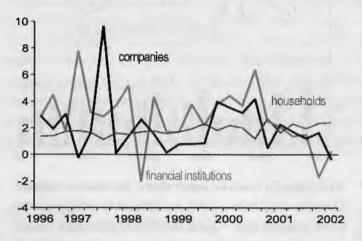
More generally ongoing growth in consumer credit shows that consumers are continuing to add to the stock of debt that is to some extent sustaining the present levels of consumer demand. The Bank of England has recently emphasised how the stock of household debt through bank lending is at an unprecedented 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.

In contrast to household demand, business demand for investment continues to remain subdued. This echoes the weak investment around the world. UK Business investment fell by 1.1 per cent compared with the fourth quarter of 2001, and by 3.4 per cent compared with the first quarter of 2001. Figure 6 shows that in recent quarters the falls have been largely driven by falls in manufacturing investment, with service investment now fairly flat.

External indices echo the general weakness in 2001, 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. On the other hand, but in a

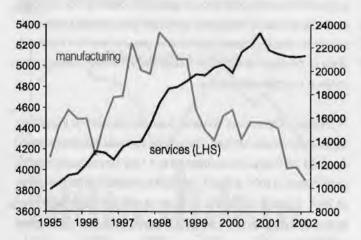
similar way to external output measures, external investment indicators showed a slight increase in the first quarter of 2002.

Figure 5
M4 lending
growth, quarter on previous quarter



The weakening investment comes as profits of companies have been subdued, with private non-financial corporations' gross operating surplus (excluding UK continental shelf companies) in 2001 as a whole declining by 1.6 per cent following growth of 1.4 per cent into 2000. This weakening in profits set alongside weaker oil revenues and still high net property income payments has returned the sector to more substantial net borrowing of £11.8 billion in 2001, following the recovery of borrowing to £3.7 billion in 2000.

Figure 6
Services & manufacturing investment £million



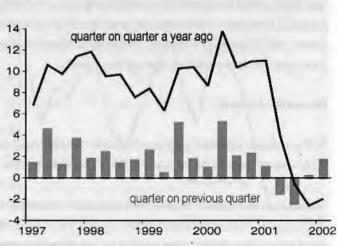
This net borrowing continues to add to the overall indebtedness of the private non-financial corporate sector (PNFC), where gross debt liabilities as a share of corporate profits are at a historic high. It may be that investment is faltering as borrowing conditions become more stringent, and companies, as well as financial organisations, review the sustainability of overall indebtedness. Potentially echoing these more stringent conditions are

bank and building society lending figures (so-called M4 lending). Here quarterly growth figures (figure 6) show the first quarterly decline in lending to non-financial companies since 1997 and weak lending to financial companies (although the two are set against ongoing growth in lending to individuals which echoes broader trends in the household demand story).

Government output saw quarterly growth of 1.2 per cent into the first quarter of 2002 following growth of 1.4 per cent in the fourth quarter of 2001. Comparing with the same quarter a year ago growth was 1.7 per cent. This output figure remains considerably weaker than current price government expenditure, which grew by 6.5 per cent in the year to the first quarter. Apart from inflation, the figures diverge because present increases in cash expenditure are unlikely to have an immediate impact on government output. Public sector net borrowing figures for the financial year 2001-2002 show that net borrowing was 1.3 billion compared with a repayment of 15.9 billion in 2000-2001. The deterioration reflects the ongoing increases to cash expenditure set alongside a weakening of tax revenues as the economy slows.

Finally on domestic demand, following earlier declines, import growth picked up slightly into the first quarter of 2002, with quarterly growth of 1.7 per cent, up from 0.2 per cent in the fourth quarter (figure 7). This resumption in growth follows as ongoing increases to imports of household goods have outstripped slightly less weak capital goods and intermediate goods. More generally however and echoing the weak domestic investment, it has been imports of both capital and intermediate goods that have seen the sharp falls across the year. Figure 8 illustrates this with growth in capital imports set alongside the equivalent export data.

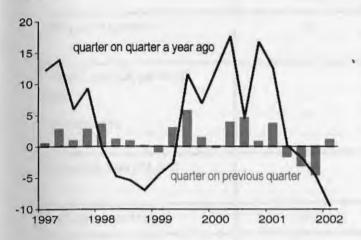
Figure 7 Imports growth



Overseas demand

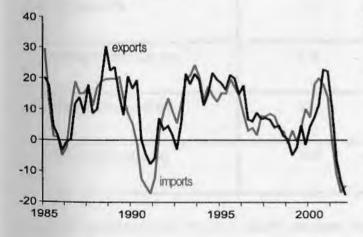
In line with the global deterioration, UK export growth declined sharply throughout 2001 and this decline continued into the first quarter of 2002.

Figure 8 Exports growth



In the year to the first quarter of 2001 overall exports declined by 6.8 per cent; this was the largest decline since the 1980-81 recession (figure 8). However the rate of quarterly decline has moderated in the latest two quarters, with a quarterly decline of only 0.6 per cent in the first quarter of 2002. This improvement came as exports of household goods rose and the decline in intermediate goods exports moderated. As illustrated in figure 9 though, exports of capital goods remain in steep decline.

Figure 9
Imports & exports in capital
growth, quarter on quarter a year ago

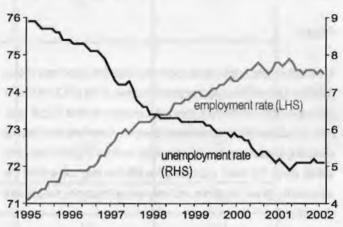


Labour Market

The latest headline data continues to show the labour market as 'flat', but with mixed messages in the detail.

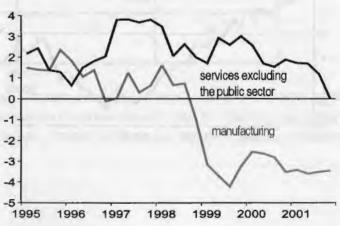
On employment, the labour force survey (LFS) figures show that the employment rate fall slightly from 74.6 per cent between Oct-Dec 2001 to 74.5 per cent between Jan-Mar 2002. On the other hand the unemployment rate also fell, from 5.2 per cent to 5.1 per cent over the same period. Despite these movements, figure 10 showing a monthly time series really illustrates the flat picture.

Figure 10 Labour Force Survey



Looking at the industrial dis-aggregation of employement however, shows weakness outside the public sector and the construction industry. Figure 11 shows manufacturing employment continuing to shrink, and also a slowdown to services employment excluding public sector jobs (reflected by 'public administration, education and health'). On the latter, annual growth slowed quite abruptly in 2001 and showed zero growth in the year to the fourth quarter of 2001; comparing the fourth quarter with the third quarter there was a decline of 0.3 per cent. On the other hand, as noted, construction jobs grew by 6.8 per cent and public sector jobs by 1.5 per cent in the year to the fourth quarter. Labour force survey data also showed an overall increase of employment of 25,000 jobs between Oct-Dec 2001 and Jan–Mar 2002.

Figure 11
Employment
growth, quarter on quarter a year ago



Lastly, while the claimant count rate remains flat, redundancy data shows the sixth successive quarterly increase.

The average earnings index continues to echo the more subdued labour market. Over the past year the headline rate has slowed to 2.9 per cent in March 2002 from 5.1 per cent in February 2001. However this slowdown has been dominated by falling bonuses in the financial sector. The corresponding figures excluding bonuses show earnings growth relatively stable; at 4.4 per cent in March 2002.

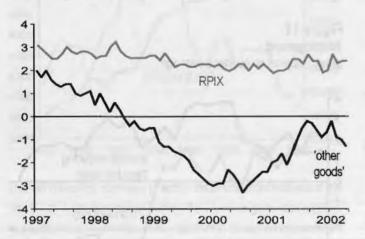
Prices

At the factory gate, output prices show very little inflation and input prices, deflation: the headline output price index shows a rise of 0.2 per cent in the year to April and the input price index measure a fall of 3.6 per cent. Both figures are influenced by recent movements to the price of oil, but underlying measures across recent months continue to confirm the same overall story. This weak producer price inflation may follow from the deteriorating global conditions, with over-supply becoming a significant phenomenon.

In April 2002 RPIX inflation was 2.3 per cent, below the Monetary Policy Committee's target. Figure 12 also shows that despite the prolonged spell of robust consumer demand 'other goods' inflation, the series perhaps most susceptible to consumer demand pressures (including, for example, cars, consumer durables, clothing and DIY goods), has shown a resumed acceleration in the rate of deflation (figure 12).

Overall, by historical standards earnings, consumer and producer price pressures continue to remain very subdued.

Figure 12 Consumer prices growth, month on a year ago



Forecasts for the UK Economy

A comparison of independent forecasts, May 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.

	Inde	ependent Forecasts for 200	2
	Average	Lowest	Highest
GDP growth (per cent)	1.9	0.4	2.6
Inflation rate (Q4: per cent)			
- RPI	2.4	1.6	3.3
- RPI excl MIPs	2.3	1.7	2.8
Unemployment (Q4, mn)	1.00	0.90	1.20
Current Account (£ bn)	-21.2	-28.2	-16.0
PSNB * (2002-03, £ bn)	10.5	-1.5	15.4

Inde	ependent Forecasts for 200	13
Average	Lowest	Highest
2.8	-0.1	3.6
2.8	2.0	4.3
2.4	1.9	2.8
0.99	0.66	1.35
-22.3	-41.1	-13.0
13.8	-2.0	22.0
	2.8 2.8 2.4 0.99	2.8

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.

^{*} PSNB: Public Sector Net Borrowing.

International Economic Indicators - June 2002

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Overview

The slowdown in the world's major economies is continuing, with Germany, France, Italy and Japan posting negative GDP growth in 2001 quarter four. USA on the other hand posted a substantial increase in GDP growth in 2002 quarter one. Inflationary pressure is slowing with prices at the factory gate particularly subdued. Industrial production is the area of main decline, with the severest declines occurring in Japan, although the start of 2002 shows slight increases in production for several countries. Trade and investment are still in decline, but household demand is broadly holding up, except in Germany. Unemployment rises have moderated slightly in the major economies, with the exception of USA and France.

EU15

The latest revised data shows that the EU economy contracted by 0.1 per cent in 2001 quarter four. GDP growth for the previous quarter was 0.3 per cent, while overall growth for 2001 was 1.7 per cent, compared with 3.6 per cent growth in 2000.

A closer look at the components of GDP change in 2001 quarter four shows that the slowdown was driven by declining investments, declining exports and falling stocks, offset by declining imports and robust government demand. Households and government made positive contributions of 0.2 percentage points and 0.1 percentage points respectively. The other components of GDP made either negative or zero contributions to GDP. Investment has made no contribution for the past two quarters. Changes in stock have also made a negative contribution (0.2 percentage points) to changes in GDP growth in the past two quarters. Exports made a negative contribution of 0.4 percentage points in 2001 quarter four. The position was slightly moderated by a substantial fall in imports.

Index of Production data shows the main source of the slowdown from the output perspective, with the fourth quarter of 2001 showing a contraction of 1.6 per cent from a revised fall of 0.4 per cent in the third quarter. Comparing 2001 quarter four with the same quarter a year ago shows the Index falling by 3.4 per cent accelerating from a fall of 0.9 per cent in 2001 quarter three. Overall IOP growth for 2001 fell by 0.1 per cent, a sharp contrast with growth of 4.7 per cent in 2000.

Producer prices for 2002 quarter one show prices continuing to fall at the factory gate with a fall of 0.7 per cent compared to a year ago, although this figure is an improvement over 2001 quarter four when the annual index fell by 1.1 per cent. Growth in the annual index of consumer prices increased from 2.0 per cent in 2001 quarter four to 2.2 per cent in 2002 quarter one. The price rises may in part be attributed to oil price rises.

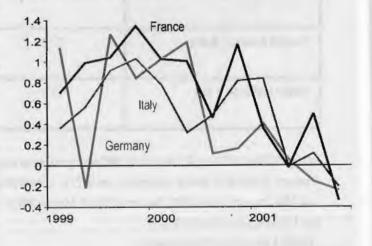
EU employment figures continue to show growth, although at a declining rate. Annual growth for 2001 was 1.2 per cent down from 1.7 per cent in the previous year. Annual growth in the year to the fourth quarter was 0.8 per cent, down from 1.0 per cent in 2001 quarter three. The EU unemployment rate in March 2002 was 7.6 per cent. The unemployment rate has been at 7.6 per cent of the workforce for the past thirteen months.

Annual earnings growth slowed to 2.5 per cent in the year to 2001 quarter four, having previously held up at 3.4 per cent for both quarters two and three.

Germany

The latest data for Germany shows quarterly GDP growth contracting for the second consecutive quarter (figure 1). Quarterly growth fell by 0.3 per cent in the fourth quarter compared with a fall of 0.2 per cent in the third.

Figure 1 GDP: Germany, France & Italy growth, quarter on previous quarter

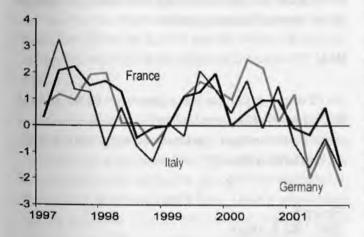


The weakness in the economy is being driven mainly by three factors.

First, a contraction in household spending (echoed by falling retail sales figures), which made a negative contribution of 0.3 percentage points to quarterly GDP. Second, falling investment, which made a negative contribution of 0.2 percentage points to quarterly GDP. Investment in Germany has contracted in the past five quarters, with 2001 showing a decline of 1.0 per cent. Third, falling trade, which made a net negative contribution to quarterly GDP of 0.4 percentage points. However, government consumption and inventories both supported GDP by making strong positive contributions to GDP growth in the fourth quarter of 0.2 percentage points and 0.4 percentage points respectively, after both made negative contributions in the previous quarter.

Industrial production, which showed a more modest decline in 2001 quarter three, declined sharply in the fourth quarter of 2001, accelerating from a fall of 0.6 per cent in the third quarter to a decline of 2.3 per cent in the fourth (figure 2). The percentage month on previous month change, which had shown some improvement in the past two months, turned negative in February, with the index falling by 0.5 per cent down from a positive 0.5 per cent in the previous month. But it should be noted that monthly changes tend to be more volatile.

Figure 2 IOP: Germany, France & Italy growth, quarter on previous quarter



The annual producer price index for 2002 quarter one show prices falling (by 0.2 per cent) at the factory gate. This is the first time annual producer prices growth have been negative since 1999 quarter three. Growth in annual consumer prices on the other hand shows a slight acceleration in 2002 quarter one to 1.9 per cent from 1.8 per cent in the previous quarter.

The slowdown in output in 2001 appears to be feeding through into the unemployment figures. While unemployment has remained steady at 8.1 per cent in each month since January 2002, Germany's unemployment rate has been increasing gradually each quarter from the recent trough of 7.7 per cent in the fourth quarter of 2000 (figure 4). Also, employment

growth contracted in the fourth quarter of 2001, with annual growth figures for the quarter showing negative growth of 0.2 per cent, the first fall since 1997.

In line with a deteriorating labour market, annual earnings growth weakened further, growing by just 1.1 per cent in the third quarter and fourth quarters of 2001, which, after accounting for inflation in the quarter, implied a fall in real earnings.

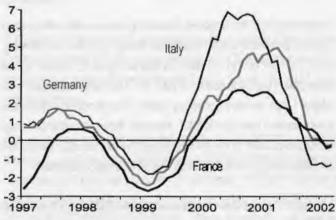
France

The latest figures for France also show negative GDP quarterly growth. The French economy contracted by a revised 0.3 per cent in 2001 quarter four from a positive 0.5 per cent in the previous quarter (figure 1).

2001 quarter four saw firms reducing both investment and stocks, which made zero and negative contribution (0.7 percentage points) to GDP respectively. However, the main driver of the weakness in the French economy in quarter four is the substantial slowing in household spending, which contributed 0.1 percentage points to GDP growth compared with a 0.5 percentage points contribution in the previous quarter. The fall in trade flows in France also accelerated in the fourth quarter, although overall trade still made a positive contribution of 0.3 per cent to GDP.

Having returned to positive growth in 2001 quarter three after two consecutive quarters of negative growth, French industrial production again contracted in the fourth quarter of 2001 by 1.5 per cent (figure 2). However, month on previous month changes in IOP show that the economy has experienced two consecutive months of positive increases in January and February 2002.

Figure 3
PPI: Germany, France & Italy
growth, month on month a year ago



Consumer price inflation has remained at 2.1 per cent, down in both February and March 2002 from 2.3 per cent in January. These recent

figures are historically high when compared with past years when inflation was between 0.5 and 1.7 per cent in the years 1997 to 2000 but may be related to oil. Producer prices growth was negative for the second consecutive month in March with a contraction in prices of 0.3 per cent. The last time producer prices growth was negative in France was in 1999 quarter three.

The weaker economic activity also appears to be feeding through to the unemployment figures. Unemployment rose slightly in March 2002 to 9.1 per cent of the workforce, from 9.0 per cent in the previous month and up from the recent trough of 8.6 per cent throughout the first three quarters of 2001 (figure 4). Employment growth also continued its slowdown in the fourth quarter of 2001, with an annual rate of 1.2 per cent, well down on growth of 2.3 per cent at the start of 2001.

Reflecting the general slowdown, annual earnings growth continued to ease, slowing slightly from 4.2 per cent in the third quarter to 4.1 in the fourth.

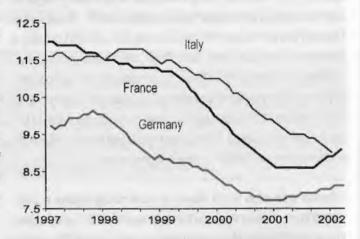
Italy

The Italian economy contracted by a revised 0.2 per cent in the fourth quarter of 2001, after posting a growth of 0.1 per cent in the previous quarter (figure 1). A closer look at the contributors to change in GDP shows that households moderated the fall in GDP by making the only positive contribution of 0.2 percentage points, having made an equivalent negative contribution in the previous quarter. As with the other major economies, the slowdown in the economy is being driven by falling business investment which made a zero contribution and by falling trade, which made a negative contribution of 0.3 percentage points. The Italian economy is also seeing substantial destocking, which in the fourth quarter of 2002 made a large negative contribution of 0.7 percentage points to quarterly GDP growth. Government spending made zero contribution to quarterly GDP change.

On the output side, this slowdown is seen in production data, with quarterly industrial production in 2001 quarter four falling by 1.7 per cent following, a fall of 0.5 per cent in the previous quarter (figure 2). Annual figures show a fall in the fourth quarter of 2001 of 4.3 per cent accelerating from a fall of 1.2 per cent in the previous quarter. Overall industrial production contracted by 1.0 per cent in 2001. However, the monthly changes show production positive for the last two consecutive months of December and January, although these figures do tend to fluctuate considerably.

Monthly CPI figures show a slight easing in April 2002 from 2.5 per cent in the previous month to 2.4 per cent. Prices grow that the factory gate is still negative, falling by 1.3 per cent (in March), slowing slightly from a fall of 1.4 per cent in the previous month.

Figure 4
Unemployment: Germany, France & Italy
Percentage of workforce



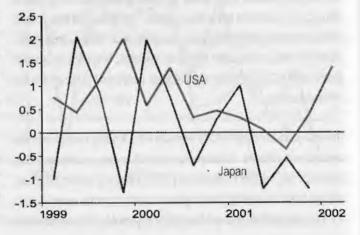
Reflecting the slowdown in the economy, quarterly employment growth was negative in 2002 quarter one, contracting by 0.2 per cent, compared with the previous quarter's negative 0.1 per cent. However, recently updated unemployment figures show slight reductions in the unemployment rate since October. The rate in January 2002 was 9.0 per cent, down slightly from 9.1 per cent in December.

Annual earnings growth continues to be weak, with growth in the fourth quarter of 2001 of 2.2 per cent, although this is the second successive quarter of slightly rising earnings growth

USA

The US economy's GDP has risen substantially in the first quarter of 2002 with growth of 1.4 per cent up from 0.4 per cent in the last quarter of 2001 and rebounding strongly from the contraction of 0.3 per cent in 2001 quarter three (figure 5).

Figure 5 GDP: USA & Japan growth, quarter on previous quarter



All components contributing to changes in GDP posted positive contributions to quarterly GDP, with the economy seeing large improvements to investment spending which made a positive contribution to quarterly GDP of 0.1 percentage points, from a negative contribution of 0.3 percentage points in the previous quarter (although this may be partially driven by government investment). However, the main contribution is from destocking which has been reversed and made a positive contribution of 0.9 percentage points to quarterly GDP. When compared to a 2001 quarter four negative contribution of 0.6 percentage points, this increase is substantial. Both exports and imports have also rebounded, although net trade continued to make a net negative contribution (of 0.4 percentage points) to quarterly GDP. However, household spending decreased in the latest period, making a contribution of 0.6 percentage points to quarterly GDP down from a contribution of 1.0 percentage points in the previous quarter. Quarterly retail sales growth echo this easing in consumer spending, with negative 2002 quarterly growth of 0.1 per cent. This is a large fall compared to the previous quarter's figure, which saw retail sales grow by 4.3 per cent (figure 6). Government contribution to quarterly GDP growth remained stable at 0.2 per cent.

Echoing the rebound, industrial production has also recovered strongly with quarterly growth in 2002 quarter four of 0.6 per cent. This is a considerable increase, as annual industrial production figures for 2001 as a whole show industrial production contracted by 3.6 per cent. Monthly figures also reinforce the quarterly data with January, February and March month on previous month changes posting positive IOP growth rates.

In spite of the recent spurt of consumer spending in the last quarter of 2001, inflationary pressures continue to remain subdued. Annual consumer prices growth slowed from 1.8 per cent in 2001 quarter four to 1.2 per cent in 2002 quarter one, although March data shows an increase over the previous month's figure. This is in spite of recent increase in oil prices. Producer prices continue to fall, with annual figures showing the PPI annual decline accelerating from 1.7 per cent in 2001 quarter four to 1.8 per cent in 2002 quarter one.

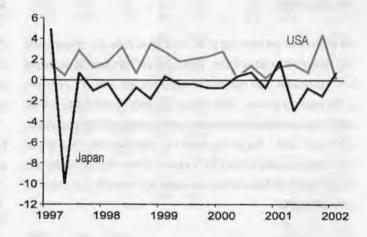
Having previously shown signs of improvement in 2001 and in contrast to the apparent pick up in the economy, unemployment figures are again increasing, with the unemployment rate in April 2002 at 6.0 percent of the workforce. This is a 0.3 percentage points increase over last month's figure, which was 5.7 per cent, and the highest figure since August 1994.

Having increased significantly in January, February and March 2002 by 4.2 per cent, annual earnings have returned to growth of 3.4 per cent in April 2002, the rate it had been for the previous seven months.

Japan

Latest 2001 quarter four data shows the Japanese economy contracting by 1.2 per cent (figure 5). This is the third consecutive quarterly contraction of the economy. Analysis of the contributors to change in GDP show that a significant rise in private consumption of 1.0 percentage points was overshadowed by a huge fall in the contribution of investment of 2.3 percentage points. Investment has not made an equivalent negative contribution to GDP since 1974 quarter one. Government contributed 0.1 percentage points to GDP, while changes in stock made a zero contribution to GDP. Net trade made a negative contribution to quarterly GDP of 0.1 percentage points.

Figure 6
Retail sales: USA & Japan
growth, quarter on previous quarter



Japanese industrial production remains in sharp decline, although the quarter four data shows that the rate of decline may have slowed a little. The quarterly figures show that the decline eased to a contraction of 2.4 per cent in 2001 quarter four, from a contraction of 4.0 per cent in the previous two quarters. Month on previous month changes also shows a slight increase in the IOP, with February 2002 posting positive growth of 0.9 per cent.

Consumer and producer prices continue to fall, continuing the deflation that began in mid-1998. Annual growth figures for 2002 quarter one show that consumer and producer prices declined by 1.4 per cent and 1.5 per cent respectively.

The weakened economy, reflected mainly by deteriorating industrial production, persistent price deflation and substantial declines in business investment and trade has led to severe job losses. Although there was a marginal reduction in the unemployment rate in March 2002, the rate is very high by historical standards. More generally, the rate of unemployment is unprecedented since at least before 1960.

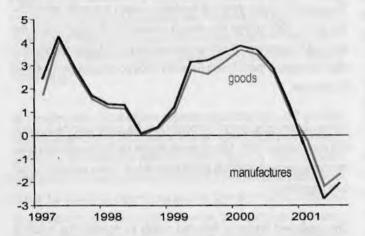
Subsequently, earnings growth also contracted considerably with negative annual growth in 2002 quarter one of 1.5 per cent, significantly worse than 2001 quarter four's negative growth of 0.6 per cent.

World Trade

With national figures yet to show lasting recovery, trade figures are showing contraction in global trade, albeit at a lag due to later production of these figures. The latest figures show OECD data going up to 2001 quarter four while non-OECD data only goes up to quarter three, except for exports of manufactures. Total trade in manufactures for 2001 quarter three contracted by 2.0 per cent and total trade in goods contracted by 1.6 per cent in the same period (figure 7). Although total trade is still in decline, the rate of decline has slowed in the latest period, as the equivalent figures for the previous quarters showed falls of 2.7 per cent and 2.2 per cent respectively.

An analysis of the make up of the total trade data also shows some improvement in the latest figures. Total exports of manufactures contracted by 1.1 percent in 2001 quarter four, compared with a fall of 2.2 per cent in the previous quarter. Total exports of goods contracted by 1.6 per cent, which is a substantial decrease over the previous quarter's contraction of 2.8 per cent. Regarding export of manufactures, the largest improvements were in non-OECD exports, where the contraction was 0.2 per cent in 2001 quarter four compared with a fall of 2.6 per cent in the previous quarter.

Figure 7
World trade in good & manufactures
growth, quarter on previous quarter



Total imports of manufactures in 2001 quarter three contracted by 1.9 per cent while total imports of goods contracted by 1.7 per cent in the same period. 2001 quarter four saw significant improvement in OECD imports of manufactures, where the contraction slowed from 1.7 per cent in 2001 quarter three to 0.8 per cent in quarter four. On the goods imports side, OECD figures improved considerably, to a contraction of 0.5 per cent in

2001 quarter four compared with a fall of 1.5 per cent in the previous quarter.

The decelerating pace of contraction for the latest quarter four data relating to OECD economies could imply a slight easing in the deterioration of world trade activity. This could be partly as a result of the US economy posting positive growth in 2001 quarter four and 2002 quarter one.

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

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		,	С	ontribution	to change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk ¹	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl	Unempl
	change on	a year ea HUDS 1.2	rlier HUDT 0.3	HUDU 0.4	HUDV -0.5	HUDW 1.5	HUDX 1.2	ILGV 0.5	ILHP 0.7	HYAB 2.5	ILAI 0.7	ILAR 3.5	ILIJ 0.5	GADR 10.6
1996 1997 1998 1999 2000	1.7 2.6 2.9 2.6 3.6	1.3 1.9 2.0 1.7	0.2 0.3 0.4 0.4	0.7 1.3 1.1 1.1	0.1 0.4 -0.2 -0.1	3.1 2.1 1.8 4.2	2.7 3.0 2.4 3.8	3.9 3.8 1.8 4.7	1.3 2.9 2.1 2.2	2.0 1.8 1.2 2.5	0.9 -0.4 0.1 4.7	3.1 2.8 2.7 3.3	1.0 1.8 1.7 1.7	10.4 9.8 9.0 8.1
2001	1.7	1.3	0.4	0.1	-0.4	0.9	0.6	-0.1	1.8	2.5	1.2	3.0	1.2	7.6
1999 Q1 Q2 Q3 Q4	2.0 2.2 2.8 3.6	2.1 1.9 2.0 2.0	0.5 0.4 0.4 0.4	1.0 1.0 1.2 1.2	-0.3 -0.2 -0.4	0.7 1.1 2.1 3.3	1.9 2.0 2.6 3.3	0.4 0.6 2.1 4.2	2.3 1.5 1.9 2.8	1.2 1.1 1.2 1.6	-1.8 -0.9 0.5 2.4	2.8 1.8 3.6 2.7	1.9 1.7 1.9 1.7	9.3 9.1 8.9 8.6
2000 Q1 Q2 Q3 Q4	3.8 4.1 3.4 3.0	1.8 2.1 1.7 1.3	0.4 0.5 0.4 0.4	1,2 1,2 1,1 1,0	-0.2 - - -0.1	4.1 4.3 4.2 4.1	3.5 4.0 3.9 3.7	4.3 5.6 4.8 4.3	2.4 2.8 2.1 1.6	2.1 2.3 2.7 2.8	4.1 4.8 5.1 5.1	3.6 3.6 2.6 3.5	1.6 1.7 1.7 1.9	8.4 8.2 8.0 7.8
2001 Q1 Q2 Q3 Q4	2.6 1.8 1.6 0.8	1.3 1.2 1.2 1.2	0.5 0.4 0.4 0.4	0.5 0.2 -0.2 -0.3	-0.1 -0.3 -0.3 -0.8	1.6 0.2 -0.9	2.5 1.3 -0.2 -1.2	3.8 0.4 -0.9 -3.4	2.2 1.8 1.8 1.2	2.7 2.9 2.5 2.0	3.3 2.4 0.7 -1.1	2.6 3.4 3.4 2.5	1.7 1.2 1.0 0.8	7.7 7.6 7.6 7.6
2002 Q1						**		-	4.67	2.2	-0.7		46	7.6
2001 Apr May Jun		::	** 7**		 15	**		0.9 -0.4 0.9	1.8 0.9 2.8	2.8 3.2 2.9	2.9 2.4 1.9	" "		7.6 7.6 7.6
Jul Aug Sep Oct Nov Dec			*** *** *** *** ***			**	17 18 19 19 19	-1.2 -0.3 -1.1 -2.4 -3.7 -4.0	1.8 1.8 1.8 0.9 1.8 0.9	2.7 2.7 2.3 2.2 1.9	1.1 0.8 - -0.8 -1.3 -1.1			7.6 7.6 7.6 7.6 7.6 7.6
2002 Jan Feb Mar Apr				**	## ##	"	**	-3.2 	0.9	2.3 2.0 2.2	-0.7 -0.8 -0.7			7.6 7.6 7.6
Percentage	change on	previous HUDY	quarter HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ				ILIT	
1999 Q1 Q2 Q3 Q4	0.7 0.6 1.1 1.1	0.7 0.2 0.6 0.5	0.1 - 0.1 0.1	0.3 0.2 0.4 0.2	-0.2 -0.1 -0.1 0.4	0.3 0.9 1.1 0.9	0.6 0.6 1.0 1.1	0.2 0.8 1.6 1.4	0.7 -0.4 1.3 1.2				-0.3 1.2 0.8 0.1	
2000 Q1 Q2 Q3 Q4	0.9 0.9 0.5 0.7	0.6 0.4 0.2 0.2	0.1 0.1 0.1 0.1	0.3 0.2 0.3 0.1	-0.4 0.2 -0.2 0.2	1.2 1.0 1.1 0.8	0.8 1.1 0.9 0.8	0.4 2.0 0.9 0.9	0.3 - 0.6 0.6				-0.4 1.2 0.7 0.3	
2001 Q1 Q2 Q3 Q4	0.5 0.1 0.3 -0.1	0.6 0.3 0.1 0.2	0.2 0.1 - 0.1	-0.2 -0.1 -	-0.4 -0.2 -0.2	-0.3 -0.3 -0.4	-0.3 -0.1 -0.6 -0.2	-0.1 -1.3 -0.4 -1.6	0.9 -0.4 0.6				-0.6 0.7 0.6 0.1	
2002 Q1			**		7	44	**		441				**	
	change on	previous	month					ILKF	ILKP					
2001 Apr May Jun								-1.1 -0.3 0.4	0.9					
Jul Aug Sep Oct Nov Dec								-1.1 1.2 -0.9 -1.2 -0.5 0.5	-0.9 1.8 -0.9					
2002 Jan Feb Mar Apr					4 B			-0.1 	0.9					

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

Imports = Imports of goods and services

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 labour force

			Cor	ntribution to	o change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPł	Earnings	Empl ¹	Unempi
Percentage cl	hange on	a year ear	lier											
4000	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA 1.3	HUCB 0.8	ILGS 0.7	ILHM -1.1	HVLL 1,4	ILAF	ILAO 3.5	ILIG -0.4	GABD 8.9
1996 1997	0.8	0.5	0.4	-0.1 0.2	-0.4	2.9	2.0	3.7	-1.7	1.9	1.1	1.5	-0.3	9.9
1998	1.7	0.9	0.2	0.5	0.5	1.7	2.2	4.2	1.0	1.0	-0.4	1.8	1.5	9.3
1999	1.7	1.7	0.3	0.8	-0.4	1.5	2.3	1.5	0.3	0.6	-1.0	2.6	8.0	8.6
2000	3.2	0.9	0.2	0.7	0.3	4.2	3.1	6.2	1.3	1.9	3.4	2.7	0.5	7.9
2001	0.7	0.7	0.3	-1.0	-0.9	1.7	0.1	0.6	1.1	2.5	2.9	1.5	0.2	7.9
1999 Q1	0.7	1.8	0.4	0.3	-0.4	0.1	1.6	-0.6	1.4	0.3	-2.4	2.5	1.1	8.8
Q2	1.0	1.7	0.2	0.7	-0.5 -0.5	0.7 2.0	1.9 2.5	0.5 2.0	-0.6 -0.3	0.5	-1.7 -0.7	2.4 2.7	0.3	8.7 8.6
Q3 Q4	2.1 3.0	1.7	0.3	1.0	-0.3	3.3	3.0	4.2	0.7	1.0	0.6	3.0	0.7	8.4
۵,	0.0	1.0	0.4	1,2	0.0		0.0	3.00	*		0.0	0.0	-	-
2000 Q1	2.9	0.6	0.3	0.9	-0.5	4.3	2.6	5.2		1.7	2.3	2.8	0.4	8.1
Q2	4.4	1.7	0.4	0.8	0.3	4.0	2.8	6.6	4.1	1.6	2.6	2,4	0.6	7.9
Q3 Q4	3.2 2.5	1.1	0.1	0.6	0.4	4.2	3.1 4.1	7.1 5.9	1.4 -0.2	2.0	3.7 4.5	3.3 2.4	0.3	7.8 7.7
													4	
2001 Q1	1.8	0.9	0.3	-0.5	-0.2	3.1	1.8	6.1	1.2	2.5	4.8	2.0	0.4	7.7
Q2 Q3	0.7	0.7	0.3	-0.8 -1.4	-0.7 -1.0	2.4 1.5	1.2 -0.3	1.5 ~1.3	1.1	3.2 2.5	4.7 2.6	2.0	0.3	7.8
Q4	0.4	0.6	0.3	-1.3	-1.5	-	-2.0	-3.7	0.6	1.8	0.3	1.1	-0.2	8.0
2002 Q1						**		H		1.9	-0.2			8.1
2001 Apr		**		**	**	**	**	1.5	0.9	2.9	5.0	+4		7.8
May Jun	**	41		"		**	44	0.5 2.3	0.5 1.8	3.5 3.1	4.6 4.3			7.8 7.9
Jul				**			14	-1.9	1.4	2.6	3.1			7.9
Aug					**		**	-0.2	1.9	2.6	2.7	**		7.9
Sep		**				.,	**	-1.6	1.2	2.1	1.9			7.9
Oct	41	**	**			41	**	-2.9	-0.8	2.0	0.6	**	**	8.0
Nov Dec	-+			**	.**		**	-3.8	2.6	1.7	0.1	**	**	8.0 8.0
Dec			"	-,	-1*		**	-4.4	0.1	1.7	0.1			8.0
2002 Jan	41	**		**		44		-4.9	-4.1	2.1	-0.1			8.1
Feb Mar				44	**			-5.5	-3.0	1.7	-0.3	84	14	8.1 8.1
Apr	**	**	**		**	**		**	46	1.8	-0.2			0.1
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								77.			"	
Percentage cl		Previous of HUCC		LILION	HUCF	HUCG	LILICH	II HO	0.1.02				1110	
1999 Q1	1.1	1.1	HUCD 0.2	HUCE 0.7	-0.3	0.4	HUCH 0.8	ILHC	ILHW 0.5				ILIQ -1.5	
Q2	-0.2	-0.5	-0.1	0.1	-	1.1	0.8	1.1	-3.1				0.7	
Q3	1.3	0.6	0.2	0.5	-0.2	0.9	0.7	1.6	1.4				1.0	
Q4	8.0	0.4	0.1	-0.1	0.2	8.0	0.7	1.3	1.9				0.5	
2000 Q1	1.0	0.1	0.1	0.3	-0.5	1.4	0.4	1.0	-0.2				-1.8	
Q2	1.2	0.6	-	_	0.8	8.0	0.9	2.5	0.9				0.9	
Q3	0.1	-0.1	-0.1	0.3	-0.2	1.1	0.9	2.1	-1.2				0.7	
Q4	0.2	-0.2	0.2	-0.3	1.0	1.1	1.7	0.2	0.3				0.7	
2001 Q1	0.4	0.6	0.2	-0.5	-1.8	166	-1.8	1.2	1.1				-1.8	
Q2	-	0.4	-	-0.3	0.2	0.1	0.4	-2.0	0.8				8.0	
Q3 Q4	-0.2 -0.3	-0.1 -0.3	-0.1 0.2	-0.3 -0.2	-0.4 0.4	0.2 -0.4	-0.5	-0.6 -2.3	-0.8 -0.5				0.5	
2002 Q1							,,	**						
Percentage cl	hango on	provious r	nonth											
	lange on	previous	iioiiiii					ILKC	ILKM					
2001 Apr								-1.2	0.2					
May								0.1	0.6					
Jun								0.1	-0.4					
Jul								-1.4	-0.7					
Aug								1.7	0.7					
Sep								-1.3	-1.4					
Oct								-1.5	-1.5					
Nov Dec								-0.9 0.1	3.3 -1.6					
200								0.1	-1.0					
2002 Jan								0.5	-3.5					
								-0.5	0.4					
Feb Mar														

GDP = Gross Domestic Product at constant market prices 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
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Imports = Imports of goods and services
Imports = Imports of goods and services

Sales = Retall 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
EmpI = Total Employment not seasonally adjusted
UnempI = Standardised Unemployment rates: percentage of total workforce

			Co	ntribution t	o change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPt1	Earnings	Empl ²	Unempl
Percentage c		year ear	ler		NII IDN	111100	111100	W 0.T		LIVAA		W A.D.		0.100
1996 1997 1998 1999 2000	1LFZ 1.1 1.8 3.5 3.2 4.1	0.7 0.1 1.9 1.9	0.5 0.5 - 0.3 0.7	1.3 1.6 1.6	HUBN -0.5 0.1 0.7 -0.3 0.4	HUBO 0.7 2.8 2.1 1.1 3.6	0.4 1.5 2.6 1.5 3.7	0.9 3.8 5.3 2.0 3.5	ILHN -0.3 1.1 2.6 2.4 0.5	1.2 0.8 0.5 1.7	-2.7 -0.6 -0.9 -1.6 2.1	2.6 2.6 2.2 2.5 5.2	0.3 0.7 1.9 2.3 2.7	GABC 11.9 11.8 11.4 10.7 9.3
2001	1.9	1.5	0.5	0.6	-0.9	0.2	-	0.9	-0.1	1.7	1.5	4.2	1.7	8.7
1999 Q1 Q2 Q3 Q4	2.7 2.7 3.2 4.1	2.0 1.8 2.0 2.0	0.2 0.3 0.3 0.6	1.5 1.5 1.6 1.6	-0.3 -0.7	0.1 0.4 1.5 2.4	1.1 1.0 1.4 2.4	0.7 0.5 2.3 4.4	3.2 1.9 2.3 2.2	0.2 0.4 0.5 1.0	-2.7 -2.3 -1.6	2.0 2.0 2.7 3.4	2.4 2.0 2.2 2.5	11.2 11.0 10.6 10.2
2000 Q1 Q2 Q3 Q4	4.5 4.5 3.9 3.7	2.0 1.6 1.4 1.2	0.5 0.7 0.7 0.7	1.7 1.5 1.6 1.7	0.1 0.3 0.9 0.3	3.3 4.0 3.5 3.8	3.2 3.6 4.2 3.9	4.4 3.8 3.5 2.4	2.0 1.3 0.1 -1.3	1.5 1.5 1.9 1.9	1.2 2.1 2.7 2.4	5.2 5.4 5.2 5.0	2.6 2.8 2.7 2.6	9.8 9.4 9.1 8.8
2001 Q1 Q2 Q3 Q4	3.0 2.0 2.0 0.5	1.4 1.4 1.7 1.5	0.6 0.5 0.6 0.4	1.1 0.8 0.4	-0.5 -0.4 -0.8 -1.7	2.7 0.6 -0.4 -2.0	2.3 0.8 -0.6 -2.4	2.3 1.5 1.2 -1.3	1.3 -0.4 -0.7 -0.8	1.2 2.1 1.9 1.4	2.5 1.8 1.1 0.6	4.3 4.2 4.2 4.1	2.3 1.9 1.3 1.2	8.6 8.6 8.6 8.8
2002 Q1	,,	V.					***	.0	-1.4	2.2	-0.2	**	**	9.0
2001 Apr May Jun	:		:		0	4.	.,	1.1 1.6 1.6	-0.2 -2.5 1.5	1.8 2.3 2.1	2.0 1.8 1.7		·· ·-	8.6 8.6 8.6
Jul Aug Sep Oct Nov Dec								1.3 1.3 0.9 -0.9 -1.2 -1.9	-0.8 -1.1 -0.9 -0.6 -0.6	2.1 1.9 1.5 1.8 1.2 1.4	1.3 1.1 0.8 0.6 0.6 0.4	:		8.6 8.6 8.7 8.8 8.9
2002 Jan Feb Mar Apr	44		**	**			**	-1.1 -0.6	-3.5 -0.6 -0.1	2.3 2.1 2.1	-0.4 -0.3	** ** **		8.9 9.0 9.1
Percentage c														
1999 Q1 Q2 Q3 Q4	0.7 1.0 1.0 1.3	0.3 0.6 0.5 0.5	0.2 0.1 0.1 0.3	0.5 0.5 0.4 0.3	HUBT -0.1 -0.2 -0.5 0.9	HUBU 0.1 0.5 1.2 0.5	0.3 0.5 0.5 1.0	1.1 1.3 2.0	0.1 -0.2 1.2 1.0				0.7 0.5 0.7 0.7	
2000 Q1 Q2 Q3 Q4	1.0 1.0 0.5 1.2	0.4 0.3 0.2 0.3	0.1 0.2 0.1 0.2	0.6 0.3 0.4 0.4	0.1 0.2	1.0 1.2 0.7 0.8	1.1 0.9 1.1 0.8	0.5 1.0 0.9	-0.1 -0.8 - -0.4				0.8 0.7 0.6 0.6	
2001 Q1 Q2 Q3 Q4	0.4 - 0.5 -0.3	0.6 0.2 0.5 0.1	0.1 0.1 0.2	-0.1 -	-0.8 -0.3 -0.7	-0.8 -0.3 -0.8	-0.5 -0.5 -0.3 -1.1	-0.1 -0.3 0.7 -1.5	2.6 -2.5 -0.3 -0.5				0.5 0.2 0.1 0.5	
2002 Q1	,,		.,	,,	**	**	**	**	1.9					
Percentage c	hange on p	revious r	nonth					ILKD	II IZAI					
2001 Apr May Jun								-0.6 0.3 0.1	-2.9 -0.5 2.0					
Jul Aug Sep Oct Nov Dec								0.7 -0.6 -0.9 0.3 -1.1	-1.4 0.7 -1.4 -0.3 1.0 -0.1					
2002 Jan Feb Mar Apr								0.8	-0.2 2.3 0.9					

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and treatment vary among countries
EmpI = Total Employment not seasonally adjusted
UnempI = Standardised Unemployment rates: percentage of total workforce

			Co	entribution to	o change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage o			ler						4					
1996	ILGA 1.1	HUCI 0.7	HUCJ 0.2	HUCK 0.7	HUCL -0.7	HUCM 0.2	HUCN -0.1	ILGU -1.6	1LHO 1,2	HYAA 4.0	ILAH 1.9	ILAQ 3.1	1LII 0.5	GABE 11.5
1997	2.0	1.9	_	0.4	0.3	1.7	2.3	3.8	0.9	2.0	1.3	3.9	0.4	11.6
1998	1.8	1.9	-	0.7	0.3	1.0	2.2	1.5	1.0	2.0	0.1	3.0	1.2	11.7
1999 2000	1.6	1.5 1.6	0.2	1.1	0.1 -1.1	0.1 3.3	1.4 2.5	-0.1 4.1	1.0 -0.5	1.7	-0.2 6.0	1.8	1.2	11.2 10.4
				0.5		0.2				2.7				
2001	1.8	0.7	0.4		-			1.0	-1.4		1.9	1.9	2.0	9.5
1999 Q1 Q2	0.9	1.3	0.2	0.6	0.7	-1.2 -0.9	0.7	-1.3 -2.4	1.0	1.4	-1.8 -1.4	2.5 1.4	1.2	11.5
Q3	1.4	1.4	0.2	1.2	-0.2	0.2	1.4	0.4	0.6	1.7	1.7	1.9	1.2	11.1
Q4	2.9	1.1	0.2	1.7	-	2.2	2.3	3.1	2.3	2.1	2.2	1.5	1.4	11.0
2000 Q1	3.3	1.4	0.2	1.5	-0.6	3.9	3.0	3.5	-0.3	2.4	4.7	1.6	1,2	10.9
Q2	3.1	1.9	0.2	1.5	-0.7	2.9	2.9	5.7	-0.3	2.6	6.2	2.6	1.5	10.6
Q3 Q4	2.6	1.7 1.5	0.3	0.8	-1.7 -1.4	3.7 2.6	2.8 1.5	3.5	-1.3	2.6	6.7 6.5	1.9 1.8	2.1	10.2
2001 Q1	2.5	1.1	0.4	0.8	-0.2	- 1.1	0.7	2.5	-0.6	2.9	4.8	2.2	3.1	9.7
Q2	2.2	8.0	0.4	0.6	-0.4	1.5	0.6	-0.8	-1.0	3.0	3.2	1.3	2.1	9.5
Q3 Q4	1.8	0.5	0.4	0.3	-0.3	-0.8 0.9	8.0 -	-1.2 -4.3	-2.2 -1.9	2.8	0.9 -1.0	2.0	1.8	9.4
2002 Q1				.,		,,				2.5	-1.3	2.2	1.8	
2001 Apr	4-					**		-0.1	-1.0	3.1	4.3	1.7		9.5
May	.,			**				-1.7	-1.0	3.0	2.9	1.1		9.5
Jun					**	.,	**	-0.6	-1.0	3.0	2.4	1.1	**	9.5
Jul Aug	**		**			**	**	-0.7 -1.0	-2.9 -1.0	2.9	1.3	2.1		9.5
Sep				44	"	**	**	-2.1	-2.9	2.6	0.4	2.0		9.4 9.4
Oct				**	-4		**	-1.5	-1.9	2.5	-0.6	2.0	**	9.3
Nov Dec	**						**	-5.8 -5.6	-1.9 -1.9	2.4	-1.3 -1.3	2.1	.,	9.2
2002 Jan	44	*+		.,			47	-3.3	2.9	2.4	-1.2	1.9		9.0
Feb				**	**		**	-3.1	2.9	2.5	-1.4	1.6	**	
Mar Apr	**		**	**		**		**		2.5	-1.3	2.8	.,	
Percentage c	hange on i	orevious a	uarter											
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS	
1999 Q1 Q2	0.4	0.5 -0.1	0.1	0.5	-0.1 0.2	-0.3 0.6	0.2	0.1	0.6				-1.0	
Q3	0.9	0.3	0.1	0.4	-0.5	0.8	0.4	-0.4 2.1	0.3				1.2	
Q4	1.0	0.3	0.1	0.5	0.5	1.1	1.4	1.3	1.3				-0.1	
2000 Q1	0.8	0.7	0.1	0.2	-0.7	1.4	0.9	0.5	-1.9				-1.2	
Q2 Q3	0.3	0.5	0.1	0.3	0.1 -1.5	-0.4 1.5	0.3	1.7 -0.1	0.3				1.5	
Q4	0.8	0.2	0.1	-0.1	0.7	0.1	0.2	1.5	-				1.9 0.6	
2001 Q1	0.8	0.2	0.1	0.3	0.4	-0.1	0.1	-0.6	-1.3				-0.8	
Q2 Q3	0.1	0.2	0.1	~ =	-0.1	-	0.2	-1.6					0.5	
Q4	-0.2	-0.2 0.2	0.1	0.1	-0.7	-0.7 -	-0.8 -0.3	-0.5 -1.7	-1.0 0.3				1.6 -0.1	
2002 Q1		**	**	**	**		44						-0.2	
Percentage c	hange on p	previous m	onth											
2001 Apr								LKE -2.2	ILKO					
May Jun								0.5	-					
Jul								-0.7	-1.0					
Aug								0.6	-1.0					
Sep								-0.9	-					
Oct								-0.1 -2.6	1.0					
Dec								1.6	-1.0					
2002 Jan								0.2	3.9					
Feb								0.2	3.9					
Mar									.,					
Apr								**	- 11					

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

Empl = Total Employment not seasonally adjusted

			Col	ntribution to	change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Eamings	Empl ¹	Unemp
Percentage c	hange on a	vear earl	ier											
Percentage	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1996	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.
2000	4.1	3.3	0.4	1.4	-0.1	1.1	2.0	4.5	6.5	3.4	4.1	3.6	1.3	4.0
2001	1.2	2.1	0.4	-0.2	-1.2	-0.6	-0.5	-3.6	4.5	2.8	0.7	3.2	-0.2	4.8
1999 Q1	4.0	3.3	0.4	1.8	-0.3	0.1	1.3	3.4	9.6	1.7	.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.:
Q3	4.0	3.4	0.3	1.6	-0.4	0.6	1.7	3.7	9.7 8.5	2.4	3.2	3.7	1.4	4.
Q4	4.4	3.4	0.4	1.4	0.1	0.5	1.7	4.4	0.5	2.0	3.2	3.0	1.5	4.
2000 Q1	4.2	3.6	0.3	1.6	-0.6	1.0	2.0	4.8	8.6	3.2	4.6	4.2	1.6	4.
Q2	5.2	3.3	0.6	1.6	0.5	1.3	2.2	5.9	7.0	3.3	4.4	3.6	1.6	4.
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.
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.
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.
Q3	0.5	1.6	0.4	-0.5	-1.2	-1.2	-1.2	-4.8	3.4	2.7	0.6	3.4	-0.2	4.8
Q4	0.5	2.1	0.6	-0.8	-1.7	-1.3	-1.4	-5.8	7.7	1.8	-1.7	3.4	-1.0	5.6
2002 Q1	1.6	2.2	0.6	-0.9	-0.1	-1.1	-0.7	-3.7	6.4	1.2	-1.8	4.2	-1.4	5.6
2001 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.
Jun	**			"	4.	**	"	-4.7	3.9	3.3	1.2	3.4	-0.2	4.0
Jul		**		**	**		**	-4.1	4.3	2.7	0.4	3.4	0.2	4.
Aug	**	**	44					-4.6	4.5	2.7	0.9	3.4	-0.6	4.
Sep		.44	++			P-0	**	-5.7	1.4	2.6	0.7	3.4	-0.1	5.0
Oct	"	**		**		LA.		-5.9	9.1	2.1	-1.0	3.4	-0.6	5.4
Nov Dec				**	**	- :	**	-5.9 -5.8	6.9 7.1	1.8	-1.6 -2.2	3.4	-1.0 -1.4	5.6
0000 1								45				4.0		
2002 Jan Feb	"	**	**	"			**	-4.5 -4.0	6.1	1.1	-2.3 -2.0	4.2	-1.8 -1.0	5.6
Mar	44		"	"		**		-2.9	6.5	1.5	-1.2	4.2	-1.4	5.
Apr	74			**	**		**			**	***	3.4	-1.0	6.0
Percentage c	nange on p	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1999 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	0.3	0.7	-0.1	0.1	-0.3	0.3	0.5	0.2	1.3				0.1	
Q4	0.5	0.5	0.1	0.1	-0.1	-0.1	-	-0.7	0.1				0.2	
2001 Q1	0.0		0.0	0.0	0.0		0.0		4.6					
Q2	0.3	0.5	0.2	0.2 -0.3	-0.8 -0.1	-0.4	-0.2 -0.4	-1.6 -1.4	1.2				-0.7	
Q3	-0.3	0.2	0.1	-0.4	-0.3	-0.6	-0.6	-1.2	0.6				0.4	
Q4	0.4	1.0	0.2	-0.3	-0.6	-0.3	-0.3	-1.7	4.3				-0.6	
2002 Q1	1.4	0.6	0.2	0.1	0.9	0.2	0.6	0.6	-0.1				-1.1	
Percentage c	hange on p	revious n	nonth					tu (* dis	20000					
2001 Apr								ILKG	ILKO				ILLA	
May								-0.6	1.4				-0.1	
Jun								-0.3 -0.9	0.1				0.6	
dul								0.1	1.0				0.4	
Aug								-0.3	0.7				-1.1	
Sep								-1.1	-2.6				-	
Oct Nov								-0.6	7.7				0.7	
Dec								-0.3 -0.4	-2.6 0.4				-0.4 -0.1	
2002 Jan								0.5	0.3				-1.6	
Feb								0.3	0.3				0.9	
Mar								0.7	-				0.3	
Apr									49					

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Unempl = Standardised Unemployment rates: percentage of total workforce

Source: OECD - SNA93

			Co	ntribution to	change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP1	Sales	CPI	PPI	Earnings ²	Empl	Unemp
Percentage	change on a					en servi								
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GAD
1996 1997	3.6 1.8	1.3	0.4	0.2	0.3	0.6	1.0	4.0	0.6 -2.1	0.1	-1.7 0.6	2.6	0.5 1.0	3.
1998	-1.0	0.5	0.3	-1.2	-0.6	-0.2	-0.6	-6.7	-6.0	0.7	-1.3	-0.9	-0.6	4.
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.
2000	2.2	0.2	0.7	0.9	-0.1	1.3	0.8	5.2	-1.1	-0.7	0.1	1.6	-0.3	4.
2001	-0.4	0.3	0.5	-0.5	12-	-0.7	-0.1	-7.0	-1.2	-0.7	-0.9	0.1	-0.5	5.
1999 Q1	-1.2	-0.4	0.4	-0.7	-0.6	-0.3	-0.3	-3.7	-4.6	-0.1	-2.2	-0.8	-1.2	4.
Q2	1.3	1.3	0.8	-0.3	-0.3	-0.1	0.2	0.3	-2.5	-0.3	-1.7	-1.3	-1.1	4.
Q3	2.1	1.6	8.0	0.1	-0.3	0.3	0.3	2.7	-2.2		-1.3	-0.3	-0.7	4.
Q4	0.6	-	0.7	0.1	-0.2	0.7	8.0	5.1	-1.1	-1.0	-0.5	-0.3	-0.2	4.
2000 Q1	3.6	1.7	0.8	0.6	-0.1	1.3	0.7	4.3	-2.2	-0.6	0.1	1.9	-0.5	4.
Q2	2.3	0.3	0.8	0.7	-0.1	1.4	8.0	6.6	-1.5	-0.7	0.3	2.2	-0.4	4.
Q3	0.7	-1.4	0.7	0.9	-	1.2	0.7	5.3	-0.4	-0.6	0.2	1.6	-0.4	4.
Q4	2.3	0.2	0.7	1.3	0.1	1.0	0.9	4.4	-0.4	-0.8	-0.1	1,1	0.2	4.
2001 Q1	1.4	0.8	0.6	0.4	-	. 0.2	0.7	0.6	2.3	-0.5	-0.4	0.4	0.5	4.
· Q2	-0.6		0.5	-0.2	6.7	-0.7	0.2	-5.2	-1.1	-0.7	-0.6	0.6	-0.4	4.
Q3 Q4	-0.5 -1.9	-0.2 0.5	0.4	0.2 -2.3	-0.1 -0.1	-1.1 -1.3	-0.3 -0.8	-10.4 -12.8	-2.6 -3.4	-0.8 -1.0	-1.0 -1.6	-0.2 -0.6	-0.8 -1.3	5. 5.
	-1.8	0.5												
2002 Q1	**	.**	**	**	**	***			-4.4	-1.4	-1.5	-1.5	-1.5	5.
2001 Apr May		"	"	**		**		-3.9 -4.8	-1.1	-0.7 -0.7	-0.6 -0.6	-0.1 -0.3	-0.2 -0.4	4.
Jun		**	14		**			-6.9	-2.2	-0.8	-0.7	2.0	-0.6	4.
Jul								-8.6	-2.2	-0.8	-0.8	1.1	-0.6	5.
Aug		**			**	**		-11.3	-3.3	-0.7	-1.0	-1.1	-0.6	5.
Sep			++			**		-11.1	-2.2	-0.8	-1.0	-0.6	-1.3	5.
Oct	*4	**	**	**	4.6	.,	44	-12.2	-3.4	-0.8	-1.5	-0.4	-1.6	5.
Nov		14				**	44	-13.1	-2.2	-1.0	-1.6	0.5	-1.1	5.4
Dec	**	٠.		**		**		-13.1	-4.5	-1.2	-1.8	-1.7	-1.2	5.5
2002 Jan						**	**	-11.1	-4.4	-1.4	-1.7	-2.7	-1.4	5.
Feb Mar		**		**		+1	••	-10.8	-4.4 -4.4	-1.6 -1.2	-1.5 -1.5	-0.8 -1.1	-1.6 -1.3	5. 5.
Apr	**	**			**		**		31		-1.0	-1.1	-1.5	
			and the same of the same of											
Percentage	change on I ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1999 Q1	-1.0	-1.3	0.1	0.4	-0.1	-	0.2	1.4	0.4				-1.8	
Q2	2.1	1.6	0.4	_	0.1	0.1	0.2	-0.3	-0.4				2.2	
Q3	0.8	1.0	0.1	-0.2	-0.2	0.3	0.2	2.7	-0.4				-	
Q4	-1.3	-1.3	0.1	-	-0.1	0.2	0.2	1.2	-0.7				-0.6	
2000 Q1	2.0	0.4	0.2	0.8	0.1	0.7	0.1	0.6	-0.7				-2.1	
Q2	0.8	0.2	0.4	0.1	-	0.3	0.3	1.9	0.4				2.3	
Q3 Q4	-0.7	-0.7	-	-	-0.1	0.1	0.1	1.5	0.8				-	
Q4	0.3	0.3	-	0.3	~	-	0.4	0.3	-0.7				-	
2001 Q1	1.0	1.0	0.2	-	***	-0.2		-3.1	1.9				-1.8	
Q2	-1.2	-0.6	0.3	-0.5		-0.5	-0.2	-4.0	-2.9				1.4	
Q3	-0.5	-1.0	-	0.5	-0.1	-0.3	-0.4	-4.0	-0.8				-0.4	
Q4	-1.2	1.0	0.1	-2.3		-0.3	-0.2	-2.4	-1.5				-0.5	
2002 Q1	"	***	**	74	**		(46.)		0.8				-2.0	
Percentage	change on	revious n	nonth					ILKH	ILKR				ILLB	
2001 Apr								-2.0	-2.2				0.7	
May								-1.0	-ma				8.0	
Jun								-0.7	-				-0.2	
Jul								-2.3	=				-0.2	
Aug								0.3	-1.1				-0.1	
Sep								-3.3	-				-0.7	
Oct								0.1	-1.1				0.1	
Nov Dec								-1.5	1.2				0.4	
								1.7	-2.3				-1.1	
2002 Jan								-1.5	2.4				-1.4	
								0.9	-				-0.3	
Feb Mar									-1.1				0.7	

GDP = Gross Domestic Product at constant market prices 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
Imports = Imports 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
Unempl = Standardised Unemployment rates: percentage of total world

	Expor	t of manufacti	ures	Import	of manufact	ures	Ex	port of go	ods	Im	port of go	ods	Total tr	ade
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufact- ures	goods
Percentage of	hange on a	vear earlier												
1992 1993 1994 1995 1996	ILIZ 4.3 4.8 12.0 9.6 6.5	ILJA 3.3 2.2 9.9 10.0 6.4	1LJB 8.6 15.3 19.9 8.6 6.5	1LJC 5.3 4.0 11.9 11.0 7.0	1LJD 4.3 1.0 12.3 10.4 7.9	ILJE 8.3 12.5 11.0 12.4 4.6	1LJF 4.3 3.9 10.6 9.0 6.6	3.7 2.2 9.4 9.4 6.4	1LJH 5.9 9.1 14.0 7.8 7.2	5.1 3.2 10.9 9.9 6.0	1LJJ 4,2 0,8 11.0 9.0 7.0	1LJK 7.8 10.3 10.8 12.2 3.5	ILJL 4.8 4.4 12.0 10.3 6.7	1LJM 4.7 3.6 10.8 9.4 6.3
1997 1998 1999 2000 2001	11.3 6.0 5.9 13.8 -1.1	11.9 6.4 6.1 12.6 -1.5	9.4 4.8 5.6 18.3 0.3	10.8 6.8 7.9 14.5	11.4 9.5 10.4 13.9 -1.3	9.5 -0.4 0.8 16.6	10.4 5.4 5.4 12.6	11.1 5.8 5.7 12.1 -0.7	8.9 4.3 4.7 13.8	9.5 6.1 6.3 12.9	9.7 8.3 8.8 12.1 –0.7	8.9 0.3 -0.9 15.9	11.1 6.4 6.9 14.2	10.0 5.8 5.9 12.8
1996 Q1 Q2 Q3 Q4	5.6 5.8 6.7 7.8	5.6 5.2 6.8 8.1	5.7 7.6 6.2 6.5	6.9 5.9 6.9 8.1	7.3 6.6 8.7 9.0	5.8 4.1 2.5 5.8	5.5 5.7 7.0 8.4	5.1 4.9 7.0 8.8	6.6 7.8 7.2 7.3	6.0 5.0 5.9 7.1	6.2 5.8 7.7 8.3	5.7 3.1 1.1 4.0	6.2 5.8 6.8 7.9	5.8 5.4 6.4 7.7
1997 Q1 Q2 Q3 Q4	8.2 11.9 12.9 12.2	8.0 13.1 14.0 12,4	9.0 7.8 9.0 11.6	8.2 11.5 12.1 11.4	8.2 12.4 12.5 12.3	8.3 9.3 11.2 9.1	7.9 11.3 11.8 10.8	7.6 12.5 13.0 11.2	8.7 8.2 8.7 9.8	7.2 10.3 10.7 9.9	7.2 10.6 10.6 10.4	7.1 9.2 10.8 8.7	8,2 11,7 12,5 11,8	7.5 10.8 11.2 10.4
1998 Q1 Q2 Q3 Q4	10.7 7.1 4.1 2.2	11.4 6.8 4.2 3.3	8.5 8.3 4.0 -1.6	10.5 7.8 4.9 4.1	13.2 9.5 7.8 7.6	3.7 3.2 -2.9 -5.4	10.0 6.3 3.4 1.9	11.0 6.2 3.4 2.5	7.4 6.5 3.5	9.6 7.0 4.4 3.5	11.4 8.3 6.9 6.4	4.7 3.4 -2.3 -4.6	10.6 7.5 4.5 3.1	9.8 6.6 3.9 2.7
1999 Q1 Q2 Q3 Q4	1.6 3.7 7.3 11.2	2.6 4.0 7.3 10.3	-2.2 2.8 7.3 14.3	4.5 6.1 9.0 12.0	7.3 9.0 11.3 13.8	-3.5 -2.2 2.3 6.6	1.4 3.6 6.7 9.9	1.8 3.7 7.2 10.0	0.3 3.5 5.3 9.6	3.6 4.7 7.1 9.9	6.3 7.6 9.5 11.9	-4.1 -3.6 - 4.1	3.0 4.9 8.2 11.6	2.5 4.2 6.9 9.9
2000 Q1 Q2 Q3 Q4	14.9 14.9 14.0 11.5	13.9 14.0 12.5 10.0	18.5 18.1 19.6 16.8	14.2 15.4 15.5 13.0	14.7 15.1 14.4 11.3	12.6 16.2 19.1 18.6	13.3 13.3 12.9 10.7	13.6 13.3 11.9 9.8	12.7 13.5 15.7 13.4	12.3 13.7 14.2 11.6	12.7 13.1 12.7 9.7	10.9 15.6 19.0 17.9	14.5 15.1 14.8 12.3	12.8 13.5 13.5 11.2
2001 Q1 Q2 Q3 Q4	6.9 0.1 -4.6 -6.7	6.0 -0.4 -4.8 -6.8	9.9 1.8 -4.2 -6.1	7.5 1.1 –3.8	5.8 -0.2 -4.6 -6.4	13.0 5.1 -1.4	6.7 0.7 -3.3	5.9 0.2 -3.5 -5.5	9.0 2.0 –2.7	7.2 1.5 -3.0	5.4 0.3 -3.7 -4.9	13.0 5.3 -0.8	7.2 0.6 -4.2	7.0 1.1 -3.1
2002 Q1	**				44		71		344		**		.,	
1996 Q1 Q2	ILJN 2.2 1.0	ILJO 2.2 0.7	1LJP 2.3 2.2	ILJQ 2.0 1.0	ILJR 2.7 1.0	ILJS 0.3 1.0	ILJT 2.3 1.1	ILJU 2.3 0.7	ILJV 2.1 2.0	ILJW 1.6 1.0	ILJX 2.3 1.3	ILJY -0.3 0.5	ILJZ 2.1 1.0	ILKA 1.9 1.1
Q3 Q4	2.0 2.3	2.3 2.7	0.7 1.1	2.4	2.8 2.2	3.0	2.3	2.5 2.9	1.6 1.4	2.2	2.5 1.9	1.2	2.2	2.2
1997 Q1 Q2 Q3 Q4	2.7 4.5 2.9 1.7	2.0 5.5 3.1 1.2	4.7 1.1 1.9 3.5	2.2 4.1 3.0 1.7	2.0 4.9 2.9 2.0	2.8 1.9 3.1 1.1	1.8 4.3 2.7 1.6	1.2 5.3 3.0 1.3	3.4 1.5 2.1 2.5	1.6 4.0 2.6 1.5	1.3 4.5 2.5 1.8	2.6 2.5 2.7 0.7	2.4 4.3 2.9 1.7	1.7 4.1 2.6 1.5
1998 Q1 Q2 Q3 Q4	1.3 1.1 -0.2	1.2 1.1 0.6 0.3	1.8 0.8 -2.1 -2.1	1.4 1.5 0.2 0.9	2.8 1.6 1.4 1.7	-2.4 1.5 -3.1 -1.5	1.1 0.8 -0.1 0.1	1.1 0.8 0.2 0.4	1,1 0.7 -0.8 -0.9	1.3 1.5 0.1 0.6	2.2 1.6 1.1 1.3	-1.2 1.2 -3.0 -1.7	1.3 1.3 0.1 0.4	1.2 1.1 - 0.3
1999 Q1 Q2 Q3 Q4	0.7 3.2 3.5 3.4	0.5 2.5 3.8 3.1	1.2 5.9 2.2 4.3	1,7 3,1 3.0 3.7	2.5 3.1 3.5 4.0	-0.4 2.9 1.4 2.7	0.7 3.0 2.9 3.0	0.4 2.6 3.6 3.0	1.4 3.9 0.9 3.0	1.4 2.6 2.4 3.2	2.1 2.9 2.9 3.5	-0.7 1.7 0.6 2.3	1.2 3.2 3.2 3.5	1.0 2.8 2.6 3.1
2000 Q1 Q2 Q3 Q4	4.0 3.3 2.7 1.1	3.7 2.6 2.5 0.9	5.0 5.6 3.4 1.9	3.7 4.1 3.1 1.4	3.3 3.5 2.9 1.2	5.2 6.1 3.9 2.3	3.8 3.0 2.5 1.0	3.6 2.4 2.4 1.0	4.3 4.7 2.8 1.0	3.5 3.9 2.8 0.9	2.8 3.2 2.6 0.7	5.8 6.1 3.6 1.4	3.9 3.7 2.9 1.3	3.7 3.5 2.7 1.0
2001 Q1 Q2 Q3 Q4	-0.3 -3.3 -2.2 -1.1	-3.6 -2.0 -1.4	-1.2 -2.2 -2.6 -0.2	-1.3 -2.1 -1.9	-1.7 -2.4 -1.7 -0.8	0.2 -1.3 -2.6	0.1 -2.8 -1.6	-3.1 -1.4 -1.1	0.2 -2.0 -1.9	-0.6 -1.6 -1.7	-1.2 -1.7 -1.5 -0.5	1.4 -1.2 -2.4	-0.8 -2.7 -2.0	-0.3 -2.2 -1.6
2002 Q1			**			*1	.,			**		**	.,	

¹ Data used in the World and OECD aggregates refer to Germany after uniffication

Regional Economic Indicators - June 2002

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Overview

At the end of 2001, employment growth continued, although regional variation saw robust growth in some regions, e.g. London offset by small declines in others, e.g. Scotland. Similarly into 2002, while the claimant count improved at the national level, some regions saw deterioration. Redundancies have picked up a little, again with a concentration in certain regions. On production and construction, data to the end of 2001 shows falls in output in all countries. Confidence data into 2002 shows strong increases in optimism across all regions, but less tangible increases in output.

GDP at basic prices

Tables 1 to 4 concern National Accounts statistics for the regions.

ONS will be releasing regional GDP data for 2000 in early November.

in Table 1, London and the South East accounted for 31.7 per cent of the UK's total GDP in 1999, with contributions of 15.9 percentage points and 15.8 percentage points respectively. The South East has increased its share from 14.8 percentage points in 1989 to 15.8 percentage points in 1999. Northern Ireland posted an 82.3 per cent increase in value terms from 1989 to 1999 from £9.3 billion in 1989 to £17.0 billion in 1999 (figure 1). However, it accounted for only 2.2 percentage points of the UK's total GDP in 1999. Annual growth for the UK was 3.8 per cent in 1999, compared to 6.1 per cent in 1998 (figure 1). The South East had the highest annual growth rate of 5.1 per cent, whilst the North East had the lowest annual growth of 2.3 per cent. These regional GDP estimates are residence based, locating the income of commuters to where they live rather than to their place of work.

Table 2 compares GDP per head per region and shows that London remains the richest region on the basis of GDP per head but that the economy there grew by 2.0 per cent in 1999, compared to 3.4 per cent nationally. This is also the lowest growth rate of all the regions in 1999. The growth rate was the highest in the South East, 4.1 per cent. GDP per head for all the regions was above £10,000 for the first time. The East recorded a figure above the UK average in 1999. The North East had the lowest regional GDP per head in 1999, followed by Northern Ireland and Wales.

Table 3 shows household disposable income per head increased in the UK in 1999 by 4.9 per cent, compared to an increase in of 2.1 per cent in 1998. London recorded the highest monetary rate in 1999 of £12,036 followed by the East with £11,255, which has overtaken the South East for the first time since 1992. Looking at annual percentage changes, the West

Midlands recorded the largest rise of 6.8 per cent in 1999, while the North East was the slowest growing region, with growth of 3.1 per cent in 1999. Other slow growing regions were, the East Midlands with 3.4 per cent and the South West and London, both with growth of 3.7 per cent in 1999. Significant acceleration in the rates of increase in 1999 compared to 1998, of more than 3.2 per cent, was seen in the West Midlands, Yorkshire and the Humber, the South East, Wales and Northern Ireland.

Figure 1
GDP, UK, England, Wales, Scotland & Northern
Ireland
growth, year on previous year

growth, year on previous year percentage change, 1997 to 1999

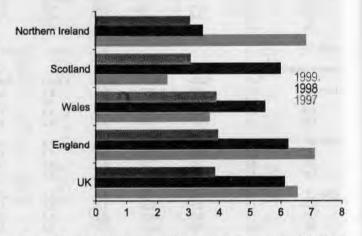


Table 4, shows individual consumption expenditure per head, with London recording the highest monetary value in 1999 of £12,250, followed by the South East with £11,392. Looking at annual percentage changes, London also recorded the largest rise in consumption with growth of 8.8 per cent in 1999, whilst the North East recorded a decline of 1.0 per cent in the same period, compared to an increase of 4.4 per cent in 1998. The average growth for the UK as a whole was 5.9 per cent in 1999, following an increase of 6.2 per cent in 1998.

The Labour Market

Tables 5 to 11 concern the labour market. Tables 6, 8 and 9 are seasonally

The **total in employment** (from the Labour Force Survey), table 9, is continuing to show a mixed picture across the regions in the fourth quarter of 2001. Employment growth in the UK increased by 0.7 per cent in the latest quarter, accelerating from an increase of 0.2 per cent in the previous quarter. However, the performance of regions differed considerably, with London, the North West and the East seeing the largest quarterly growth of 2.0 per cent, 1.5 per cent and 1.2 per cent respectively. Employment growth in Yorkshire and the Humber, the South West and the South East grew by 1.0 per cent, 0.9 per cent and 0.7 per cent respectively. The North East and the West Midlands and Northern Ireland employment grew by 0.2 per cent, 0.5 per cent and 0.1 per cent respectively. Regions which saw falls in their employment growth were the East Midlands (0.4 per cent), Wales (0.2 per cent) and Scotland (0.5 per cent)

National year-on-year growth to 2001 quarter four stood at 1.2 per cent, compared with 0.8 per cent in the previous quarter. All regions except the North East, Yorkshire and the Humber and Scotland saw growth over the fourth quarter a year ago, with the highest employment growth in London, the South West, the South East and the East Midlands.

Employee jobs (from Employers Surveys), in table 11, showed employment growth in most regions in 2001 quarter four, following slow growth in the majority of the regions in 2001 quarter three. Overall growth in employee jobs in the UK was stronger in 2001 quarter four than in the previous quarter, at 0.5 per cent, having grown by 0.3 per cent in the third, although there appear to be seasonal factors present in the data. Growth in the year to quarter four in the UK was 0.3 per cent. However, the picture across regions is mixed. Regions experiencing annual growth in the year to the fourth quarter were the North West (0.5 per cent), Yorkshire and the Humber (0.2 per cent) the East Midlands (1.0 per cent) the East (0.8 per cent), the South West (2.0 per cent) and Northern Ireland (0.5 per cent). Regions that saw falls in the same period were the North East, the West Midlands, the South East Wales and Scotland.

The UK claimant count rate, table 8, increased by 0.1 percentage points between March and April 2002. Most of the regions claimant count rates have held steady since the beginning of the year. Unchanged over the last three months are the counts of the North East, the North West, Yorkshire and the Humber, East Midlands, West Midlands, the South West and Northern Ireland. Regions that saw a slight increase of 0.1 percentage points in the claimant count rate between March and April were the East, London, the South East, Wales and Scotland. Overall between 2000 and 2001, the UK claimant count fell 0.4 percentage points, with the largest falls in the North East, where the count fell by 0.8 percentage points and the West Midlands and Wales where the count fell by 0.5

In Table 6, the rate of **ILO unemployment** in the UK, remained at 5.1 per cent in the fourth quarter of 2001. However, the standstill in the national rate masked a high degree of movement between the latest quarters at the regional level. Increases in unemployment in 2001 quarter four were seen in the North East and the East Midlands (0.3 percentage points), and the West Midlands (0.2 percentage points). Decreases to unemployment rates of 0.1 percentage points were seen in Yorkshire and the Humber, the East, London the South East, Wales and Scotland. Northern Ireland's unemployment rate decreased by 0.2 percentage points.

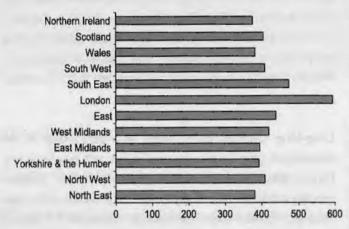
Long-term claimant count rates as a percentage of the unemployed, table 7 is showing most regions, with the exception of Northern Ireland, recording decreases in the latest data. Between February and March 2002 all regions with the exception of the South West and Northern Ireland saw declines of between 0.1 and 0.2 percentage points. Northern Ireland's long-term claimant count continued to improve quickly, falling by a further 0.8 percentage points, while the South West's count increased by 0.3 percentage points over the same period. Wales's long term claimant count remained unchanged. It is difficult to interpret the significance of these figures, as the data has only been available since January 1999. Also a decline in these rates can be attributable either to a reduction in the number of long-term unemployed or offset by a rise in the number of short-term unemployed.

Table 10 shows **redundancy rates** in the government office regions. Redundancy data contrasts to some extent with the picture given by the claimant count figures. The figures show that almost all regions saw increases in redundancies between Autumn 2001 and Winter 2001, with the exceptions being London (no change) and Yorkshire and the Humber, which saw a significant drop in redundancies per thousand from ten to five. Comparing Winter 2001 with Winter 2000 shows that the East, London, the South East, the North East, the East Midlands and Scotland had increased redundancies over the period, with Scotland having 4 more redundancies per 1,000 employees in Winter 2001 than the same period a year ago.

Total average gross weekly pay, (from the annual New Earnings Survey), in table 5, shows all regions recorded an acceleration in the rate of growth of pay over the latest two years. The West Midlands recorded the highest rate of growth in the year to April 2001, with a rate of 8.2 per cent, although this came after it had the lowest rate of growth out of all the regions the previous year. Other regions recording growth in excess of 6.0 per cent were the South East where wages grew by 6.7 per cent and the South West, where wages grew by 7.3 per cent. London

continues to be the region with the highest weekly pay of £593.7 (figure 2).

Figure 2
Total average gross weekly pay
2001 April
seasonally adjusted



Industrial Production and Construction

UK industrial production output, table 12, declined for the fifth quarter in a row with a decline of 2.2 per cent between quarters three and four of 2001. This is the largest quarterly decline since 1984 quarter one. Manufacturing output, which accounts for the bulk of production, decreased by 2.0 per cent in the fourth quarter of 2001, a continuation of the previous quarter's decline, although not as steep. Within the manufacturing industries, the most significant falls were in the electrical and optical equipment industries and the basic metals and metal products industries. Over the year to quarter four, UK production output decreased by 5.7 per cent.

On the other hand, **UK construction output**, table 13, rose by 1.8 per cent in 2001 quarter four, the fifth successive quarter of positive growth, following the previous quarter's increase of 0.9 per cent. Overall in 2001, construction output increased by 3.6 per cent. This is the largest annual percentage increase since 1997.

Wales' industrial production, table 12, showed a contraction in 2001 quarter four of 0.6 per cent, following growth in the third quarter of 0.6 per cent (figure 3). The decline in annual growth was more pronounced, with production down by 7.3 per cent overall in 2001. This is the largest decline since this series was released. The fall in manufacturing output was mainly due to declines in the electrical and optical equipment industries, textile industries and basic metals and fabricated metal products.

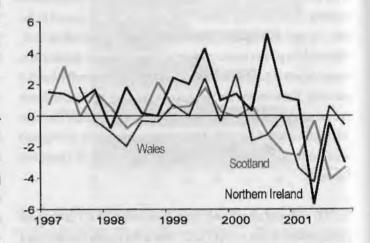
Wales' construction output, table 13, shows while growth resumed in the third and fourth quarters, overall construction output remained subdued. Construction output fell by 5.8 per cent in 2001 as a whole, following a 7.2 per cent contraction in the previous year.

Scotland's industrial production, table 12, continued to contract, recording negative growth of 3.3 per cent in the fourth quarter, following on from negative growth of 4.1 per cent in the previous quarter (figure 3). The overall contraction for 2001 was 7.8 per cent. This is the largest decline since figures for this series became available.

Scotland's construction output, table 13, shows in the latest figures a quarterly contraction in growth of 2.1 per cent in 2001 quarter four, following a decline of 3.2 per cent in the previous quarter. This is the fourth successive quarter of negative growth. Construction growth fell by 2.5 per cent overall in 2001, compared with positive growth of 7.6 per cent in 2000 and 3.4 per cent in 1999.

Northern Ireland's industrial production, table 12, continued to contract, recording a fall of 3.0 per cent in the fourth quarter of 2001, having fallen by 0.5 per cent in the previous quarter (figure 3). Overall in 2001, industrial production declined by 0.9 per cent, although this followed the particularly vigorous growth of 8.2 per cent in 2000 and 7.1 per cent in 1999.

Figure 3
IOP: Wales, Scotland & Northern Ireland growth, guarter on previous quarter



Northern Ireland's construction output, table 13, contracted by 0.6 per cent in the fourth quarter of 2001 (provisional), following a revised fall of 0.5 per cent in the previous quarter. This is the third successive fall in output, although the data is very volatile.

Manufacturing

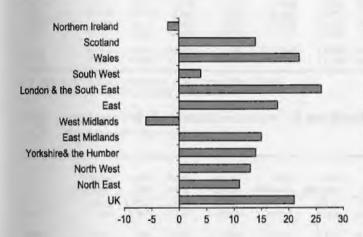
Almost all CBI data is presented on the basis of government office regions.

However, London and the South East are combined in the same manner as the standard statistical region of the South East.

Tables 14 to 18 show that CBI/BSL balances reveal a substantial increase in business optimism but more modest increases in the volumes of new orders across most regions in its latest survey.

Table 14 shows that businesses in all regions were substantially more optimistic about the business situation in the April 2002 survey than the January survey. The only regions that had negative balances were the West Midlands and Northern Ireland, although these were still much improved over the previous survey (figure 4).

Figure 4
Manufacturing industry
business optimism (balances)
April 2002



UK manufacturing output, as measured by CBI/BSL balances for **volume of output** in table 15, show deterioration in the volume of output over the past four months, but an anticipated improvement looking ahead. The pattern is fairly uniform across regions.

The overall CBI/BSL April 2002 balance for **volume of new orders**, table 16, shows a similar volume of new orders in the April and January surveys, although with particularly vivid improvements in the North East and the North West and deterioration in the South West and Northern Ireland. Looking ahead to the next four months, again, all regions anticipate improvements.

Volume of new export orders, table 17, for the next four months is showing a mixed picture from the April 2002 survey across the regions. The North East, the East Midlands, London and the South East, the South West, Wales and Scotland are expecting improvements looking ahead. On the other hand, Yorkshire and the Humber, the West Midlands, the East and Northern-Ireland show the balance of opinion on the side of deterioration, although not to the level of the past four months.

In contrast, the percentages of **firms working below capacity** table 18, shows the UK seeing an increase in the number of firms working below capacity from 66 percent in January 2002 to 72 per cent in April 2002. This is the highest percentage of firm working below capacity since 1993 quarter one. Most firms echoed the overall increase with the West Midlands and Northern Ireland seeing the largest increases in the number of firms working below capacity. On the other hand, capacity utilisation increased in the North East and Scotland.

The Housing Market

In Table 20, UK **house prices** (not seasonally adjusted) growth slowed in the fourth quarter, decreasing by 2 per cent over the previous quarter

The latest quarterly data showed this decrease was seen across most regions with the largest falls in prices in the North west (7.5 per cent) and Northern Ireland (8.7 per cent). The North East had the largest house price increase of 6.5 per cent.

On the other hand, the annual data shows a different story, with the UK, year-on-year growth to 2001 quarter four seeing an increase in house prices of 4.6 per cent (10 per cent in the year to the third quarter). Annual growth was highest in the East Midlands at 13.1 per cent. Other regions that saw large annual price increases were the North East, the North West, and the South West. Yorkshire and the Humber, the East and Wales had annual growth of 8 per cent, 8.2 per cent and 8.9 per cent respectively. The only region to witness a fall in annual house prices was Northern Ireland, where prices fell by 2.8 per cent. First quarter data from external sources, the Halifax and Nationwide, however show house price inflation accelerating.

In Table 19, the number of **permanent dwellings started** fluctuates quite widely from quarter to quarter with a significant seasonal factor involved. The latest data for 2001 quarter four shows declines in the growth in the number of permanent dwellings started in all the regions. There were major falls in London (44.1 per cent), the North East (28.1 per cent) and Wales (28.5 per cent). Annual growth in the year to 2001 quarter four shows all regions increasing the number of permanent dwelling started, with the exception of the North East where there was a fall of 26.7 per cent and in London, where there was a fall of 2.5 per cent. Regions that saw considerable increases in annual growth in the year to the fourth quarter were the South East, with the highest growth rate for the period of 45 per cent, the North West with growth of 23.8 per cent and Northern Ireland with 21.3 per cent.

Business Start-Ups

VAT registrations and de-registrations, table 21, shows registrations

outnumbering de-registrations by 6,200 for the calendar year 2000 which, although a net gain, is well down on the level recorded in 1998, when there was a net gain of 30,300 registered enterprises. The net gain of 6,200 enterprises during 2000 shows a rise in the total business stock for the fifth consecutive year, however, in all regions net gains were less than those recorded in 1998. In 2000 registrations outnumbered deregistrations in every region, except Yorkshire and the Humber, where there was a net loss of 800 businesses and Wales with a net loss of 200 businesses. Both the South West and Scotland recorded no change in the their respective numbers of registered businesses. The largest net gains were in London of 2,700 businesses, the South East of 1,900 businesses, the East of 1,000 businesses and the North West with a net gain of 800 businesses.

	United Kingdom ² (£m)	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South	England	Wales	Scotland	Northern Ireland
1989	TMPV	TMPW	TMPX	TMPY	TMPZ	TMQA	TMQB	TMQC	TMQD	TMQE	TMQF	TMQG	TMQH	TMQI
	452 437	17 156	49 365	34 848	30 439	37 956	45 885	68 907	66 979	34 118	385 653	19 007	38 448	9 329
1993	562 857	21 480	60 664	42 952	37 124	46 859	55 928	86 574	83 817	42 529	477 927	23 191	49 302	12 437
1994	593 931	22 074	63 938	44 752	39 023	49 577	59 824	91 118	88 936	44 607	503 851	24 463	52 273	13 344
1995	622 389	22 975	66 007	47 108	40 976	52 407	62 416	93 843	93 319	47 385	526 437	25 989	55 667	14 297
1996	657 775	23 755	68 937	50 043	44 184	54 851	66 484	99 490	100 614	50 128	558 483	27 017	57 338	14 936
1997	700 567	24 202	72 414	53 182	47 261	57 783	72 698	108 559	108 276	53 580	597 956	28 010	58 650	15 952
1998	743 314	25 294	75 275	55 457	49 413	61 130	77 962	118 499	116 024	56 064	635 117	29 541	62 153	16 501
1999	771 849	25 875	77 562	57 554	50 906	63 495	81 793	122 816	121 956	58 151	660 108	30 689	64 050	17 003

¹ Based on the European System of Accounts 1995 (ESA95).

2 UK less Extra-Regio and statistical discrepancy.

Source: National Statistics

2

Gross domestic product¹ at basic prices: £ per head Government Office Regions

	United Kingdom ²	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
1989	TMQJ	TMQK	TMQL	TMQM	TMQN	TMQ0	TMQP	TMQQ	TMQR	TMQS	TMQT	TMQU	TMQV	TMQW
	7 888	6 614	7 199	7 042	7 621	7 242	9 012	10 135	8 805	7 297	8 069	6 624	7 544	5 893
1993	9 671	8 216	8 783	8 563	9 102	8 855	10 772	12 494	10 834	8 927	9 852	7 978	9 614	7 610
1994	10 170	8 441	9 248	8 901	9 519	9 352	11 467	13 088	11 441	9 311	10 349	8 393	10 168	8 114
1995	10 619	8 796	9 547	9 354	9 944	9 869	11 889	13 406	11 918	9 828	10 771	8 900	10 818	8 654
1996	11 185	9 111	9 980	9 927	10 673	10 309	12 582	14 107	12 761	10 351	11 384	9 240	11 162	8 964
1997	11 871	9 301	10 494	10 541	11 371	10 845	13 657	15 266	13 634	11 008	12 141	9 562	11 429	9 507
1998	12 548	9 741	10 909	10 983	11 848	11 455	14 530	16 532	14 510	11 447	12 845	10 063	12 117	9 754
1999	12 972	10 024	11 273	11 404	12 146	11 900	15 094	16 859	15 098	11 782	13 278	10 449	12 512	10 050

¹ Based on the European System of Accounts 1995 (ESA95).

2 UK less Extra-Regio and statistical discrepancy.

Source: National Statistics

3

Household disposable income¹: £ per head Government Office Regions

	United Kingdom ²	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	DEPZ	LRCG	LRCH	DEQB	DEQC	DEQH	LRCI	DEQE	LRCJ	DEQG	LREV	DEQJ	DEQK	DEQL
1989	5 560	4 908	5 239	5 208	5 280	4 934	6 097	6 549	6 110	5 638	5 643	4 994	5 355	4 729
1993	7 771	7 053	7 313	7 232	7 214	7 112	8 248	9 311	8 519	7 608	7 867	6 986	7 704	6 540
1994	8 019	7 095	7 536	7 417	7 569	7 391	8 540	9 612	8 873	7 767	8 127	7 235	7 773	6 959
1995	8 442	7 423	7 912	7 740	7 883	7 871	8 909	10 123	9 306	8 290	8 545	7 703	8 199	7 428
1996	8 867	7 819	8 341	8 272	8 390	8 113	9 292	10 635	9 824	8 698	8 991	8 010	8 579	7 621
1997	9 403	8 108	8 761	8 589	8 931	8 405	10 233	11 358	10 503	9 368	9 559	8 338	8 918	8 150
1998	9 603	8 104	8 932	8 794	9 040	8 612	10 640	11 607	10 663	9 474	9 755	8 583	9 172	8 247
1999	10 078	8 353	9 375	9 305	9 346	9 195	11 255	12 036	11 249	9 825	10 237	9 113	9 558	8 659

¹ Based on the European System of Accounts 1995 (ESA95).

2 UK less Extra-Regio

Source: National Statistics



Individual consumption expenditure¹: £ per head Government Office Regions

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
1003	TLZI	TLZJ	TLZK	TLZL	TLZM	TLZN	TLZO	TLZP	TLZQ	TLZR	TLZS	TLZT	TLZU	THZZ
1994	7 441 7 762	6 676 6 973	7 082 7 336	7 081 7 306	7 180 7 583	6 920 7 364	7 380 7 915	8 799 9 011	8 424 8 697	7 045 7 408	7 539 7 865	6 563 6 997	7 334 7 537	6 427 6 775
1996	8 268	7 391	7 798	7 758	7 939	7 705	8 514	9 485	9 333	8 049	8 365	7 722	8 007	7 188
1997	8 776	7744	8 331	8 177	8 370	8 128	8 963	10 248	9 938	8 584	8 895	8 041	8 488	7 463
1998	9 3 1 6	8 086	8 662	8 763	8 695	8 640	9 740	11 264	10 656	8 961	9 488	8 079	8 874	7 749
1999	9 864	8 003	9 321	8 907	9 057	9 262	10 077	12 250	11 392	9 600	10 057	8 206	9 459	8 281

¹ Based on the European System of Accounts 1995 (ESA95).

	United Kingdom ²	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
1993 Apr	DEOG 316.0	LRCO 286.2	LSHZ 299.1	DCQI 287.6	DCQH 285.5	DCQG 292.7	LRCQ 312.2	DCPI 408.8	LRCR 328.9	DCQF 298.8	DCQL 281.5	DCQM 297.6	DCQN 282.4
1994 Apr	324.7	294.6	307.7	297.0	292.6	300.1	322.9	420.6	339.4	306.9	290.5	301.9	286.5
1995 Apr	335.3	299.2	317.7	306.0	306.4	311.3	331.5	441.5	348.1	313.9	302.0	313.5	300.2
1996 Apr	350.2	314.1	329.6	316.4	317.9	324.3	345.7	454.3	367.4	326.5	313.1	324.9	306.2
1997 Apr	366.3	327.6	345.8	330.5	332.9	337.8	362.4	480.1	382.5	342.7	330.1	336.8	319.7
1998 Apr	383.1	339.2	361.6	344.9	350.4	358.8	378.6	500.9	405.5	354.0	343.9	350.3	332.6
1999 Apr	398.7	349.6	372.6	361.0	361.7	375.6	396.6	520.0	423.2	364.9	353.6	364.9	344.9
2000 Apr	-	368.0	389.0	375.1	374.4	387.2	416.2	561.7	443.3	380.6	368.4	383.0	360.4
2001 Apr	_	380.8	408.3	392.1	394.3	419.1	438.7	593.7	473.0	408.5	381.8	404.5	375.0

Average gross weekly earnings of full-time employees on adult rates whose pay for the survey pay-period was not affected by absence.
 Apr 2000 and Apr 2001 data for UK not available at time of publication.

Sources: New Earnings Survey, National Statistics; Department of Economic Development, Northern Ireland

ILO unemployment rates as a percentage of the economically active1, seasonally adjusted

Government Office Regions

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South	England	Wales	Scotland	Northern Ireland ²
	MGSX	YCNC	YCND	YCNE	YCNF	YCNG	YCNH	YCNI	YCNJ	YCNK	YCNL	YCNM	YCNN	MGXW
1998 Q4	6.2	9.7	7.1	7.1	4.9	6.6	4.3	7.7	4.0	4.5	6.0	7.2	7.8	6.8
1999 Q1	6.2	9.7	6.7	6.8	5.1	7.0	4.2	7.8	3.9	4.9	6.0	7.2	7.5	7.2
Q2	6.0	9.6	6.3	6.3	5.3	6.9	4.2	7.4	3.9	4.5	5.8	7.5	7.2	7.6
Q3	5.9	9.7	6.3	6.1	5.6	6.3	4.0	7.5	3.8	4.4	5.7	7.3	7.0	7.3
Q4	5.9	8.4	6.0	6.1	5.6	6.8	4.2	7.1	4.1	4.2	5.6	7.4	7.2	6.6
2000 Q1	5.8	9.0	6.1	6.3	5.2	6.1	4.0	7.6	3.5	4.3	5.5	6.8	7.5	6.6
Q2	5.5	8.9	5.4	6.1	4.9	6.1	3.6	7.2	3.3	4.2	5.2	6.1	7.2	6.7
Q3	5.4	9.0	5.4	6.1	4.8	5.8	3.7	7.0	3.1	4.0	5.1	6.5	6.9	5.8
Q4	5.2	8.0	5.2	5.6	4.6	6.0	3.4	6.9	3.4	3.9	5.0	6.2	6.0	6.1
2001 Q1	4.9	7.4	5.4	5.1	4.9	5.1	3.7	6.1	3.7	3.6	4.7	6.1	5.7	6.2
Q2	5.1	7.1	5.4	5.5	4.8	5.3	3.8	6.3	3.3	3.7	4.8	5.9	6.7	6.0
Q3	. 5.1	7.3	5.5	5.1	4.4	5.4	3.9	6.9	3.4	3.5	4.9	5.4	6.7	6.3
Q4	5.1	7.6	5.1	5.0	4.7	5.6	3.8	6.8	3.3	3.5	4.9	5.3	6.6	6.1

¹ Periods are calendar quarters.

Source: Labour Force Survey, National Statistics

Long-term claimant count as a percentage of the unemployed¹ (those out of work for 12 months or more)

Government Office Regions

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South	Wales	Scotland	Northern Ireland
	LRFN	LRFO	LSIA	LRFR	LRFS	LRFT	LRFU	LRFV	LRFW	LRFX	LRFY	LRFZ	LRGA
2001 Feb	19.6	21.0	18.0	17.6	17.1	21.8	16.6	25.0	16.7	14.5	17.2	18.1	30.6
Mar	19.7	21.3	18.1	17.8	17.3	21.7	16.6	24.7	16.8	14.8	17.5	18.3	31.3
Apr	19.9	21.5	18.2	17.8	17.6	21.8	17.0	24.5	16.8	15.0	18.2	18.7	31.7
May	20.3	22.0	18.7	18.3	18.0	22.2	17.2	24.3	17.1	15.5	18.8	19.0	32.2
May Jun	20.6	22.4	19.2	18.7	18.4	22.7	17.6	24.3	17.3	15.9	19.7	18.9	32.2
Jul	20.0	21.7	18.8	18.4	18.1	22.2	17.1	23.9	16.6	15.4	19.2	18.0	30.1
Aug Sep Oct	19.5	21.4	18.5	17.9	17.9	21.5	16.4	23.3	15.8	14.9	18.7	17.4	29.7
Sep	19.7	21.3	18.9	18.1	18.2	21.8	16.1	22.9	15.5	14.8	18.9	18.0	30.7
Oct	19.5	20.6	19.0	18.2	18.2	21.9	15.7	22.6	15.0	14.5	18.8	17.4	31.5
Nov	18.9	19.8	18.5	17.7	17.6	21.7	15.0	21.9	14.1	13.7	18.1	16.6	31.5
Dec	18.0	18.7	17.7	16.9	16.9	20.7	14.2	21.0	13.0	13.0	17.0	15.9	30.8
2002 Jan	16.8	17.4	16.5	15.9	15.6	19.5	13.0	20.6	12.0	12.0	15.9	14.4	29.5
Feb	16.4	17.3	16.2	15.6	15.3	19.0	12.5	20.0	11.4	11.5	15.3	14.1	28.4
Mar	16.3	17.4	16.1	15.4	15.1	18.9	12.4	19.8	11.3	11.8	15.3	14.0	27.6

¹ Computerised claims only.

Source: National Statistics

² Estimates for Northern Ireland are not seasonally adjusted. The quarterly series starting in 1995 provides insufficient data to do this reliably.

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	BCJE	DPDM	IBWC	DPBI	DPBJ	DPBN	DPDP	DPDQ	DPDR	DPBM	DPBP	DPBQ	DPBR
1998 1999 2000 2001	4.5	7.2	5.1	5.4 5.0	4.0 3.7 3.5 3.2	4.6	3.2	5.0	2.6 2.3 1.9 1.6	3.4	5.4	5.5	7.3 6.4 5.3 5.0
1999	4.2 3.6 3.2	7.0	4.6	5.0	3.7	4.5 4.0 3.7	2.9	4.5	2.3	3.1	5.0	5.1	6.4
2000	3.6	6.3	4.1	4.4	3.5	4.0	2.5	3.8	1.9	2.5	4.4 3.9	4.6 4.2	5.0
2001	3.2	5.5	3.7	4.0	3.2	3.7	2.1	3.3	1.0	2.1	3.9	4.2	5.0
2001 Apr	3.2	5.5	3.8	4.0	3.2 3.2 3.2	3.8 3.8 3.7	2.1 2.1 2.1	3.3 3.3 3.3	1.6 1.6 1.6	2.2 2.2 2.1	4.0	4.2	5.1 5.1 5.0
May	3.2	5.5	3.8	4.0	3.2	3.8	2.1	3.3	1.6	2,2	4.0	4.2	5.1
Jun	3.2 3.2 3.2	5.4	3.7	4.0	3.2	3.7	2.1	3.3	1.6	2.1	3.9	4.2	5.0
.101.	3.2	5.4	3.7	3.9	3.2	3.7	2.1 2.1 2.1 2.1	3.3 3.3 3.3	1.5	2.1	3.9 3.8 3.8	4.1	5.0
Aura	3.2	5.4	3.7	3.9	3.1	3.6	2.1	3.3	1.5	2.1	3.8	4.1	5.0
Sep	3.2	5.4 5.3	3.7	3.9	3.1	3.6	2.1	3.3	1.5	2.1	3.8	4.2	4.9
Jul Aug Sep Oct Nov	3.2 3.2 3.2 3.2 3.2 3.2	5.4 5.4 5.4	3.7	3.9 3.9 3.9 3.9 3.8 3.8	3.1 3.1 3.1 3.1 3.0	3.7 3.6 3.6 3.6 3.6 3.6	2.1	3.4	1.5 1.5 1.5 1.6 1.6	2.1	3.8 3.8 3.7	4.2	5.0 5.0 4.9 4.9 4.9 4.9
Nov	3.2	5.4	3.7	3.8	3.1	3.6	2.1	3.4	1.6	2.1	3.8	4.2	4.9
Dec	3.2	5.4	3.7	3.8	3.0	3.6	2.1	3.5	1.6	2.1	3.7	4.2	4,9
2002 Jan	3.2	5.3	3.6	3.7 3.7 3.7 3.7	3.0 2.9 2.9 2.9	3.6 3.5 3.5 3.5	2.1 2.1 2.1	3.5 3.5	1.6 1.6	2.0	3.7 3.7	4.1	4.8 4.8
Feb	3.1 3.1 3.2	5.2	3.6 3.6	3.7	2.9	3.5	2.1	3.5	1.6	2.0	3.7	4.1	4.8
Mar	3.1	5.2 5.2	3.6	3.7	2.9	3.5	2.1	3.5	1.6	2.0	3.6 3.7	4.1	4.8
Apr	3.2	5,2	3.6	3.7	2.9	3.5	2.2	3.6	1.7	2.0	3.7	4.2	4.8

Source: National Statistics

Total in employment^{1,2}, seasonally adjusted **Government Office Regions**

Thousands

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland ³
	MGRZ	YCJP	YCJQ	YCJR	YCJS	YCJT	YCJU	YCJV	YCJW	YCJX	YCJY	YCJZ	YCKA	YCPT
1998 Q4	27 448	1 060	3 025	2 281	1 989	2 461	2 638	3 376	4 042	2 339	23 211	1 235	2 308	700
1999 Q1	27 540	1 058	3 023	2 287	2 009	2 454	2 652	3 391	4 049	2 372	23 295	1 238	2 309	694
Q2	27 592	1 062	3 064	2 291	1 998	2 461	2 656	3 394	4 046	2 374	23 346	1 231	2 318	693
Q3	27 696	1 077	3 077	2 311	2 006	2 475	2 664	3 389	4 053	2 360	23 411	1 244	2 335	705
Q4	27 769	1 089	3 093	2 320	2 019	2 459	2 661	3 406	4 057	2 390	23 494	1 244	2 333	702
2000 Q1	27 824	1 087	3 106	2 312	2 018	2 471	2 673	3 383	4 107	2 394	23 550	1 242	2 336	695
Q2	27 930	1 105	3 137	2 344	2 036	2 459	2 684	3 378	4 116	2 381	23 641	1 252	2 353	680
Q3	27 999	1 100	3 096	2 348	2 020	2 458	2 702	3 399	4 112	2 425	23 660	1 262	2 378	701
Q4	28 088	1 099	3 125	2 353	2 012	2 461	2 757	3 420	4 117	2 401	23 745	1 255	2 388	699
2001 Q1	28 180	1 108	3 136	2 335	2 009	2 481	2 753	3 454	4 134	2 4 1 0	23 819	1 250	2 398	713
Q2	28 161	1 097	3 100	2 328	2 019	2 479	2 729	3 472	4 152	2 428	23 804	1 252	2 384	721
Q3	28 227	1 097	3 096	2 323	2 052	2 505	2 743	3 475	4 148	2 440	23 878	1 260	2 382	706
Q4	28 419	1 099	3 141	2 347	2 043	2 492	2777	3 544	4 179	2 462	24 084	1 258	2 371	707

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

2 Periods are calendar quarters.

Source: Labour Force Survey, National Statistics

Redundancies, not seasonally adjusted¹ **Government Office Regions**

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DITA	LRDH	LRDI	DCXF	DCXG	DCXL	LRDJ	DCXI	LRDK	DCXK	DCXN	DCXO	DITB
Spring 1998	7	_3	6	7	10	8	7	7	7	7	_3	10	-
Summer 1998	7	_3	7	9	9	9	5	5	7	6	_3	8	- 3
Autumn 1998	7	10	7	7	8	9	9	6	9	8	_3	6	3
Winter 1998	9	16	9	6	8	9	6	10	8	9	12	- 11	
Spring 1999	8	_3	9	9	_3	11	8	6	7	7	10	10	_
Summer 1999	7	_3	9	9	8	8	7	4	6	7	10_3	10	
Autumn 1999	7	_3	10	6	9	6	6	6	7	8	_3	6	3
Winter 1999	В	11	8	7	11	10	6	7	7	6	15	9	-
Spring 2000	7	10	7	9	8	8	4	7	6	8	_3	10	_
Summer 2000	6	10_3	7	5	9	7	5	4	7	8	_3	6	_
Autumn 2000	7	_3	8	7	7	8	6	- 6	6	6	_3	7	_
Winter 2000	7	_3	9	6	. 7	9	5	6	6	8	9	6	***
Spring 2001	7	_3	8	5	8	8	6	7	5	7	_3	10	_
Summer 2001	7	_3	8	7	7	8	9	5	7	5	_3	R	-
Autumn 2001	B	10	9	10	7	6	7	8	9	6	_3	7	_
Winter 2001	9	12	10	5	8	9	8	8	10	8	10	10	_

¹ The method of calculating redundancy estimates back to spring 1995 has changed from that used to calculate data previously published in this table Thus the data in this table are not comparable to those previously published. See pp225-229 of the May 2000 Labour Market Trends for more informa-tion.

Source: Labour Force Survey, National Statistics

³ Estimates for Northern Ireland are not seasonally adjusted. The quarterly series starting in 1995 provides insufficient data to do this reliably.

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
1999 2000 2001	YEKA 105.3 106.9 107.7	YEKB 101.1 113.2 114.9	YEKJ 105.2 101.8 100.8	YEKC 103.9 110.3 110.6	YEKD 103.8 107.0 109.8	YEKI 102.6 105.9 105.9	YEKE 106.2 106.6 108.0	YEKF 109.5 102.8 102.9	YEKG 107.6 103.6 104.2	YEKH 104.9 104.5 105.2	YEKK 104.7 105.7 105.8	YEKL 102.8 105.2 106.2	YEKM 106.3 108.2 109.3
2000 Jun	106.6	101.7	105.7	103.8	103.4	102.9	105.7	112.6	110.1	107.2	105.6	104.9	107.7
Sep	107.2	101.8	106.1	104.8	103.6	102.8	107.4	113.7	110.5	106.8	106.2	106.0	108.0
Dec	108.0	102.4	106.2	105.6	104.1	103.2	108.8	114.9	111.5	106.9	106.6	107.2	109.6
2001 Mar	107.0	101.0	104.9	104.7	103.3	102.5	110.0	114.2	110.2	106.3	105.5	105.8	109.0
Jun	107.5	100.7	105.4	105.0	104.1	102.6	109.4	114.6	110.7	108.2	105.7	106.4	109.0
Sep	107.8	100.5	106.5	105.2	104.5	103.5	110.2	115.3	110.4	108.5	105.9	106.0	108.9
Dec	108.3	100.8	106.7	105.8	105.1	103.1	109.7	115.4	111.1	109.1	106.3	106.6	110.2

Source: National Statistics

12 Index of industrial production¹

Seasonally adjusted 1995 = 100

	United Kingdom	Scotland	Northern Ireland	Wales
1998 1999 2000 2001	CKYW 103.4 104.2 105.9 103.6	LRFK 111.5 115.3 115.7 106.7	LRFL 110.5 118.3 128.0 126.9	TMQX 100.0 100.9 102.6 95.1
1998 Q4	103.1	113.1	111.1	99.1
1999 Q1	102.7	113.7	113.8	99.8
Q2	103.6	114.4	116.1	99.8
Q3	105.2	116.4	121.1	102.2
Q4	105.2	116.7	122.3	101.8
2000 Q1	104.5	116.6	124.0	104.5
Q2	106.1	117.3	124.4	102.8
Q3	106.8	115.8	130.9	101.5
Q4	106.1	113.0	132.5	101.5
2001 Q1	105.5	110.1	133.8	98.1
Q2	104.5	109.7	126.2	93.9
Q3	103.4	105.2	125.6	94.5
Q4	101.1	101.7	121.8	93.9

¹ The index of industrial production has been rebased from 1990=100 to 1995=100. Figures on the 1990=100 base are not being continued

Sources: National Statistics; Scottish Executive;

Department of Enterprise, Trade & Investment Northern Ireland;

13 Index of construction¹

Seasonally adjusted 1995 = 100

	United Kingdom	Scotland	Northern Ireland	Wales
1998 1999 2000 2001	GDQB 107.0 107.8 109.7 113.7	LRZR 98.3 101.6 109.3 106.6	LRFM : : :	TMQY 98.1 93.0 86.3 81.3
1998 Q4	106.0	99.4	108.1	103.7
1999 Q1	106.3	92.9	97.7	97.1
Q2	106.9	101.2	106.2	94.5
Q3	108.7	104.6	103.1	91.5
Q4	109.3	107.7	103.1	88.9
2000 Q1	112.1	115.5	109.4	85.9
Q2	109.7	104.9	121.2	91.4
Q3	107.9	107.1	114.9	86.8
Q4	109.2	109.6	113.2	81.3
2001 Q1	111.5	110.6	119.2	83.4
Q2	113.1	108.3	118.7	76.1
Q3	114.1	104.8	118.12	82.4
Q4	116.2	102.6	117.43	83.4

¹ The Index of construction has been rebased from 1990=100 to 1995=100.

Figures on the 1990=100 base are not being continued

² Revised

³ Provisional

Sources: National Statistics; Scottish Executive; Department of Finance and Personnel, Northern Ireland

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South	Wales	Scotland	Northern Ireland
2001 Jul Oct	DCMO -22 -54	LRYS -28 -52	LRYT -22 -74	DCMU -27 -66	DCMT 3 -47	DCMS -8 -72	LRYU -29 -40	DCMP -36 -62	DCMR -41 -72	DCMX -21 -72	DCMY -52 -47	DCMZ -60 -51
2002 Jan Apr	-31 21	-14 11	-47 13	-34 14	-36 15	-59 -6	-4 18	-9 26	-42 4	-33 22	-34 14	-18 -2

1 Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

15 Manufacturing industry: volume of output Government Office Regions (London and the South East is still on an SSR basis)

Balance1

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months 2001 Jul	DCLQ	LRYV -19	LRYW -15	DCLW -24 -16	DCLV -12	DCLU 7 5	LRYX 11 17	DCLR -14 -15	DCLT 2 17	DCLZ -1 -9	DCMA -21 -34	DCMB -19 -14
Oct 2002 Jan Apr	-11 -13 -15	-42 -24 -3	-41 -46 -5	-24 -24	-5 -5	3 -17	-5 -11	-13 -8 -9	3 -26	-18	-26 -33	7 -21
Next 4 months 2002 Apr	DCMC 14	LRYY 38	LRYZ 21	DCMI 13	DCMH 16	DCME 17	LRZA 11	DCMD 14	DCMF -16	DCML 13	DCMM -2	DCMN 1

1 Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

16 Manufacturing industry: volume of new orders Government Office Regions (London and the South East is still on an SSR basis)

Balance¹

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months 2001 Jul Oct	DCNA -6 -14	LRZB -25 -27	LRZC -28 -46	DCNG -17 -26	DCNF -17 8	DCNE -1 -21	LRZD -6 -17	DCNB -3 -11	DCND -15 17	DCNJ -1 -19	DCNK -24 -54	DCNL -2
2002 Jan	-15	-13	-41	-28	-9	-2	-10	-10	-9	-20	-23	10
Apr	-14	7	9	-19	-1	-15	-10	-17	-22	-7	-30	-22
Next 4 months	DCNM	LRZE	LRZF	DCNS	DCNR	DCNQ	LRZG	DCNN	DCNP	DCNV	DCNW	DCNX
2002 Apr	9	47	19	10	31	10	5	12	4	15	-3	-3

1 Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

1 7 Manufacturing industry: volume of new export orders Government Office Regions (London and the South East is still on an SSR basis)

Balance¹

	United	North	North	Yorkshire and the	East	West		London and the	South			Northern
	Kingdom	East	West	Humber	Midlands	Midlands	East	South East	West	Wales	Scotland	Ireland
Past 4 months					2000	2000				20011		
2001 Jul	DCNY	LRZH -11	LRZI -22	DCOE	DCOD -28	DCOC -8	LRZJ -16	DCNZ	DCOB	DCOH	DCOI	DCOI
Oct	-20 -32	-61	-56	-14 -31	-7	-57	-4	-4	15	-32	-36	-6
2002 Jan	-36 -18	-41	-48	-46 -20	-22 -29	-37	-20 -22	-17	-18 -56	-19	-39 -21	-59 -31
Apr	-18	7	-8	-20	-29	-23	-22	-14	-56	2	-21	-31
Next 4 months		Orania.	Y-100					1100				
2002 Apr	DCOK 6	LRZK 32	LRZL -	DCOQ -13	DCOP 22	DCOO	LRZM -3	DCOL 6	DCON 5	DCOT 5	DCOU 11	DCOV -20

¹ Balance in percentage of firms reporting rises less those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

18 Manufacturing industry: firms working below capacity Government Office Regions (London and the South East is still on an SSR basis)

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
2001 Jul Oct	DCOW 67 59	LRZN 90 90	LRZO 73 73	DCPC 73 62	DCPB 52 43	DCPA 68 55	LRZP 66 63	DCOX 70 65	DCOZ 48 41	DCPF 56 41	DCPG 49 54	DCPH 84 72
2002 Jan Apr	66 72	90 80	70 65	74 80	51 66	50 60	65 69	69 72	62 71	62 69	61 54	54 68

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South	Wales	Scotland ¹	Northern Ireland
2000 2001	DEOI 188 410	LRDP 7 088 6 320	LRZQ 18 691 19 133	DCRX 13 796 14 581	DCRW 15 163 14 822	DCRV 15 620 14 422	LRDR 18 802 18 926	DCRR 14 731 16 430	LRDS 23 344 25 574	DCRU 16 744 16 312	BLIA 9 352 9 113	BLFA 23 925	BLGA 11 154 13 197
1998 Q4	38 626	1.418	4 357	3 067	3 471	2 884	3 868	3 479	4 943	3 363	1 692	4 212	1 872
1999 Q1 Q2 Q3 Q4	49 389 49 701 47 720 42 842	1 874 1 792 1 891 1 473	4 336 5 037 5 007 4 424	3 676 4 104 3 986 3 418	3 799 4 303 3 817 4 034	4 149 4 191 3 851 3 402	4 724 5 108 4 653 4 101	4 196 3 494 2 867 2 951	6 422 6 920 6 565 5 361	3 968 4 571 4 534 3 709	2 255 2 722 2 376 1 958	6 798 4 760 5 821 5 386	3 192 2 699 2 352 2 625
2000 Q1 Q2 Q3 Q4	52 120 50 618 48 252 37 420	2 071 1 786 1 712 1 519	5 546 4 806 4 560 3 779	3 571 3 661 3 580 2 984	4 161 4 025 3 890 3 087	4 566 4 470 3 657 2 927	5 350 5 148 4 926 3 378	3 240 4 340 3 963 3 188	6 316 6 778 6 028 4 222	4 688 4 595 4 259 3 202	2 205 2 749 2 781 1 617	6 814 5 457 6 406 5 248	3 592 2 803 2 490 2 269
2001 Q1 Q2 Q3 Q4	48 990 52 177	1 926 1 733 1 548 1 113	4 788 4 979 4 687 4 679	3 847 3 794 3 495 3 445	3 762 3 759 3 813 3 488	3 995 4 063 3 201 3 163	4 558 5 709 4 576 4 083	3 421 4 339 5 561 3 109	5 956 7 111 6 379 6 128	4 082 4 429 4 057 3 744	2 206 2 703 2 452 1 752	6 685 5 739	3 764 3 780 2 901 2 752

1 Includes estimates for outstanding returns for private sector.

Sources: Department of the Environment, Transport and the Regions; National Assembly for Wales; Scottish Executive; Department for Social Development, Northern Ireland

20 House prices¹ Government Office Regions

1993 = 100

	United Kingdom	North East	North West ²	Mersey- side	Yorkshire and the Humber	East Midlands	West	East	London	South East	South	Wales	Scotland	Northern Ireland
2000 2001	LRBH 165.3 179.2	LRDX 126.9 132.1	LRDY 132.6 143.5	LREN 122.1 141.9	LRBJ 123.2 132.5	LRBK 141.7 157.1	LRBP 147.5 160.5	LRDZ 172.8 192.9	LRBM 209.7 231.8	LREA 188.1 207.5	169.1 191.3	LRBR 130.9 146.4	LRBS 124.0 129.3	LRBT 188.6 207.8
1998 Q4	133.6	108.0	117.7	111.7	113.1	124.3	123.5	139.7	152.9	145.9	134.2	117.6	116.7	161.1
1999 Q1	134.4	117.1	118.5	114.5	112.4	120.5	122.8	139.8	155.5	148.6	135.9	118.7	112.4	167.7
Q2	140.1	119.6	120.9	110.3	114.8	128.0	124.5	143.1	170.1	151.0	139.5	126.9	118.4	163.8
Q3	148.3	129.5	127.1	115.3	120.0	130.0	135.0	144.7	185.5	160.1	151.3	125.5	124.8	171.1
Q4	152.1	119.4	129.5	112.7	120.0	129.7	136.3	159.7	192.6	167.3	150.6	125.5	124.8	170.7
2000 Q1	156.0	116.5	126.5	109.8	119.9	137.3	137.5	163.7	200.7	171.6	157.7	128.6	124.2	181.5
Q2	164.5	131.9	135.8	120.0	119.9	140.8	146.9	170.6	215.7	184.5	163.8	129.2	123.6	184.3
Q3	167.6	122.4	134.8	121.2	127.4	144.6	151.0	178.0	204.1	192.4	176.9	131.8	124.4	186.0
Q4	172.6	126,2	129.3	134.8	125.7	144.7	153.1	181.4	219.2	202.1	177.7	133.2	124.2	201.9
2001 Q1	171.7	122.7	135.4	150.5	129.0	146.3	152.2	188.1	225.5	192.0	182.0	137.7	130.2	221.9
Q2	177.9	132.9	138.0	132.0	128.8	154.5	157.9	187.9	234.4	211.3	183.8	154.6	126.9	204.4
Q3	184.3	132.7	153.5	141.5	135.9	162.6	166.6	196.3	236.4	214.3	200.2	148.1	130.5	215.0
Q4	180.6	141.3	142.0	140.7	135.7	163.6	162.1	196.2	228.2	207.9	197.9	145.1	131.5	196.2

¹ These indices adjust for the mix of dwellings (by size and type, whether new or second-hand) and exclude those bought at non-market prices and are based on a sample of mortgage completions by all lenders.

Source: Department of the Environment, Transport and the Regions

2 Excludes Merseyside.

21 VAT registrations and deregistrations¹: net change² Government Office Regions

Thousands

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DCYQ	LREB	LRZS	DCYT	DCYU	DCYY	LRED	DEON	LREE	DCYX	DCZA	DCZB	DCZC
1997	18.1	-0.2	1.0	-0.4	0.5	-0.3	2.5	8.9	4.3	0.9	-0.1	0.7	0.2
1998	30.3	0.2	2.5	0.5	1.2	1.7	2.7	11.3	6.9	1.7	-0.1	0.9	0.9
1999	6.5	-0.1	0.9	-0.7	-0.2	0.2	0.6	4.6	2.4	0.1	-0.7	-0.5	-0.1
2000	6.2	0.1	0.8	-0.8	0.2	0.3	1.0	2.7	1.9	-	-0.2	_	0.3

Registrations and deregistrations of VAT-based enterprises. Not wholly comparable with figures for earlier years which counted VAT reporting units.

Source: Department of Trade and Industry

2 Registrations less deregistrations.

CORPORATE SERVICES PRICE INDEX (EXPERIMENTAL) - 1st QTR 2002

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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).

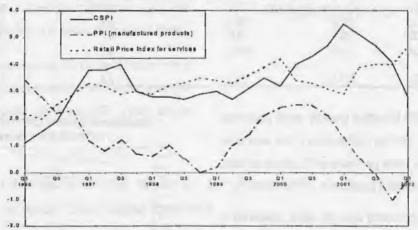
An article published in the July 2000 issue of Economic Trends contained background details of the development of the CSPI (also available at www.statistics.gov.uk/cspi).

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 1, 2002

The top-level CSPI is constructed by weighting together the currently available industry-level indices. Coverage at present is 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 2.8 per cent in Q1 2002, compared to 4.1 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).

This summary includes revisions to the indices for national post parcels, employment agencies, security services and courier services, arising from the inclusion of some additional historical data. The revisions affect some of the values from Q1 2000 onwards, except for national post which shows changes from 1996. Effects on the top-level CSPI are minor.

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

		Quarterly CSPI index	x values (1995=100)	Percentage chang	e on same quarter in s year (%)
		Including rent	Excluding rent	Including rent	Excluding rent
1996	Q1	100.6	100.3	0.7	0.2
15.5.5	Q2	101.6	101.4	1.3	1.0
	Q3	101.9	101.7	1.7	1.4
	Q4	103.3	103.3	2.7	2.7
1997	Q1	104.5	104.6	3.8	4.3
	Q2	105.4	105.6	3.8	4.1
	Q3	106.0	106.1	4.0	4.3
	Q4	106.4	106.3	3.0	2.9
1998	Q1	107.4	106.9	2.8	2.2
	Q2	108.4	108.0	2.8	2.3
	Q3	108.9	108.1	2.7	1.9
	Q4	109.5	108.4	2.9	2.0
1999	Q1	110.5	109.3	3.0	2.2
	Q2	111.4	109.8	2.7	1.7
	Q3	112.3	110.2	3.1	1.9
	Q4	113.3	110.8	3.5	2.2
2000	Q1	114.1	111.4	3.2	2.0
	Q2	115.8	113.2	4.0	3.1
	Q3	117.2	114.4	4.3	3.8
	Q4	118.6	115.7	4.7	4.4
2001	Q1	120.4	117.2	5.5	5.1
	Q2	121.8	118.3	5.1	4.5
	Q3	122.7	118.8	4.7	3.9
	Q4	123.5	119.0	4.1	2.9
2002	Q1	123.8	119.1	2.8	1.6

In Q1 2002, the CSPI (including property rental payments) rose by 0.3 per cent. The key contributions to this were price increases for property rental payments and business air fares offset by a decrease for road freight.

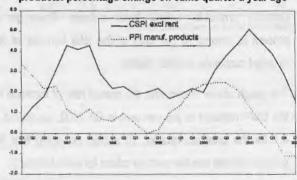
The top-level CSPI (excluding property rental payments) is compared to the net sector output PPI for manufactured products in the top graph on the right. Prices of corporate services covered by this inquiry have shown a relatively smooth upward path since 1997 but have been rising at a greater rate over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

The annual rate for the CSPI has fallen four quarters running. Annual rates for the PPI have also been generally falling in more 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:

- prices for road freight fell by 0.6 per cent in the latest quarter - the main reasons reported were increased competition and lower fuel costs. Prices are 1.8 per cent higher than a year ago - the lowest annual rate of increase since Q2 1999.
- sea and coastal water freight prices show a decrease of 2.2 per cent this quarter, continuing the decline that began in mid-2001 – caused mainly by increasing competition in the market, according to the industry;
- prices for business air fares increased by 2.2 over the last quarter and are 7.4 per cent higher than a year ago mainly reflecting increases in prices for long-haul flights;
- property rental payments are 5.3 per cent higher than a year ago, although the increase in the latest quarter (0.8 per cent) is the lowest since mid-1997, mainly due to

- lower rental values for office properties, as reported by data suppliers IPD;
- following 6 consecutive quarterly decreases, prices for car contract hire rose 0.5 per cent in Q1 2002 and are 3.3 per cent lower than a year ago;
- prices for employment agencies are shown to have fallen over the last two quarters – the only reductions since the index began in 1997. The main reason reported was reduced demand caused by an abundance of labour;
- prices for security services increased by 0.7 per cent in the latest quarter and are 3.9 per cent higher than a year ago.
- 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. There was no change in prices for the latest quarter and they remain 5.1 per cent higher than a year ago.

The next set of CSPI results will be issued on 16th August 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		F	reight trans	port by road		Sea and		
SIC(92):	and repair of motor vehicles* 50.20	Canteens and catering 55.50	Bus and coach hire 60,23/1	Total 60.24	International component	Commercial vehicle ferries 61.10/1	coastal water freight 61,10/2	Busines air fare 62.10	
995 net sector weights (%):	30.20	55.55	00.2011	00,24		01.10/1	51.10/2	02.10	
(including property rentals) (excluding property rentals)	3.95 5.71	0.78 1.13	0.59 0.86	19.80 28.63		0.51 0.74	0.59 0.85	1.9 2.8	
1996	99.8	**	103.0	103.6	101.1			103	
1997	104.5	440.0	108.5	110.1	104.8	96.9	95.4	115	
1998 1999	106.0 108.0	112.0 114.7	115.2 119.7	113.2 115.8	104.8 102.0	96.4 101.9	88.6 79.6	123 127	
2000	110.0	115.9	130.5	123.6	103.4	101.3	82.1	135	
2001	112.6	120.3	135.6	132.9	104.9	101.2	84.9	153	
ercentage change, latest year	on previous yes	ar							
1996 1997	4.7	-	5.4	6.3	3.7	45		11	
1998	1.4		6.1	2.8	0.1	-0.4	-7.2	7	
1999	1.9	2.5	3.9	2.4	-2.7	5.6	-10.2	3	
2000 2001	1.9	1.0 3.8	9.1 3.9	6.7 7.5	1.3	-0.5 -0.1	3.2	13	
uarterly results (not seasona		3.0	3.5	7.5	1.0	-0.1	0.4	,,	
1997 Q1	104.2		106.8	108.0	101.7	99.2	95.2	113	
Q2	104.4	"	108.4	110.2	105.8	98.0	95.4	113	
Q3 Q4	104.8 104.8	111.0	109.2 109.8	110.9 111.2	105.8 105.8	95.8 94.4	95.7 95.5	116	
1998 Q1	105.4	110.8	111.9	112.0	104.8	97.0	93.7	111	
Q2	106.4	111.9	115.5	113.3	105.3	96.3	88.4	12	
Q3	106.3	112.4	116.2	113.5	105.4	95.9	88.1	12	
Q4 1999 Q1	106.1 107.0	112.8 113.9	117.1 118.4	113.9 114.2	103.8 103.5	96.6 103.8	84.0 81.8	12 12	
1999 Q1 Q2	107.9	114.9	119.5	114.2	101.8	102.7	81.2	12	
Q3	108.2	115.1	120.1	116.1	101.5	101.5	77.1	12	
Q4	108.9	115.1	120.5	118.2	101.4	99.6	78.0	12	
2000 Q1	109.2	115.1	126.6	118.6 121.9	102.3 102.3	102.1 101.5	79.6 81.9	12 13	
Q2 Q3	109.5 110.1	116.1 116.2	130.8 131.9	125.4	102.3	101.4	83.1	13	
Q4	111.2	116.3	133.0	128.6	106.0	100.3	83.8	14	
2001 Q1	111.9	119.6	134.2	131.3	106.0	103.7	85.8	15	
Q2	112.6	120.5	135.1	132.3	106.3	101.9	87.3 85.2	15	
Q3 Q4	113.1 112.8	120.4 120.7	136.1 137.0	133.6 134.5	102.2 105.2	100.2 98.9	81.2	15 15	
2002 Q1	114.4	121.1	137.4	133.7	105.2	100.8	79.5	16	
ercentage change, latest qua	rter on previous	quarter							
1997 Q1	3.4		2.4 1.5	2.3	-0.8 4.0	-1.7 -1.2	-1.1 0.2	:	
Q2 Q3	0.2	100	0.8	0.7	0.0	-2.3	0.3		
Q4	0.0	-0.1	0.5	0.2	0.0	-1.4	-0.2		
1998 Q1	0.6	0.0	1.9	0.7	-1.0	2.7	-1.9		
Q2	-0.1	1.0 0.5	3.2 0.6	1.2 0.3	0.5	-0.8 -0.4	-5.7 -0.3		
Q3 Q4	-0.1	0.4	0.8	0.3	-1,5	0.8	-4.6		
1999 Q1	0.8	0.9	1.1	0.3	-0.3	7.4	-2.6		
Q2	8,0	0.9	1.0	0.5	-1.6	-1.1	-0.7		
Q3	0.4	0.2	0.5 0.3	1.2	-0.3 -0.1		-5.1 1.1		
Q4 2000 Q1	0.6	-0.1 0.0	5.1	0.3	1.0	2.5	2.1		
Q2	0.2	0.9	3.3	2.7	0.0	-0.6	2.8		
Q3	0.5	0.1	0.8	2.9	0.5		1.5		
Q4	1.0	0.1	0.8	2.5	3.1	-1.1	0.9		
2001 Q1 Q2	0.6 0.6	2.8 0.8	0.9 0.7	2.1 0.8	0.0		1.7		
Q3	0.5	-0.1	0.7	1.0	-3.8		-2.4		
Q4	-0.3	0.2	0.7	0.6	2.9		-4.5		
2002 Q1	1.4	0,3	0.3	-0.6	0.0	1.9	-2.2		
ercentage change, latest qua	5.1	onding quarter o	4.8	5.4	0.1	"	**	1	
Q2 Q3	5.0 4.9	**	5.9 5.5	7.0 7.4	5.7 5.6		-1.6		
Q4	4.0		5.3	5.3	3.3		-0,8		
1998 Q1	1,1		4.8	3.7	3.0		-1.5		
Q2	1.9		6.6	2.8	-0.4		-7.3 -7.9		
Q3 Q4	1.4	1.3	6.4 6.6	2.4 2.5	-0.4 -1.9		-12.0		
1999 Q1	1.5	2.8	5.8	2.0	-1.3		-12.7		
Q2	1.4	2.7	3.5	1.3	-3.4	6.6	-8.1		
Q3	1.8	2.4	3.4	2.2	-3.7		-12.5		
Q4	2.7	2.0	2.9	3.8	-2.4		-7.2 -2.7		
2000 Q1 Q2	2.0 1.5	1.1	6.9 9.3	3.8 6.2			0.8		
Q3		1.0	9.8	8.0		-0.1	7.7		
Q4	2.1	1.1	10.4	8.8	4.6	0.6	7.4	3	
2001 Q1	2.5	3.9	6.0	10.7			7.8	1	
Q2 Q3		3.8	3.3 3.2	8.6 6.5				1	
Q3 Q4		3.8	3.0	4.6					
2002 Q1		1.3	2.4	1.8					

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

	forwarding	ational post parcels*	Courier services	Business telecomm- -unications*	Property rental payments*	activities	Car contract hire*	Construction plate
IC(92): 995 net sector weights (%):	63.40	64.11	64.12	64.20	70.20	70.30	71.10	71.
(including property rentals) (excluding property rentals)	5.78 8.35	4.28 6.19	0.97 1.40	7.40 10.71	30.84 0.00	1.18 1.71	1.34 1.94	1.1
nnual		100 0	100.4	•	100.0			
1996 1997	103.9	106.8 112.4	100.4 101.4	86.1	102.2 105.4	**	96.4	98
1998	99.2	119.8	105.6	83.4	110.0	119.5	97.5	99
1999	95.5	122.9	107.0	81.7	116.0	125.5	99.2	103
2000	96.1	128.6	109.9	77.7	122.6	134.5	102.2	109
2001	96.0	132.6	116.0	75.6	130.5	139.0	97.0	113
ercentage change, latest year on p 1996					2.2			
1997	**	5.3	1.0		3.1		**	
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	
2000	0.6	4.7	2.7	-4.9	5.7	7.2	3.0	
2001	-0.1	3.1	5.6	-2.6	6.5	3.3	-5.1	
uarterly results (not seasonally ad	usted)							
1997 Q1	103.5	108.5	101.2	88.3	104.2		96.1	98
Q2	103.7	113.8	101.5	86.1	105.1	,.	96.7	96
Q3	104.0	113.8	101.2	85.6	105.7	**	96.2	94
Q4	104.4	113.8	101.7	84.4	106.7	4.4.7	96.5	96
1998 Q1	102.2 99.7	113.8 121.9	102.7	83.5	108.4	117.0	97.6	10
Q2 Q3	98.1	121.9	105.8 106.8	83.1 83.5	109.3 110.5	119.0 120.9	98.4 96.9	9
Q3 Q4	96.7	121.9	107.3	83.5	111.7	121.3	97.3	9
1999 Q1	97.4	121.9	107.3	83.5	113.4	121.9	97.8	10
Q2	94.7	123.2	106.9	83.0	114,9	124.6	98.1	10
Q3	94.5	123.2	106,9	81.5	116.9	126.6	99.6	10
Q4	95.4	123.2	107.0	78.7	118.7	128.8	101.4	10
2000 Q1	95.2	123.2	108.3	79.1	120.1	131.8	102.3	10
Q2 Q3	95.7	130.4 130.4	108.2 109.9	78.7 77.0	121.7 123.3	133.9 135.2	102.7 102.2	11
Q3 Q4	96.3 97.1	130.4	113.3	75.9	125.2	135.2	, 101.6	11
2001 Q1	98.0	130.4	113.8	75.9	127.6	138.6	99.5	11
Q2	97.0	133.3	115.6	75.5	129.6	139.1	96.6	11
Q3	94.9	133.3	117.2	75.5	131.4	139.2	96.2	114
Q4 2002 Q1	94.0 94.2	133.3 133.3	117.6 118.7	75.6 75.5	133.3 134.4	139.1 139.0	95.7 96.2	11
ercentage change, latest quarter o								
1997 Q1 Q2	0.2	4.9	0,6	-2.5	0.9	**	2.1 0.6	J
Q2	0.3	0.0	-0.4	-0.6	0.6		-0.5	-
Q4	0.4	0.0	0.5	-1.4	0.9	10	0.3	
1998 Q1	-2.1	0.0	1.0	-1.1	1.6	4.	1.1	
Q2	-2.5	7.1	3.1	-0.4	0.9	1.7	0.8	
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	0.4	
1999 Q1 Q2	0,7 -2.8	0.0 1.1	0.0 -0.4	0.0 -0.5	1.5	0.5 2.2	0.5	
Q3	-0.2	0.0	0.0	-1.8	1.8	1.6	1.6	
Q4	0.9	0.0	0.1	-3.5	1.5	1.7	1.9	
2000 Q1	-0.2	0.0	1.2	0.6	1.2	2.3	0.9	
Q2	0.5	5.9	-0.1	-0.5	1.3	1.6	0.4	
Q3	0.6	0.0	1.5	-2.1	1.3	1.0	-0.5	
Q4	0.8	0.0	3.1	-1.4	1.6	1.4	-0.6	
2001 Q1 Q2	1.0	0.0 2.2	0.5 1.5	0.0 -0.6	1.9 1.5	1.0	-2.1 -2.9	
Q3	-2.1	0.0	1.4	0.0	1.4	0.0	-0.4	
Q4	-1.0	0.0	0.3	0.1	1.5	0.0	-0.5	
2002 Q1	0.2	0.0	0.9	-0.1	8,0	-0.1	0.5	
rcentage change, latest quarter of 1997 Q1	n correspondir		1.5		2.8			
Q2		4.9	1.2	**	3.2		3.5	
Q3 Q4	**	4.9 4.9	0.3		3.3		3.2	
1998 Q1	-1.2	4.9	1.1	-5.5	4.0		2.5 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	.,	8.0	
1999 Q1	-4.7	7.1	4.5	0.0	4.7	4.2	0.2	
Q2	-5.0	1.1	1.0	-0.1	5.1	4.8		
Q3	-3.6	1.1	0.1	-2.4	5.8	4.7		
Q4	-1.3	1.1	-0.3	-5.8	6.2	6.1		
2000 Q1 Q2	-2.3	1.1 5.9	0.9	-5.3 -5.3	5.9 5.9	8.1 7.4		
Q2 Q3	1.0	5.9	2.8	-5.5	5.4	6.8		
Q4	1.7	5.9	5.9	-3.5	5.5	6.5		
2001 Q1	3.0	5.9	5.1	-3.9	6.3	5.2		
Q2	1.4	2.2	6.8	-4.1	6.5	3.9		
Q3	-1.4	2.2	6.8	-2.0	6.6	2.9		
Q4 2002 Q1	-3.2 -3.9	2.2	3.8 4.3	-0.4 -0.6	6.5 5.3	1.4		

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

		Market research	Technical testing	Employment agencies	Security services	Industrial cleaning	Commercial film processing	Contrac
SIC(92):	30	74.13	74.30	74.50	74.60	74.70	74.81/9	74.82
1995 net sector		1.28	1.21	6.32	1.15	2.27	0.09	0.4
	operty rentals) roperty rentals)	1.85	1.75	9.14	1.66	3.29	0.12	0.49
Annual	roporty remains,	.,,,,,		0,1.1		0.20	0.12	0
	1996	**		100	99.4	99.4	101.7	
	1997 1998		106.7	108.9 114.9	99.5 100.3	98.8 101.3	104.7 105.5	
	1999	112.2	109.1	120.6	103.0	101.8	105.6	109.4
	2000	118.1	109.8	124.1	105.0	102.0	106.3	112.7
	2001	120.9	111.0	131.3	108.3	101.8	107.6	112.8
Percentage cha	ange, latest year on pr	evious year						
	1996 1997	.,	**		0.1	-0.6 -0.5	1.7	
	1998			5.5	0.9	2.5	0.8	
	1999	- 10	2.2	4.9	2.7	0.5	0.1	
	2000	3.5	0.6	2.9	1.9	0,1	0.7	3.0
Superiorly recul	2001 ts (not seasonally adju	4.1	1.0	5.8	3.1	-0.1	1.2	0.1
additionly result	1997 Q1	usteu)		107.0	98.9	98.8	104.4	
	Q2		100	108.4	99.2	98.6	104.4	
	Q3	+4	1/2.	109.9	99.7	98.9	104.7	
	Q4	wi	400 4	110.4	100.0	99.0	105.3	
	1998 Q1 Q2		106.1 106.7	112.9 114.1	100.3 99.8	100.8 101.3	105.5 105.5	
	Q2 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	109.3
	Q2	112.0	109.1	120.7	102.5	101.9	105.6	109.
	Q3	112.4	109.0	121.0	103.9	101.9	105.6	109.5
	Q4 2000 Q1	112.8 115.2	109.3 109.5	121.3 122.5	104.3 104.3	101.7 102.0	105.6 105.9	109.5
	Q2	115.7	109.7	123.9	104.4	102.1	105.9	112.3
	Q3	116.5	110.1	124.6	105.6	102.0	106.5	113.5
	Q4	117.1	110.1	125.4	105.7	101.7	107.0	113.0
	2001Q1	120.5	109.5	128.0	106.8	101.6	106.8	112.0
	Q2 Q3	121.0 120.7	110.9 111.5	131.3 133.2	108.0 108.1	101.7 101.4	107.0 108.2	112.8
	Q4	121.4	111.9	132.8	110.3	102.7	108.5	112.5
	2002 Q1	124.3	113.4	132.3	111.0	103,6	108.5	112.9
			-					
Percentage cha	ange, latest quarter on 1997 Q1	previous quari	er		0.2	0.0	0.3	
	Q2	**	**	1.2	0.3	-0.2	0.0	
	Q3	- 4		1.4	0.5	0.3	0.3	
	Q4	.,		0.5	0.3	0.1	0.6	
	1998 Q1 Q2		0.5	2.2 1.1	-0.5	1.8 0.5	0.2	
	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	- 2
	Q2	0.3	0.0	1.0	1.1	0.1	0.1	0.5
	Q3 Q4	0.4 0.3	-0.2 0.3	0.2 0.3	1.4 0.4	0.0 -0.2	0.0	0.0
	2000 Q1	2.1	0.2	1.0	0.0	0.3	0.3	2.3
	Q2	0.5	0.2	1.1	0.1	0.1	0.0	0.1
	Q3	0.7	0.3	0.6	1.1	-0,2	0.5	1.3
	Q4	0.6	0.0	0.7	0.2	-0.2	0.4	-0.
	2001 Q1 Q2	2.9 0.4	-0.5 1.2	2.1 2.5	1.0 1.1	-0.1 0.1	-0.2 0.2	-0.: 0.:
	Q3	-0.2	0.6	1.4	0.1	-0.2	1.2	0.0
	Q4	0.6	0.3	-0.3	2.0	1.2	0.3	0,
	2002 Q1	2.4	1.4	-0.4	0.7	0.8	0.0	-0.
Percentage ch	ange, latest guarter on	corresponding	quarter of pro	ovious vear				
orcentage ch	1997 Q1	. corresponding	quarter or pro	orious year	-1.0	-1.3	3.0	
	Q2				-1.1	-1.2	3.3	
	Q3	.,			1.0	0.2	4.5	
	Q4	**		- "	1.3	0.3	1.1	
	1998 Q1 Q2	**		5.5 5.3	1.4 0.6	2.1 2.8	1.1	
	Q3	1111	**	4.9	0.7	2.6	0.8	
	Q4			6.4	0.8	2.6	0.2	
	1999 Q1	**	2.8	5.8	1,1	0.9	0.0	
	Q2	1.00	2.3	5.7	2.6	0.6	0.1	
	Q3	5.2	2.1	4.9	3.4	0.4	0.1	
	Q4 2000 Q1	3.9 3.1	1.7 0.3	3.2 2.6	3.5 2.9	0.1	0.1	2.
	2000 Q1 Q2	3.3	0.5	2.6	1.9	0.2	0.4	2.
	Q3	3.6	1.0	3.0	1.6	0.0	0.8	3.
	Q4	3.9	0.7	3.4	1.4	0.0	1.3	3.
	2001 Q1	4.6	0.0	4.5	2.4	-0.4	8.0	0.
	Q2	4.6	1.1	6.0	3.4 2.4	-0.5	1.0	0.
	0.0			B 0	24	-0.5	1.6	-0.
	Q3 Q4	3,6 3.7	1.3	6.9 5.8	4.3	1.0	1.4	0.

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

	Direct marketing &	Translation &				Commercial	TOP-LEVE	L CSPI
	secretarial services	interpretation services	Adult education	Sewerage services	Waste	washing & dry cleaning	property	Excludin proper
IC(92): 995 net sector weights (%):	74.83 (part)	74.83 (part)	80.42	90.00/1	90.00/2	93.01	rentals	Renta
(including property rentals) (excluding property rentals)	0.19 0.27	0.15 0.21	0.58 0.84	1.33 1.92	2.39 3.46	0.58 0.83	100.00	100.0
nnual 1996			103.4	105.5	111.3		101.8	101
1997			108.5	109.9	126.8		105.6	105
1998	108.0	106.9	111.1	114.1	129.0	108.9	108.5	107
1999	109.9	108.5	114.7	118.1	138.1	112.1	111.9	110
2000	109.5	108.6	118.8	107.8	145.2	114.8	116.4	113
2001	107.3	107.7	123.7	105.6	149.9	116.3	122.1	118
ercentage change, latest year o	in previous y	ear	3.4	5.5	11.3		44	
1997		*1	4.9	4.2	13.9		3.7	
1998			2.4	3.8	1.8	44	2.8	1
1999	1.8	1.5	3.2	3.4	7.0	2.9	3.1	
2000	-0.3	0.0	3.6	-8.7	5.2	2.4	4.1	- 5
2001 uarterly results (not seasonally	-2,0	-0.8	4.1	-2.0	3,3	1.2	4.9	
1997 Q1	aujusteuj		107.2	106.8	126.4		104.5	104
Q2	**	· ·	107.3	111.0	125.9		105.4	108
Q3		106.5	108.8	111.0	126.8	106.5	106.0	106
Q4		106.6	110.7	111.0	128.0	107.7	106.4	10
1998 Q1	106.4	106.9	111.1	111.0	128.5	107.3	107.4	10
Q2	108.1	106.7	110.9	115.2	129.2	109.2	108.4	10
Q3	109.1 108.2	106.9 107.1	110.7 111.9	115.2 115.2	128.9 129.3	109.8 109.4	108.9 109.5	10 10
Q4 1999 Q1	109.3	108.5	113.9	115.2	130.9	110.5	110.5	10
Q2	110.4	108.6	114.4	119.0	139.6	112.5	111.4	10
Q3	109.7	108.5	115.0	119.0	140.8	112.4	112.3	11
Q4	110.0	108.5	115.4	119.0	140.9	112.9	113.3	11
2000 Q1	110.2	109.1	117.6	119.0	141.7	114.6	114.1	11
Q2	109.8	109.1	117.6	104.0	147.3	114.9	115.8	11
Q3	110.2	108.2	119.7	104.0	146.2	115.3	117.2	11
Q4	107.8	107.9	120.4 122.1	104.0	145.5 145.5	114.4	118.6 120.4	11
2001 Q1 Q2	106.9 106.8	107.9 108.0	123.3	104.0 106.1	148.7	115.6 116.2	121.8	11
Q3	107.6	107.7	124.3	106.1	152.5	116.1	122.7	11
Q4	107.7	107.3	125.3	106.1	152.9	117.1	123.5	11
2002 Q1	106.9	107.5	126.9	106.1	152.9	117.4	123.8	11
ercentage change, latest quart	er on previou	s quarter			-2.2		w 2	
1997 Q1	**		3.0	0.0	2.2	**	1.2	
Q2	**	**	0.1	3.9	-0.4 0.7		0.9 0.5	
Q3 Q4	**	0.1	1.4	0.0	0.9	1.1	0.4	
1998 Q1	**	0.2	0.3	0.0	0.4	-0.4	0.9	
Q2	1.7	-0.1	-0.2	3.8	0.5	1.7	1.0	
Q3	0.9	0.2	-0.2	0.0	-0.2	0.6	0.4	
Q4	-0.8	0.2	1.1	0.0	0.3	-0.4	0.5	
1999 Q1	1.0	1.3	1.8	0.0	1.2	1.0	1.0	
Q2	1.0	0.0	0.4	3.3	6.7	1.8	0.8	
Q3 Q4	-0.6 0.3	0.0	0.5 0.4	0.0	0.8	-0.1 0.5	0.8	
2000 Q1	0.3	0.5	1.9	0.0	0.6	1.5	0.8	
Q2	-0.4	0.0	0.0	-12.6	4.0	0.2	1.5	
Q3	0.4	-0.8	1.8	0.0	-0.B	0.4	1.1	
Q4	-2.2	-0.2	0.6	0.0	-0.4	-0.7	1.3	
2001 Q1	-0.8	0.0	1.4	0.0	-0.1	1.0	1.5	
Q2	-0.1	0.0	0.9	2.0	2.2	0.5	1.1	
Q3	0.8	-0.2	0.9	0.0	2.5 0.4	-0.1	0.8	
Q4 2002 Q1	0.1 -0.8	-0.4 0.1	0.7 1.3	0.0	0.0	0.8	0.6	
2002 Q1	-0.0	0,1	1.0	0.0	0.0	0.0	0.0	
ercentage change, latest quart	er on corresp	onding quarter	of previous y	ear				
1997 Q1		.,	4.5	5.3	20.0	**	3.8	
Q2			3.7	3.9	17.6		3.8	
Q3	47	**	5.1	3.9	16.1		4.0	
Q4	44	**	6.4	3.9	3.4	***	3.0	
1998 Q1	41	14	3.6 3.3	3.9 3.8	1.6 2.6	**	2.8 2.8	
Q2 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	
Q2	2.1	1.7	3.2	3.3	8.1	3.0	2.7	
Q3	0.6	1.5	3.8	3.3	9.2	2.3	3.1	
Q4	1.7	1.4	3.1	3.3	8.9	3.2	3.5	
2000 Q1	0.8	0.5	3.2	3.3	8.2	3.7	3.2	
Q2	-0.6	0.5	2.8	-12.6	5.5	2.1	4.0	
Q3	0.5	-0.3	4.1	-12.6	3.8	2.6	4.3	
Q4	-2.0	-0.6	4.4	-12.6	3.3	1.3	4.7	
2001 Q1	-3.0	-1.0 -1.0	3.8 4.8	-12.6 2.0	2.7 0.9	0.9	5.5	
Q2 Q3		-0.4	3.9	2.0	4.3	1.2 0.7	5.1 4.7	
Q4	-0.1	-0.6	4.0	2.0	5.1	2.3	4.1	
					0.1	2.0		

Jobs in the Public and Private Sectors

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Introduction

This article presents data (updated to June 2001) on jobs in the public and private sectors. A similar article that presented data to June 2000 was published in the June 2001 edition of *Economic Trends*. It shows the relative overall size of the two sectors (Table A) and gives a more detailed analysis of the types of jobs in the public sector. Table B compares UK workforce jobs over ten years. Table C gives sector information by industry group (based on the Standard Industrial Classification (SIC) 1992). Table D gives information by public sector major category and also includes data on a full-time equivalent basis as well as by headcount. Please note all figures shown are unadjusted for seasonal variation.

In April 2001 Government Supported Trainees (GST) fell significantly; this is due to a proportion of adults who would have joined the Work Based Learning Activities (WBLA) provision being mandated to join the "New Deal 25plus" programme.

Key Points

Total workforce jobs increased by 206,000 (0.7 per cent) between 2000 and 2001.

In 2001, for the third year running, public sector jobs showed an increase (91,000; 1.8 per cent), year on year, largely driven by rises in education and NHS trusts. The private sector increased by 115,000 (0.5 per cent).

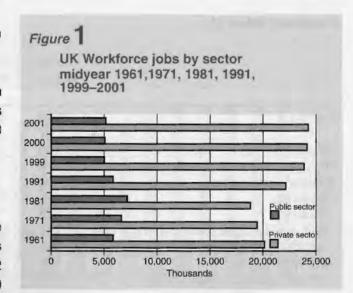
Analysis by Sector (Table A and Figure 1)

In 2001, 82.5 per cent (24.3 million) of workforce jobs were in the private sector (this included 3.4 million self-employment jobs). This is 115,000 higher than the previous year. In 2001, there were 5.2 million jobs in the public sector. This shows an increase of 91,000

(1.8 per cent) on the previous year and compares with increases of 54,000 (1.1 per cent) in 2000 and of 74,000 (1.5 per cent) in 1999.

Jobs in general government increased by 64,000 (1.8 per cent) between 2000 and 2001. The biggest rise within local government was in education, an increase of 48,000 jobs (3.7 per cent). Jobs in central government increased by 14,000 (1.6 per cent) over the same period; this increase was due in part to institutions (e.g. Scottish Homes) being reclassified from the public corporations sector when the Scottish Parliament and National Assembly for Wales were established.

Over the last 10 years, jobs within public non-financial corporations (excluding NHS Trusts), have fallen by around 236,000 (-39.4 per cent) to 363,000 in June 2001. General government has fallen by 1.5 million (-29.6 per cent) over the same period. There was a decrease in local government jobs of 215,000 (-7.3 per cent), particularly in education which fell by 67,000 (-4.7 per cent).



TableA AnalysisofUKWorkforcejob	suysector: neadc	ount, midyear	1961,1971,1	981,1991&1	999-2001			Thousands
		1961	1971	1981	1991	1999	2000	2001
TotalWorkforcejobs	DYDA	26,008	26,084	26,001	27,992	28,890	29,218	29,424
Privatesector	DYBI	20,149	19,457	18,816	22,144	00.070	04.440	
Bovernment-supportedtrainees	DYCZ			10,010		23,872	24,146	24,261
Publicsector	FHCE	5,859	6,627	7,185	353	123	112	96
ublicaon-financial corporations	DYBH	2,200	2,009		5,848	5,018	5,072	5,163
lationalHealthServiceTrusts	CGXN	2,200	2,009	1,867	723	1,508	1,530	1,557
Other	OUNIN	0.000	0.000		124	1,131	1,145	1,194
eneralgovernment	FHCA	2,200	2,009	1,867	599	377	385	363
entralgovernment		3,659	4,618	5,318	5,125	3,510	3,542	3,606
IM Forces	FHBT	1,790	1,966	2,419	2,178	869	860	874
ational Health Service	BCAH	474	368	334	297	208	207	204
	FHBR	575	785	1,207	1,098	76	79	75
Other	FHBS	741	813	878	783	585	574	595
ocalgovernment	DYBG	1,869	2,652	2,899	2,947	2,641	2,682	
ducation	FHBU	785	1,297	1,454	1,416	1,257		2,732
ocialservices	FHBV	170	276	350	414		1,301	1,349
Police	FHBX	108	152	186		388	386	376
onstruction	FHBW	103	124		202	202	204	214
Other	FHBY	703		143	106	59	59	57
	11101	703	803	766	809	735	732	736

Table B UK employment: midyear 1991

	Total		Male			Female	Thousand
(4 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	employed	Total	Full-time	Part-time	Total	Full-time	Part-time
Workforce jobs	27,992	15,423		•	12,570	- 0	
Self-employment jobs HM Forces	3,766	2,820	"	711	946		,,
Government supported trainees	297 353	278 217	**	**	19	-	
Employee jobs	23,576	12,108	**	**	136 11,468	"	н
Education Health, social work & other services provided to the public	1849	571		,,	1278	**	
Public administration, defence & compulsory	2,593	500		- "	2,093		
social security	1,467	797	**	*	670		
Production, construction, transport & utilities Other	7,360	5,431			1,929	11	n n
	10,307	4,809	**	>4	5,498	l _{ee}	**

UK employment: midyear 2001

· · · · · · · · · · · · · · · · · · ·	Total		Mala			1115	Thousand
	employed		Male			Female	
		Total	Full-time	Part-time	Total	Full-time	Part-time
Workforce jobs	29,424	15,814			13,610		
Self-employment jobs	3,426	2,494			000		
HM Forces	204	188	"	"	932) i	b
Government supported trainees	96	60	**	н	17	ec.	- 11
Employee jobs	25,697		44.040		36		44-
Education	2,135	13,072	11,316	1,757	12,625	6,656	5,969
Health, social work & other services provided to the public	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	626	468	158	1,509	676	833
Public administration, defence & compulsory	2,965	562	408	154	2,403	1,085	1,318
social security	1,408	700	074				
Production, construction, transport & utilities		725	674	51	683	491	192
Other	6,766	5,077	4,910	168	1,689	1,280	408
2.0(0)	12,423	6,081	4,855	1,226	6,342	3,124	3,217

Analysis of UK Workforce jobs (Table B)

Since 1991, total workforce jobs have increased by 1,432,000 (5.1 per cent); Self-employment jobs decreased by 340,000 (-9.0 per cent); HM Forces and Government-supported trainees totals have decreased by 93,000 (-31.3 per cent) and 257,000 (-72.8 per cent) respectively.

Within employee jobs since 1991:

Education increased by 286,000

(15.5 per cent)

Public administration, defence, and compulsory social security fell by

59,000

(-4.0 per cent)

Production, construction, transport & utilities

fell by 594,000

(-8.1 per cent)

Health, social work and other services

provided to the public increased by 372,000

(14.3 per cent)

Other services which includes the following industries: Agriculture, Wholesale & retail trade, Hotels & restaurants, Financial & business services, Community & social activities increased by

2,116,000 (20.5 per cent)

Analysis by Industry Group (Table C and Figure 2)

Figure 2 shows the distribution of public sector employee jobs by industry group. This is expanded further in Table C that shows the

split between the public and private sector for certain industries. Public sector is defined here as including central government, local government and public non-financial corporations.

Public sector education has retained a similar share of total public sector jobs over the last 10 years; 25.5 per cent in 1991 and 27.2 per cent in 2001. However, the public element within the education sector dropped from 76.6 per cent to 63.2 per cent of total education jobs between 1991 and 2001. Public sector education jobs have increased each year since 1994.

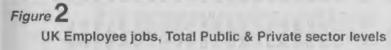
In 2001, 33.2 per cent (1.6 million) of all public sector employee jobs were in the health and social work sector, compared with 29.5 per cent (1.6 million) in 1991. The public sector share of total jobs in these industries dropped from 63.1 per cent in 1991 to 55.5 per cent in 2001.

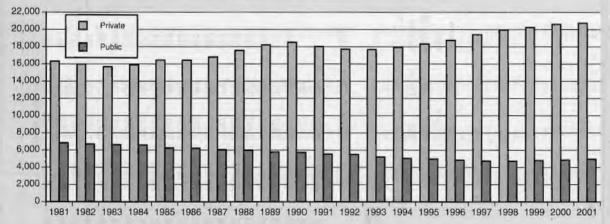
In 2001, 28.4 per cent (1.4 million) of all public sector jobs were in public administration, defence and compulsory social security sector; compared with 26.4 per cent (1.5 million) in 1991. Total numbers have fallen by 59,000 over the same period.

Between 1991 and 2001, total jobs in industries covering production, construction, transport and utilities decreased by 594,000 (-8.1 per cent) to 6.8 million. The proportion of all public sector jobs in these industries fell from 12.7 per cent in 1991 to 8.5 per cent in 2001.

Availability of other data

Other employment data published by ONS can be found in Labour Market Trends, the Monthly Digest and Annual Abstract of Statistics, and United Kingdom National Accounts (The Blue Book). Data underlying the figures for general government are produced quarterly and are available on request.





Thousands

SIC 1992	= 3 5 1											Emp	oloyee jobs			15.1			
						Education	n	The state of the s	11-11-11-11-11-11	social work & s provided to		Public admin- istration, defence & compulsory social security		ion, constru t & utilities	iction,	Other			
	Workforce jobs	Self- employ- ment jobs	HM Forces	Govern- ment supported trainees	Employee jobs	Total	Private	Public	Total	Private	Public	Public Total	Total	Private	Public	Total Public & Private	Total Private Sector	Total Public Sector	
Division					01-99	80			85 & 91			75	10-45 60-64			01-05, 50-55 65-74, 90 & 92-99			
	CGYL	CGYM	CGYN	CGYO	CGYP	CGYQ	CGYR	CGYS	CGYT	CGYU	CGYV	CGYW	CGYX	CGYY	CGYZ	CGZA	CGZD	CGZE	
1981 1982	26,001 25,543	2,492 2,552	334 324	PI.	23,174 22,668	1,582 1,574	128 140	1,454	2,011 2,044	454 465	1,557 1,579	1,575 1,540	9,378 8,883	7,368 6,995	2,010 1,888	8,629 8,626	16,323 15,971	6,851 6,697	
1983	25,249	2,611	322	16	22,300	1,580	146	1,434	2,071	484	1,587	1,537	8,468	6,675	1,793	8,644	15,670	6,630	
1984	25,920	2,937	326	175	22,482	1,602	172	1,430	2,126	535	1,591	1,519	8,312	6,587	1,725	8,922	15,908	6,574	
1985	26,231	3.051	326	176	22,678	1,629	200	1,429	2,221	622	1,599	1,489	8,209	6,833	1,376	9,130	16.435	6.243	
1986	26,280	3.092	322	226	22,641	1,674	222	1,452	2,296	694	1,602	1,483	7,973	6,661	1,312	9,214	16,429	6.212	
1987	26,806	3,326	319	311	22.850	1,735	249	1,486	2,391	781	1,610	1,503	7,878	6,765	1,113	9,343	16,810	6,040	
1988	27,769	3,547	316	343	23,563	1.796	292	1,504	2.540	907	1,633	1,486	7,975	6,938	1,037	9,765	17.564	5,999	
1989	28,637	3,877	308	462	23,990	1.836	394	1,442	2,521	884	1,637	1,407	8,024	7,074	950	10,201	18,214	5,776	
1990	28,920	3,928	303	423	24,265	1,861	430	1,431	2,535	897	1,638	1,447	7,924	7,025	899	10,498	18,516	5,749	
1991	27,992	3,766	297	353	23,576	1,849	433	1,416	2,593	957	1,636	1,467	7,360	6,655	705	10,307	18,025	5,551	
1992	27,272	3,441	290	325	23,216	1,826	436	1,390	2,682	1,041	1,641	1,469	6,973	6,314	659	10,267	17,723	5,493	
1993	26,906	3,445	271	311	22,879	1,809	608	1,201	2,721	1,118	1,603	1,464	6,613	5,993	620	10,271	17,673	5,206	
1994	27,070	3,547	250	302	22,971	1,833	657	1,176	2,739	1,154	1,585	1,445	6,591	6,042	549	10,363	17,929	5,042	
1995	27,383	3,610	230	225	23,317	1,843	655	1,188	2,776	1,178	1,598	1,408	6,626	6,091	535	10,665	18,336	4,981	
1996	27,619	3,615	221	181	23,601	1,867	676	1,191	2,798	1,206	1,592	1,414	6,644	6,142	502	10,878	18,753	4,848	
1997	28,135	3,609	210	159	24,156	1,872	679	1,193	2,825	1,223	1,602	1,366	6,776	6,341	435	11,317	19,412	4,744	
1998	28,498	3,487	210	121	24,680	1,852	648	1,204	2,829	1,234	1,595	1,399	6,937	6,502	435	11,663	19,946	4,734	
1999	28,890	3,513	208	123	25,046	2,007	750	1,257	2,804	1,209	1,595	1,410	6,839	6,402	437	11,986	20,236	4,810	
2000	29,218	3,423	207	112	25,476	2,125	824	1,301	2,888	1,278	1,610	1,397	6,836	6,392	444	12,230	20,611	4,865	
2001	29,424	3,426	204	96	25,697	2,135	786	1,349	2,965	1,320	1,645	1,408	6,766	6,346	420	12,423	20,738	4,959	

General	government
General	government

		Central go	vemment					Local governm	ent					Public r	on-financial co	porations ²		
	HM Forces	National Health Service	Other central government	Total central government	Education	Social sevices	Con- struction	Police (incl. civilians)	Other local government	Local authorities community programme	Total local government	Total general government	Nationalised industries	NHS Trusts	Other public (nf) corporations	Total public (nf) corporations	Total public sector	of which: Civil Service ⁶
Headcount	CGYN	FHBR	FHBS	FHBT	FHBU	FHBV	FHBW	FHBX	FHBY	CUKE	DYBG	FHCA	FHCB	CGXN	FHCC	DYBH	FHCE	CGXU
1961 1971 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1989 1990 1990 1991 1992 1993 1994 1995 1996 1997 1998	474 368 318 314 323 334 324 322 326 326 322 319 316 308 303 297 290 271 250 230 221 210 210 208 207 204	575 785 1,120 1,152 1,174 1,207 1,227 1,223 1,223 1,215 1,212 1,228 1,226 1,221 1,098 917 543 177 97 84 78 77 76 79	741 813 926 921 896 878 849 835 810 811 800 781 776 783 801 776 783 801 792 758 708 612 582 581 585 574 595	1,790 1,966 2,364 2,387 2,393 2,419 2,400 2,384 2,359 2,360 2,337 2,312 2,315 2,300 2,178 2,008 1,606 1,185 1,035 917 870 868 869 869 860 874	785 1,297 1,512 1,539 1,501 1,454 1,434 1,433 1,430 1,429 1,486 1,504 1,442 1,431 1,416 1,391 1,201 1,176 1,188 1,191 1,193 1,204 1,349	170 276 334 344 346 350 368 376 387 398 405 411 417 414 410 398 408 412 406 403 395 386 376	103 124 155 156 152 143 130 126 125 125 125 125 127 114 106 97 90 87 83 76 65 61 59 59	108 152 170 176 181 186 187 187 187 188 191 194 195 199 202 204 207 206 207 207 206 207 202 204 214	703 803 761 782 776 766 761 768 773 774 770 763 764 771 806 809 797 783 768 744 726 712 735 732 736	277 588 677 888 966 89°	1,869 2,652 2,932 2,956 2,899 2,865 2,905 2,942 2,958 3,010 3,062 3,061 2,967 2,947 2,899 2,679 2,645 2,639 2,679 2,644 2,593 2,579 2,682 2,732	3,659 4,618 5,296 5,349 5,318 5,265 5,269 5,301 5,317 5,374 5,403 5,267 5,125 4,907 4,285 3,830 3,641 3,463 3,447 3,542 3,542 3,606	2,152 1,856 1,844 1,849 1,816 1,657 1,554 1,465 1,410 1,131 1,058 864 791 719 675 497 457 457 437 382 345 287 242 248 247 245 229	124 314 662 1,000 1,082 1,121 1,123 1,131 1,145	48 153 217 216 222 210 202 198 189 120 129 121 111 112 110 105 93 80 107 139 128 126 130 140 134	2,200 2,009 2,061 2,065 2,038 1,866 1,599 1,251 1,187 985 912 831 785 723 876 1,192 1,462 1,528 1,491 1,497 1,508 1,509	5,859 6,627 7,357 7,449 7,387 7,185 6,952 6,900 6,569 6,359 6,355 6,355 6,355 5,848 6,052 5,848 5,783 5,477 5,292 5,211 5,069 4,954 4,954 4,948 5,072 5,163	672 714 751 739 715 698 672 654 630 608 610 599 583 586 579 576 592 579 553 532 512 493 484 481 498 506
Full-time equivalents 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1989 1990 1991 1992 1993 1999 1999 1999 1999 1999	CGYN 318 314 323 334 324 322 326 326 326 327 290 271 250 230 221 210 210 208 207 204	CGXY 957 977 1,001 1,038 1,047 1,046 1,032 1,028 1,016 1,013 1,013 1,013 1,013 1,013 1,013 1,015 69 65 65 64 64 66 64	CGXZ 885 897 872 853 827 812 787 788 776 756 751 763 765 766 783 772 733 681 584 554 552 559 588	CGYA 2,160 2,188 2,196 2,225 2,198 2,180 2,145 2,142 2,114 2,080 2,084 2,084 2,084 2,084 2,084 2,084 2,146 7,1823 1,467 1,141 980 870 829 826 828 852 856	CULZ 1,105 1,110 1,087 1,041 1,034 1,027 1,021 1,029 1,046 992 ² 990 982 970 840 ⁵ 818 806 817 815 819 836 862 901	CUMB	CGYB 152 150 146 136 131 130 126 125 125 128 125 119 114 105 97 90 86 82 75 64 59 58 58	CUMD 165 172 176 180 182 182 182 184 186 189 191 194 197 199 201 201 201 202 203 200 202	CGYC 675 701 699 692 681 686 689 675 677 674 681 692 720 706 695 685 664 632 613 597 606 611 621	CGYD 23 45 52 76 72 67*	CGYE 2,325 2,368 2,343 2,306 2,274 2,301 2,320 2,325 2,352 2,377 2,378 2,266 2,278 2,291 2,258 2,105 2,078 2,048 2,014 1,977 1,954 1,977 1,954 1,977 2,000 2,049	CGYF 4,485 4,556 4,539 4,531 4,472 4,481 4,465 4,467 4,466 4,470 4,458 4,350 4,354 4,258 4,081 3,572 3,219 3,028 2,884 2,806 2,780 2,801 2,801 2,801 2,802 2,805	CGYG 1,843 1,818 1,785 1,656 1,538 1,444 1,390 1,118 1,043 850 775 703 659 482 442 423 367 331 278 288 234 234 233 231	CUMP	CGYH 217 216 222 206 198 197 188 118 127 119 110 108 100 103 91 78 105 137 126 124 128 138	CGYI 2,060 2,034 2,007 1,862 1,736 1,641 1,578 1,236 1,170 969 894 813 767 684 801 1,054 1,239 1,312 1,257 1,263 1,270 1,284 1,303	CGYJ 6,545 6,590 6,546 6,393 6,208 6,122 6,043 5,703 5,636 5,439 5,352 5,163 5,121 4,882 4,626 4,458 4,340 4,188 4,063 4,043 4,043 4,071 4,136 4,208	CGYK 739 727 703 687 662 645 622 599 600 587 580 571 562 554 573 559 534 512 492 472 463 460 475 483

<sup>The Appendix gives details of the definitions and coverage of sectors and success of the statistics and the many changes in them between 1981 and 1994 (except in the case of the Civil Service which is documented back to 1969).

Details of transfers of public corporations to the private sector, including the numbers of employees involved, are given in the Appendix.</sup>

<sup>Polytechnics were transferred to the private sector in April 1989.
Community Programme employees were transferred to the Employment Training Scheme during the third quarter of 1998.
FE colleges and 6th-form school employees were transferred to the private sector from April 1993.
Great Britain only.</sup>

Appendix: Definition of the sectors

The United Kingdom national accounts divide the economy into institutional sectors so as to display the relationships between the different parts of the economy and the different forms of economic activity in a way which aggregate statistics cannot do. The sectors bring together those institutional units, which are likely to play similar roles in economic activity and which may be expected to react in a broadly similar fashion to various market, fiscal and monetary forces.

The sectors used in this article are the same as in the national accounts. Full definitions of the sectors are given in Sector Classification for the National Accounts, and in United Kingdom National Accounts: Concepts, Sources and Methods.

Some of the estimates for the latest year are provisional and are subject to minor changes, as final information becomes available. The figures for NHS Trusts and grant-funded education establishments may be subject to more substantial revision because they are estimated from a variety of sources.

The European System of National and Regional Accounts, which forms the basis for the UK economic accounts, consists of a coherent, consistent and integrated set of accounts based on a set of internationally agreed concepts, definitions, classifications and accounting rules. The accounts are compiled for a succession of time periods and cover economic activities, the economy's productive assets and the wealth of its inhabitants.

General Government

This sector includes all institutional units which are non-market producers whose output is intended for individual and collective consumption, and are mainly financed by compulsory payments made by units belonging to other sectors. It also includes all institutional units principally engaged in the redistribution of the national income and wealth.

Central Government

This sub-sector of general government includes all administrative departments of the State and other central agencies whose competence extends normally over the whole economic territory. In the UK the administration of social security funds is an integral part of central government concerning both its funding and decision-making, and so cannot be separately classified as social security funds.

Some trading bodies that were classified as central government under the previous system are now public non-financial corporations because they are market producers, manage their own finances, and have sufficient autonomy to be classified as institutional units. ECGD (Export Credit Guarantee Department) is also a market producer but its finances are not sufficiently independent of central government for it to be regarded as an institutional unit in its own right; it is therefore within the central government sector.

Consistent data for years since 1961 appears in the *Economic Trends*Annual Supplement.

Civil Service

The Civil Service comprises the Home Civil Service and the Diplomatic Service, but not the Northern Ireland Civil Service, locally engaged staff overseas or employees of Non Departmental Public Bodies.

Further analysis of Civil Service manpower figures at 1st April 2001 can be found in the publication *Civil Service Statistics 2001*.

Local government

This sector consist of all local government authorities which both have power to raise funds by means of rates, levies and council tax etc. and which are obliged to make annual returns of income and expenditure under successive local government acts. It includes all levels of administrative authorities (including parish councils) and also local authorities with special functions. It includes magistrates' courts, the probation service in England and Wales and police forces and their civilian staffs. It embraces all functions of such authorities (including, for example, their education services and construction departments) and includes trading activities of local authorities, such as housing, theatres, etc. From April 1999, grant maintained schools, which had been classified to central government, were reclassified to local authority status (the formal change was in September 1999, at the start of the new academic year). There are three new categories of mainstream school: community, foundation and voluntary. For GM schools, this means that, like other state schools, they will be maintained by their Local Education Authorities.

Polytechnics and Higher Education colleges were transferred from local authority control from April 1989, as were Further Education and sixth form colleges from April 1993. These are all now regarded as part of the private sector (non-profit making bodies).

Public non-financial corporations

Public corporations are defined as corporate enterprises which are publicly owned and controlled, but which, at the same time, have substantial freedom to conduct their affairs along business lines. Examples include the BBC and the Scottish Water Authorities. They are publicly controlled to the extent that the public authority, i.e. central or local government, usually appoints the whole or a majority of the board of management. Subsidiaries of public corporations are part of this sector if their accounts are consolidated with those of the parent corporation. Nationalised industries represent a group of particularly large and important public corporations. Examples include Consignia (formerly the Post Office) and the Civil Aviation Authority.

Some bodies controlled by central government are classified as being public corporations rather than central government, such as the Royal Mint.

From 1st April 1991, NHS Trust hospitals are also included in this sector.

Public Sector

Comprises general government and public non-financial corporations.

Private Sector

Private non-financial corporations, financial corporations including the Bank of England, households and the Non-profit institutions serving households.

Classification by industry

Industries are classified according to the "UK Standard Industrial Classification of Economic Activities 1992".

Sources of the statistics

The figures for total Workforce jobs and Government-supported trainees, together with the industrial analyses of employee jobs and the self-employment jobs, are aggregated from those compiled by the Employment, Earnings and Productivity Division, (PBG) and

Labour Market Division (SESAG) of the Office for National Statistics; the Department of Enterprise, Trade and Investment, Northern Ireland and DfES.

Estimates of employment in central government are obtained from a number of sources. HM Forces and National Health Services figures are obtained from the EEPD within the Office for National Statistics. Other Central government consists largely of those employed in the Civil Service. These numbers are obtained from the Personnel Management and Conditions of Service Division of the Cabinet Office. The remainder of central government employees are derived from the Cabinet Office Public Bodies publication.

Public non-financial corporation's data are derived from the ONS Inter Departmental Business Register (IDBR) and other regular surveys carried out by the EEPD (responsible for Annual Business Inquiry and Short-term Employment Surveys).

The local government data sources for England and Wales are the quarterly local authority survey (EEPD), police data are obtained from the Home Office, and Education and Health figures are produced by the EEPD. The source for Scotland is the Joint Staffing Watch survey by the Scotlish Executive and COSLA (Convention of Scotlish Local Authorities).

Full-time equivalent employment

To provide a more refined measure of manpower inputs, many of the institutions in the public sector count their part-time workers in terms of full-time equivalents. This analysis appears in Table D. Measuring full-time equivalents is a somewhat imprecise process, with each institution having its own convention for making the calculation. In the case of the Civil Service from 1939 to 1995, part-time staff working 10 hours or more per week were each counted as half a member of staff in arriving at a full-time equivalent figure. From 1 April 1995, the method of counting part-time staff was changed in order to reflect more accurately the resources used. This change was made in recognition of the increase, over recent years, in the number of staff working part-time who are now included in the FTE total as a proportion of a full-time employee, according to the proportion of full-time hours worked.

Part-time staff working fewer than 10 hours per week are now included in Headcount and FTE totals. Figures for earlier years were re-estimated on the basis of the new methodology to enable comparisons over time.

The full-time equivalents for local authorities are derived by applying factors to the numbers of part-time workers in three groups based on average hours worked in each group nationally.

The groups and factors for England and Wales are:

Non-manual Employees

Further education 0.11
Other 0.53
Manual workers 0.41

In other parts of the public sector, part-timers have been taken as half-units.

Headcount employment

Staff in post figures that give part-time staff equal weight with fulltime staff.

MAJOR SECTOR CHANGES; 1998 to 2001

Definitions, Coverage and Consistency of Statistics

Central Government

 In the three months to January 1998 the following reductions occurred:

> the Benefits Agency (1,700 down); the MoD (790 down); Customs and Excise (400 down).

To 1 January 1998 the prison service increased by 200 staff.

In the three months to April 1998 the following reductions occurred:

the Benefits Agency (2,200 down); the MoD (1,500 down); the Home Office (1,100 down).

The main transfers of staff and functions out of the Civil Service in the three months to April 1998 were:

In March 1998 the Fleet Maintenance and Repair function of the Naval Bases and Supplies Agency (MoD) was transferred to Fleet Support Ltd. (1,140 staff).

- 1 April 1998, the Historic Royal Palaces Agency (Dept. for Culture, Media and Sport), became an Executive Non-Departmental Public Body (NDPB)1 outside the Civil Service (455 staff).
- 1 April 1998, Marine Safety and Coastguard Agencies merged to form Maritime and Coastguard Agency (941 staff).
- 1 April 1998, the National Criminal Intelligence Service (Home Office) became a Service Authority (similar to a police authority) outside the Civil Service (564 staff).
- 1 April 1998, the Police Information and Technology Organisation (Home Office) became an Executive Non-Departmental Public Body (325 staff).

The largest increases in numbers of permanent staff leading up to April 1998 were 600 staff in HM Prison Service, in response to the increasing prison population. In the same period, 260 additional staff were employed by the Driver and Vehicle Licensing Agency to support the introduction of the photocard licence.

- 1 April 1998, Defence Communication Services Agency (MoD) launched (517 staff).
- 23 July 1998, the Women's Unit transferred from the Dept. of Social Security to the Cabinet Office (43 non-industrial staff).
- The largest reductions in numbers of permanent staff in the three months to 1 October 1998 occurred in the Benefits agency (680 down), the Ministry of Defence (340 down) and Customs and Excise (200 down).
- The largest increases in numbers of permanent staff in the three months to 1 October were in the Prison Service (450 up), in response to the increasing prison population.
- In the three months to 1 January 1999 the following staff increases occurred:

the Benefits Agency increased by 920 in order to reduce the need for casual staff in future;

Employment Service by 680, due mainly to the rollout of the New Deal for Lone Parents and pilot schemes for the New Deal:

HM Prison Service by 190;

The Ministry of Agriculture, Fisheries and Food by 110;

UK Anti-Drugs Co-ordination Unit was transferred from the Privy Council Office to the Cabinet Office.

- The largest decreases in the three months to 1 January 1999 occurred in the Ministry of Defence; down by 800 members of staff mainly due to natural wastage and non-replacement of leavers.
- 18 January 1999, Scottish Records Office changed name to The National Archives of Scotland.
- In the three months to 1 April 1999 the following changes occurred:

Majority of the Department of National Savings privatised (down 4,000);

1,600 staff reduction in HM Prison Service;

Privatisation and other reorganisation in MoD accounted for a decrease of 1,200 staff;

Office of the National Lottery became an NDPB¹ and renamed The National Lottery Commission, with a loss of 33 staff:

Lord Advocate's Department subsumed in the Scottish Office (19 staff);

Defence Codification Agency, subsumed by MoD RAF;

Defence Animal Centre merged with Army Training and Recruitment Agency;

Maintenance Group Defence Agency subsumed with Defence Aviation Repair Agency;

Contributions Agency transferred from DSS to the Inland Revenue (7,580 staff); Staff numbers rose in the Benefits Agency by 1,200, the Employment Service by 200 and Driving Standards Agency by 500, in response to rising demand for driving tests. Staff numbers continued to rise slightly in the Scottish Office and Welsh Office dealing with devolution.

May 1999:

The National Assembly for Wales was established. Small number of staff transferred from Welsh Office to the new Assembly to run the Office of the Presiding Officer.

Scottish Executive formed with no staff.

• 1 July 1999:

Office of Gas Supply and Office of Electricity Regulation merged to form OFGEM.

The Scottish Office was split into the Scottish Executive on devolution. Staff from the Scottish departments moved to the Scottish Executive which also absorbed Scottish Courts Administration and Office of Advocate General. Scottish Office Pension Agency renamed Scottish Public Pensions Agency.

Following devolution, staff in the Welsh Office moved to The National Assembly for Wales. The National Assembly also took in some 260 staff previously outside the Civil Service from Housing for Wales, Health Promotion for Wales and Welsh Health Common Services Agency. A small Office of Secretary of State for Wales formed at this time.

- 19 July 1999, OPRAF Office of Passenger Rail Franchise renamed Shadow Strategic Rail Authority.
- 30 September 1999, Government Property Lawyers ceased to exist. Remaining staff were absorbed into Treasury Solicitors.
- 1 October 1999:

The Rent Service, an Executive Agency of DETR was formed with 80 staff from DETR.

Around 4,200 staff (some 3,500 full-time equivalents) from the Family Credit Unit in Benefits Agency transferred to the Tax Credit Office within the Inland Revenue.

 1 April 2000. In the six months to April 2000, the following increases in permanent staff occurred:

The Employment Service (up 1,300) to implement enhancements to New Deal programmes.

The Home Office (up 1,240) because staff were recruited to speed up consideration of immigration and asylum cases.

The Prison Service (up 1,530) due largely to growth in the prison population and the new accommodation programme. There was a reduction (of around 300) in the Scottish Prison Service.

The Benefit Agency. Growth of 1,220 in permanent staff was offset by continuing and substantial reductions in casual staff numbers. Growth in permanent staff in the Child Support agency (by 660) was due to increased workloads to implement reforms in Child Support.

The Rent Service, which had been established in October 1999, grew by around 800, as staff transferred in from Local Government.

HM Customs and Excise IT. Staff numbers fell by some 400 including staff transferred to the ICL under the Private Finance Initiative.

NHS Purchasing and Supply Agency set up. Reporting to the Department of Health.

Office of Government Commerce set up reporting to Treasury Ministers with a small number of staff transferred from the Treasury. CCTA, PACE and The Buying Agency became agencies of OGC.

Food Standards Agency set up reporting to the Secretary of State for Health. Most of the staff were transferred from MAFF and Department of Health. Meat Hygiene Service became an Executive Agency of FSA. Civil Service College ceased to be an Executive Agency, and now becomes a fully integrated part of the Centre for Management and Policy Studies within the Cabinet Office.

MOD, Army Technical Support Agency ceased to be an agency, now subsumed within MOD.

 1 October 2000. In the six months to October 2000, the following increases in permanent staff occurred:

Home Office - up 1,950 because staff were recruited to speed up consideration of immigration and asylum cases;

Child Support Agency - up 540 due to extra workload on the Child Support Reform project;

Prison Service - up 1,620 reflecting the continuing upward trend of the prison population and the movement from short term agency to permanent staff. There has also been a reduction in the number of staff on long-term sickness absence, which means that some staff previously excluded from the figures are now being counted;

Organisational changes for the six months to October 2000 included:

Small Business Service launched as an Executive Agency of the DTI.

Information Technology Services Agency (DSS) was reabsorbed by its parent Department. In August 2000, many of the former agency's functions and staff were transferred to the Affinity Consortium. ITSA ceased to exist in October 2000 (staff still on the ITSA payroll as at October 2000 have been relocated to other parts of the DSS).

The Appeals Service launched as an Executive Agency of the DSS.

 1 April 2001. In the six months to April 2001 the following increases in permanent staff occurred:

Home Office (up 1,800) are continuing to increase staff due to the recruitment of staff in the Immigration

and Nationality department, mainly to deal with the volumes of work related to asylum cases.

Inland Revenue (up 500) due to workload changes and specific projects, which are included in the department's Government Expenditure Plans.

National Assembly for Wales (up 430) as agencies have been brought into the National Assembly for Wales following devolution. These include: Farming and Conservation Agency (110 staff), the Welsh Drug and Alcohol Unit (10 staff) and Clinical Excellence Support Unit (10 staff) and also additional staff were recruited to meet operational needs.

MAFF (since June 2001 incorporated into DEFRA) (up 380) - some of this increase is related to the Foot and Mouth crisis, with additional veterinary staff having to be recruited.

Customs and Excise (up 220) as staff were recruited following reorganisations which have included setting up call centres and centralised units.

Cabinet Office (up 130) mainly to enable them to meet their objective of putting all public services online by 2005

Organisational changes for the six months to April 2001 included:

Postal Services Commission launched, with 25 staff mostly from other government departments.

40 staff from the Registry of Friendly Societies transferred to the Financial Services Authority.

Shadow Strategic Rail Authority became a Non Departmental Public Body (NDPB)1 - 220 staff dropped from the count.

Local Authorities

Polytechnics and higher education institutions in England transferred from the local authority sector in April 1989, reducing the numbers by 60,000 (3,900 FTE).

Both Further Education (FE) and sixth form college funding transferred from local authority control on 1 April 1993. This involved approximately 119,000 academic and non-academic staff (on a full-time equivalent basis) being transferred to the private sector at mid-1993.

Public non-financial corporations

The public corporations in existence in June 2001 are listed below.

Name of corporation	Commencing or
	vesting date
Audit Commission	April 1983
Audit Scotland	April 2000
British Broadcasting Corporation	
(BBC)	1927
British Coal Corporation ¹	January 1947
British Hallmarking Council ³⁶	April 1998
British Nuclear Fuels plc (BNFL) 4	April 1992
United Kingdom Nirex Ltd - (s BNFL)	July 1982
British Waterways Board	January 1963
Buying Agency, The3a	January 1995
Caledonian MacBrayne Ltd ²	April 1990
Central Office of Information3b	April 1995
Channel Four Television Company	
Ltd ²	December 1980
Civil Aviation Authority (CAA)	April 1972
Commonwealth Development	
Corporation	February 1948
Companies House ^{3b}	April 1995
Consignia Pic	March 2001
Covent Garden Market Authority	October 1961
Crown Agents Holding and	
Realisation Board	January 1980
Crown Estate Commissioners36	April 1995
Defence Aviation Repair Agency	April 2001
Defence Evaluation and Research	
Agency ^{3c} (DERA)	April 1996
Driving Standards Agency ^{3d}	April 1997
Eastern Shires Purchasing	
Organisation	January 1981
East of Scotland Water Authority ⁵	April 1996

¹ Executive Non-Departmental Public Bodies (NDPB) - operate under statutory provisions, employ their own staff and have responsibility for their own budgets.

Financial Services Authority39	April 2000
Fire Service College ^{3b}	April 1995
Fleet Air Arm Museum	April 2001
Food from Britain ³⁶	April 1998
Forensic Science Service ³¹	April 1999
Forest Enterprise ^{1,3b}	April 1995
General Lighthouse Fund³e	April 1998
General Teaching Council for Wales	September 2000
Highlands and Islands Airports ²	April 1965
Historic Royal Palaces Trust ³⁰	April 1998
Historic Royal Palaces Enterprises Ltd	April 1998
Horserace Totalisator Board ^{3b}	April 1995
Hydrographic Office ^{3b}	April 1995
Laganside Corporation	April 1989
Land Registry, Her Majesty's36	April 1995
Local Authority Airports	From April 1987
Local Authority Bus and Tram	
Companies	October 1986
Medicines Control Agency ^{3b}	April 1995
Meteorological Office3b	April 1996
National Blood Authority	April 1993
Navy, Army and Air Force Institute	April 1996
New Millennium Experience	
Company Ltd ^{1,3d}	February 1997
NHS Estates ³¹	April 1999
NHS Logistics Authority	April 2000
NHS Trusts	April 1991
North of Scotland Water Authority ⁵	April 1996
Northern Ireland Housing Executive	May 1971
Northern Ireland Driver Vehicle Testing	
Agency ^{3c}	April 1996
Northern Ireland Transport Holding	
Company	April 1968
Northern Lighthouse Board ^{3e}	April 1998
Oil and Pipelines Agency	December 1985
Ordnance Survey ³	April 1999
Passenger Transport Executives	October 1969 and
	various later dates
Patent Office ^{3b}	April 1995
Port of London Authority	April 1998
Queen Elizabeth II Conference	
Centre ^{3c}	April 1997
Registers of Scotland®	April 1995
Remploy Ltd³b	April 1995
Royal Mint	April 1975
	January 1981
**	June 1986
Trinity House Lighthouse Service ³⁰	April 1998

Trust Ports Northern Ireland	April 1974
Vehicle Inspectorate ^{3b}	April 1995
West of Scotland Water Authority ⁵	April 1996
WJEC CBAC Ltd (Welsh Joint	
Education Committee)	January 2001

¹ Name changed. British Coal Corporation was formerly the National Coal Board with name change in March 1987; London Regional Transport was formerly London Transport Executive; Highlands and Islands Enterprise was formerly Highlands and Islands Development Board; Scottish Enterprise was formerly Scottish Development Agency; Scottish Homes was formerly Scottish Special Housing Association and Housing corporation (Scotland). Forest Enterprise was previously named Forestry Enterprise Agency; New Millennium Experience Company Ltd. taken into public ownership on 12 July 1997 previously named Millennium Central Ltd.

² Caledonian MacBrayne Ltd, was part of the former Scottish Transport Group; Channel Four Television Company Ltd was part of the Independent Television Commission; Highlands and Island Airports were part of the Civil Aviation Authority.

^{3a} Non ESA95 change: reclassified from central government in 1995q1.

- 36 As described for 3a but for 1995q2.
- 3c As described for 3a but for 1996q2
- 3d As described for 3a but for 1997g2
- 3e As described for 3a but for 1998g2
- 31 As described for 3a but for 1999q2
- 30 As described for 3a but for 2000q2

² Until 1990

3 Ceased trading July 1991

Publicly owned institutions not classified to the public sector for statistical purposes

Institution	Classified to
Bank of England Banking Department	Financial institutions
British Nuclear Fuels Ltd'	Industrial and
	commercial companies
Girobank ²	Financial institutions
International Military Services ³	Industrial and
	commercial companies
¹ Until April 1992	

⁴ Began in April 1971, reclassified from a private NFC to a public NFC from April 1992.

⁵ Reclassified from Local Authority.

Corporations reclassified to the private sector since 1998

Magnox Electric 1998q1 (now a wholly owned subsidiary of BNFL); Kingston Communications July 1999.

Corporations dissolved

National Film Finance Corporation abolished in December 1985, and replaced in the private sector by the British Screen Finance Consortium:

National Oil Corporation, in March 1986, being replaced by the Oil and Pipelines Agency;

National Dock Labour Board in July 1989;

Electricity Council in March 1990, being replaced in the private sector by the Electricity Association;

The Crown Suppliers in March 1991;

Pilotage Commission in April 1991;

Six Local Authority Bus Companies from April 1989 to November 1994;

Scottish Nuclear plc in March 1996;

Nuclear Electric plc in March 1996;

Crown Agents for Overseas Governments and Administrations Ltd. (known as Crown Agents); replaced on privatisation by Crown Agents Ltd. on 21 March 1997;

London Regional Transport disbanded on 3 July 2000 and has been replaced by Transport Trading Ltd.

Other changes

The Housing Corporation was reclassified in the 1987 *Blue Book* as a central government trading body and the data were revised back to 1974. The Independent Television Commission (other than Channel Four) was reclassified to the central government sector from October 1991. The Urban Regeneration Agency was established from November 1993, and incorporated the former English Industrial Estates Corporation from April 1994, trading as English Partnership. Letchworth Garden City Corporation became Letchworth Garden City Heritage Foundation, a private charity from October 1995.

Parts of British Coal and British Railways Board have been sold since 1994. British Energy assumed most of the activities of Nuclear Electric plc and Scottish Nuclear plc in April 1996. AEA Technology, part of UKAEA, was sold in September 1996. East Kilbride and Glenrothes New Town Development Corporations were wound-up in December 1995. Cumbernauld, Irvine and Livingstone New Town Development Corporations were wound-up in December 1996. The Urban Development Corporations for Birmingham, Black Country, Bristol, Cardiff Bay, London Docklands, Merseyside, Plymouth, Teeside, Trafford Park and Tyne and Wear were wound up from March 1998.

The following were reclassified to Central Government:

Deeds of Assumption - March 1996

UKAEA - 1996a3

Housing Action Trusts (Castle Vale, Liverpool, Stonebridge, Tower Hamlets, Waltham Forest) – January 1987

Railsale - November 1995

English Partnerships - April 1999

Scottish Development Agency - April 1999

Scottish Homes - April 2000

London Pensions Fund Authority - July 2000

British Transport Police - February 2001

Scottish Enterprise - April 2001

Highlands and Islands Enterprise - April 2001

Welsh Development Agency - April 2001

For statistical purposes within the National Accounts, the income and expenditure transactions of the Bank of England Banking Department have been reclassified from the 1993 *Blue Book* to the financial sector. Data have been revised back to 1984. This also applied to Girobank, until its privatisation in July 1990.

From the 1993 *Blue Book*, the fossil fuel level on electricity distribution is now separately identified as a capital grant within the public corporation accounts. Until this, *Blue Book* income generated was included in gross trading surplus.

Availability of Quarterly Data

Quarterly data underlying the figures for general government are available on request from Claire Hardwidge, Office for National Statistics, EMP RAP, Room 1.075, Government Buildings, Cardiff Road, Newport, NP10 8XG. Tel: 01633 812093; Fax: 01633 812247.

References

Civil Service Statistics 2001 published on the Internet www.civilservice.gov.uk/statistics

Enquiries can be made to: Employment Conditions and Statistics Division, Personnel Statistics, Cabinet Office, Admiralty Arch, The Mall, London, SW1A 2WH.

Tel: 020 7276 1532; Fax: 020 7276 1679; E-mail: psb@cabinet-office.x.gsi.gov.uk

Public Bodies 2001 published by TSO, price £26.50.
Enquiries to Cabinet Office, Public Bodies Team, 70 Whitehall, London, SW1A 2AS. Tel: 020 7276 2462; Fax 020 7270 1874; www.cabinet-office.gov.uk/quango

The United Kingdom National Accounts Sector Classification Guide (formerly known as MA23) can be downloaded at www.statistics.gov.uk/themes/economy/Articles/National Accounts/Sector Accounts/Sector Classification.asp

United Kingdom National Accounts Concepts, Sources and Methods
– a PDF file can be viewed at www.statistics.gov.uk/downloads/
theme economy/Concepts Sources and Methods.pdf

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ONS can also be contacted via the National Statistics website www.statistics.gov.uk

UK Material Flow Accounting

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Summary

This article sets out how a material flow account for the United Kingdom for the period 1970 to 2000 has been compiled, and some of the main results. Total resource use rose during the 1970s, as oil and gas production from the North Sea reserves started, but eased off during the early 1980s. There were significant increases in material flows, in line with economic growth, in the latter part of the 1980s, but from 1990 onwards resource use has stabilised despite a considerable increase in the size of the UK economy. The article concludes by reviewing the merits of the various indicators of material flows and by identifying a number of areas where the accounts and associated indicators could be improved.

Introduction

One of the main objectives of environmental accounting is to study the economic activities of production and consumption and understand how these activities impact upon the environment. To do this, it is useful to define the economy in physical terms, as the activities that use materials or energy to produce goods and services that can be exchanged for money. The environment constitutes the physical surroundings in which the economy operates, to which it is physically linked, and to which materials return once they have been disposed of by the economy.

By measuring the physical movement of materials between the economy and the environment, it is possible to draw up a material flow account which balances the inputs (extraction of natural resources from the UK environment, and imports of goods) with the outputs (wastes, emissions and exports) and accumulation of stock (in terms of new buildings, etc.) within the economy. This mass balance concept is based on the principle that matter can neither be created nor destroyed. Items in the accounts vary from gases such

as carbon dioxide to bulk materials such as coal or wood. When linked to changes in economic activity, it should be possible to draw conclusions about the extent to which economic progress is becoming de-coupled from resource use.

These considerations led the Department of the Environment Transport and the Regions (DETR), now Department for Environment, Food and Rural Affairs (DEFRA) to include an indicator of resource use (to be developed) in the core set of sustainable development indicators published in 1999 in 'Quality of Life Counts'.' Following this, DETR in conjunction with ONS, engaged the Wuppertal Institute² to develop an economy-wide material flow account for the UK. The framework used in this study follows the standards set out by Eurostat.³ The Wuppertal Institute's research, covering 1970 to 1999, has now been completed and the report will be made available on the DEFRA website⁴, with the summary results being published in *UK National Accounts* (the ONS *Blue Book*).⁵ This note gives a brief outline of the project, revises and updates the results to include 2000 data, and considers some of the options for further development of the accounts.

Material Inputs

Material flow accounting involves estimating all the physical inputs entering the economy and the outputs of products, waste and emissions resulting from the production and consumption activities of the economy. Annex 1 gives a summary of the materials covered in the accounts.

Direct inputs of materials to the economy consist of resource extraction in the UK (fossil fuels, minerals and other aggregates, and the harvesting of agricultural produce, fisheries and timber) and imports (which may enter the UK economy as raw materials, semi-manufactured products or finished products).

In addition to these inputs, the economy draws both water and air into the production and consumption processes. Water is used so widely, and in such quantities, that its inclusion in the accounts tends to obscure other resource use. For this reason, the accounts only include the water that is contained in products such as agricultural produce and imported beverages; other consumptive uses, where water cannot be used for any other purposes (such as water evaporated through cooling, and water for cleaning or irrigation) and *in situ* uses (such as hydroelectric power) are excluded from these accounts.

On the other hand, air used in productive and consumptive processes is included in the accounts, in order to balance the output of gases and water vapour with the inputs of carbon and other materials. Essentially this means that the accounts include the oxygen for the combustion of fuels, oxygen for respiration of humans and livestock and oxygen for non-energy processes such as steel making. The inputs of air are not, however, defined as part of the material requirement of the economy.

Material Outputs

Outputs can then be defined to cover all releases to the environment (emissions to air and water and landfilled waste) generated by UK economic activities, plus exports to other countries (which are categorised in the same way as imports to the UK).

By convention, the recycling of materials is not treated either as an input or as an output in the material flow accounts, because the waste is not viewed as leaving the economic domain. The amount of recycling is nevertheless included in the accounts both to ensure that double-counting is avoided and because it is the subject of considerable policy interest in its own right.

Hidden Flows

The accounts also provide a framework for recording the quantity of raw material that is translocated by the process of extraction, but not actually used in the production of goods and services. These movements are known as hidden flows. Hidden flows may be a result of extraction activities within the UK economy, or associated with the extraction of raw materials in other countries which are then imported into the UK economy. Examples of hidden flows are unused extraction from mining and quarrying (also known as overburden), discarded material from harvesting (e.g. wood harvesting losses such as timber felled but left in the forests), and soil and rock that is moved during construction and dredging.

Soil erosion is caused by a number of factors, including human activities. In this context it is not a material that is deliberately moved for economic purposes. It may nevertheless be considered as being a hidden flow, but because of the lack of reliable information, it has been excluded from the accounts. It is not believed to be particularly significant within the UK.

In principle, the accounts enable other indirect flows to be recorded, i.e. the waste material in other countries resulting from the production of semi-processed and finished goods for import into the UK economy. In order to be able to estimate these flows, we would need to have information about the resource use of trading partners. Although material flow accounts have been produced in a number of other EU and OECD countries, no analysis of the material 'embedded' in imports to the UK has yet been carried out and the accounts do not contain any estimates of these movements.

Data sources

The accounts are based upon three main sources of information. The data on the yields of agriculture, forestry and fishing comes from statistics compiled by DEFRA and submitted to the Food and Agriculture Organisation (FAO).⁶ Data on minerals extraction has been obtained from the UK Minerals Yearbook⁷, and information on the mass of imports and exports has been taken from trade information compiled by HM Customs and Excise.⁸

These three primary sources are supplemented by a wide range of information about the amount of unused material that is moved for each tonne of used material. For example, it has been estimated that 20 tonnes of unused material is extracted for each tonne of slate extracted. The ratios are of critical importance in the estimation of hidden flows, but in practice a time series of estimates relating to the UK is not available. In their absence, factors relating to other countries and other periods of time have had to be used.

There are also significant gaps in the information about the outputs of waste and emissions from the economy. For emissions to air, the National Atmospheric Emissions Inventory (NAEI)¹⁰ provides a comprehensive time series, but data on solid waste is limited to a single year only and there is virtually no information available about the amounts of substances contained in waste water. Estimates of the amount of material emitted to water should in principle also include run-off (e.g. salt and other materials from roads that ends up in rivers) and leaching (e.g. nitrates and phosphates seeping out from agricultural fields), but these emissions are intrinsically difficult to ascertain.

Results

With limited information on emissions, the results from the accounts are so far restricted to the input side of the mass balance.

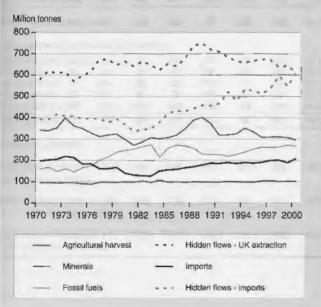
Figure 1 shows the relative significance of the different direct and indirect material inputs to the UK economy in 2000, expressed in terms of amounts per person.

The extraction of oil, gas, stone, sand and gravel accounted for 8.5 tonnes per person, with agricultural harvest and animal grazing

Figure 1 Material inputs to the UK economy, 2000 Tonnes per capita Hidden flows - other imports 35 Hidden flows - coal imports 30 Hidden flows - other UK extraction Hidden flows - soll excavation Hidden flows - UK coal mining 20 Imports 15 Agricultural harvest Other minerals including 10 Crushed stone extraction Sand and gravel extraction Oil and gas production

Figure 2

Material inputs to the UK economy, 1970–2000



accounting for a further 1.6 tonnes. Imports accounted for 3.5 tonnes per person, giving a total direct input of 14.6 tonnes a head. The remainder of the total is accounted for by hidden flows from UK extraction (10.2 tonnes per person) and those relating to imports (10.3 tonnes per person). UK hidden flows are dominated by open-cast coal mining and excavation for construction, while those associated with imports mainly relate to the mining of metal ores and coal.

Included in material inputs to the UK economy are inputs from domestic extraction relating to exports. These amounts are not shown separately in Figure 1. In 2000, the UK exported 3.3 tonnes per person to other countries, while hidden flows associated with these exports amounted to 2.8 tonnes per person.

Figure 2 shows how each of the input elements of the material flow accounts have changed between 1970 and 2000. The main changes have been increasing production from the UK's oil and gas reserves resulting in a rise in the quantities of fossil fuels over the period. An increase in imported semi-processed and finished goods has led to an overall increase in imports and an increase in the hidden flows associated with imports. Minerals extracted have declined over the period, due to substantial reductions in clay production. Hidden flows associated with UK extraction have fluctuated over the period, showing a large decline over the last 10 years, mainly due to a decrease in the extraction of deep-mined coal and other minerals such as clay. There has been little change in agricultural harvest and the mass of associated imports over the period.

Table 1 gives more detailed information on the figures shown in Figure 2 and on the changes in the volume of exports and associated flows.

Summary indicators

A number of resource use indicators can be derived from the material flow accounts. The three most widely used indicators, all relating to inputs to the UK economy, are the Total Material Requirement (TMR), the Direct Material Input (DMI) and Domestic Material Consumption (DMC). There are also a number of output and material balance indicators, which cannot yet be calculated because of lack of data. The output indicators are potentially more useful as they provide a better link with the environmental impact of resource consumption.

Total Material Requirement

TMR measures the total material basis of the economy, that is the total direct and indirect resource requirements of all the production and consumption activities. TMR includes the amount of used extraction in the UK, the imports into the UK, and the resulting indirect

	1970	1971	1972	1072	1074	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	on tonne
	1870	1971	1872	1973	1974	1919	1976	1977	1910	1979	1900	1201	1,304	1303	1904	130
Domestic Extraction																
Biomass		15	100			24				1.2		141	-			
Agricultural Harvest	42	44	41	44	43	38	36	45	46	45	47	46	52	46	56	47
Timber Animal Grazing	3 49	49	49	3	3	3 49	49	4 49	4 49	49	4	49	48	4	48	48
Fish	1	1	1	49	49	1	1	1	1	1	1	1	1	1	1	1
Total Biomass	96	98	95	98	97	92	90	99	100	99	101	100	105	99	109	100
Minerals																
Ores	12	11	10	8	4	5	5	4	4	4	1	1	1	1	- 1	1
Clay	38	37	39	40	37	33	32	30	31	28	25	24	25	27	22	23
Other Industrial Mineral	14	6	6	13	13	12	12	13	12	15	11	10	11	10	11	11
Sand and Gravel	122	123	129	143	126	131	124	113	116	117	110	101	102	111	110	112
Crushed Stone	156	161	168	195	181	169	157	152	155	159	150	134	147	159	158	160
Total Minerals	342	339	352	399	362	360	329	312	319	324	298	271	286	307	302	307
Fossil Fuels													7421		2.4	
Coal	149	149	122	132	110	129	124	122	124	122	130	128	125	119	51	94
Natural Gas	11	19	27	30	36	37	40	42	40	41	39	38	39	41	40	37
Crude Oil	0	0	0	0	0	2	12	38	54	78	80	89	103	115	126	128
Total Fossil Fuels	161	169	150	162	147	168	176	203	218	241	249	255	267	275	217	259
Total Domestic Extraction	598	606	596	659	605	609	594	613	637	664	648	626	658	681	627	666
Imports																
Biomass	25	24	24	26	23	21	22	22	20	20	18	16	17	17	16	16
Minerals	3	3	4	4	7	7	4	3	3	4	3	4	5	5	5	5
Fossil Fuels	123	132	133	137	132	111	108	88	86	85	74	60	58	54	74	76
Products	45	43	44	51	50	44	50	48	53	58	45	51	48	51	56	58
Total Imports	197	202	205	219	213	183	184	161	161	167	140	131	128	126	150	156
Exports				9=												
	1		1 4								-		10			-
Biomass Minerals	7	7	8	1 8	9	9	9	10	10	11	11	10	10	6	8	7
Fossil Fuels	5	4	6	6	3	4	6	18	27	43	44	64	70	77	81	85
Products	34	35	34	37	37	36	41	48	49	48	41	43	39	40	43	48
Total Exports	47	47	48	53	51	51	57	77	89	104	101	123	128	129	139	146
Indirect Flows																
From Domestic Extraction (excludi	ing soil	erosion)														
Coal mining	187	233	220	219	196	223	247	275	286	263	316	298	305	293	263	299
Extraction of oil and gas	2	3	4	4	5	5	6	8	9	11	11	-11	12	13	14	14
Mineral and ore extraction	177	167	168	175	156	158	152	176	162	156	121	117	126	122	120	115
Soil excavation	158	158	159	160	157	155	155	155	157	157	155	154	155	157	158	158
Unused biomass	16 40	18 40	18	18	18	16	16	19	20	20	22 40	22 40	25 40	23 40	28 40	25 42
Dredging Total from demonstration	579	620	40	40	571	597	617	674	674	647	665	641	664	648	623	653
Total from domestic extraction Of which,	219	620	609	616	5/1	297	01/	0/4	0/4	047	000	041	004	040	023	000
- indirect flows relating to exports	173	145	174	202	241	210	148	156	159	157	169	202	168	129	216	178
From overseas extraction relating	to Impo															
Agricultural and animal products	89	84	90	76	68	71	42	36	39	34	28	30	28	32	33	34
Hard coal	1	29	34	12	24	35	21	13	15	31	55	32	26	29	47	91
Basic metal products Other raw materials	76 36	69 38	64	76	67 48	57 46	68 25	63 22	56 22	63 24	47 21	58 18	49 26	51 26	55 27	59 26
Semi-manufactured goods	191	173	36 194	39 207	203	186	244	261	247	243	218	200	216	214	220	213
Total relating to imports	394	394	418	409	410	395	400	396	380	396	368	338	344	352	381	423
Summary Aggregates													1			
2.00		444	2011		1		1203		-	1		-	No.		-	100
Direct Material Input (domestic extraction + imports)	795	808	801	877	818	792	778	774	798	831	788	756	786	807	778	821
Domestic Material Consumption (domestic extraction + imports - expo	748 orts)	761	753	825	767	741	722	697	709	726	687	634	659	678	639	676
Total Material Requirement	1,768	1,821	1,827	1,902	1,799	1,784	1,795	1,844	1,852	1,874	1,821	1,736	1,794	1,807	1,782	1,897

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Domestic Extraction															
Biomass															
gricultural Harvest	49	46	48	46	46	47	50	47	45	47	54	53	51	52	51
Timber	5	5	6	6	6	6	6	8		8	7	7	7	7 43	43
Animal Grazing	47	47	46	46	46	46	46	46	45	44	44	45 1	44	1	1
Fish Fotal Biomass	102	99	101	100	100	100	103	101	100	100	106	107	103	104	103
I Olai Dicinass	102	30	101	100	100	100	100	101	100	100	100	107	100	104	100
Minerals				1 W.J.	- 9			1							
Dres	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Clay	22	23	24	25 12	21 11	19	16 10	15 10	17 10	18	16 10	15 10	16 9	15	16
Other Industrial Mineral Sand and Gravel	116	12	141	143	128	103	103	104	113	106	101	103	103	105	102
Crushed Stone	168	190	212	221	212	196	190	195	210	200	181	182	182	179	168
Total Minerals	318	347	388	401	373	318	319	324	351	334	308	310	310	308	295
Visi minorale	010	- 411	000	- 141	0,0	4.0			-		7.77			-	770
Fossil Fuels			101	144			75		50			10	40	20	00
Coal	108	105	104	101	94	96 43	75 52	69 61	50 65	54 71	51 84	49 86	42 90	38 99	33 108
Natural Gas	39 127	41 123	39 114	39 92	43 92	90	94	100	127	130	130	128	133	137	127
Crude Oil	274	269	258	231	229	229	221	230	241	255	265	263	265	274	268
Total Fossil Fuels	214	209	238	231	528	223	261	230	241	200	200	200	200	2/4	200
Total Domestic Extraction	694	715	747	732	701	647	642	655	691	689	679	680	678	686	665
Imports															
Biomass	18	19	18	17	17	15	16	16	18	16	17	18	18	17	18
Minerals	5	5	8	9	8	7	6	6	8	В	6	6	7	7	5
Fossil Fuels	76	75	71	76	89	93	93	89	78	73	77	79	76	70	83
Products	59	66	73	76	74	69	75	74	87	89	91	96	100	95	102
Total Imports	158	165	170	178	187	185	190	185	190	187	191	200	201	189	208
Exports															
Biomass	11	10	4	9	8	8	8	7	7	7	8	8	8	7	8
Minerals	.5	6	6	6	7	8	11	15	15	15	17	16	16	16	16
Fossil Fuels	89	86	68	49	58	56	58	64	82	85	80	79	79	84	90
Products	48	48	42	42	44	46	48	65	71	67	70	83	78	76	81
Total Exports	153	149	120	106	117	118	124	151	175	174	174	185	181	184	196
Indirect Flows															
From Domestic Extraction (exclud	ling sol	l erosion)													
Coal mining	281	306	343	354	343	351	338	315	288	299	297	303	267	275	244
Extraction of oil and gas	14	14	13	11	12	12	13	15	17	19	20	20	21	23	23
Mineral and ore extraction	120	129	150	149	135 168	113 165	113 164	115 163	123 164	117 164	110 165	110 166	112 167	110 167	108
Soil excavation Jnused biomass	159 27	162 25	165 25	167 27	27	27	27	26	26	27	31	31	30	29	36
Dredging	40	40	40	40	36	42	29	28	39	40	51	41	40	40	40
Total from domestic extraction	642	677	736	748	720	709	684	664	658	666	675	671	637	644	612
Of which,															
- indirect flows relating to exports	232	242	230	163	166	151	135	157	177	184	166	176	182	158	166
From overseas extraction relating	to imp														
Agricultural and animal products	35	36	49	44	43	43	48	44	52	50	52	54	50	51	53
Hard coal	76	70	84	87	103	143	161	123	121	121 59	104 57	113 60	190 60	195 48	220
Basic metal products Other raw materials	66 27	76 25	73 24	70 24	61 25	50 23	51 24	49 22	23	22	21	20	18	17	19
Semi-manufactured goods	232	224	215	234	224	210	239	242	271	275	279	294	278	238	273
otal relating to imports	435	431	445	460	457	468	522	481	536	527	514	541	597	549	614
Summary Aggregates	100	101	110	100		100				-					
America 1 validadares															
Direct Material Input (domestic extraction + imports)	853	879	917	910	888	833	833	840	881	876	871	880	879	875	873
Domestic Material Consumption domestic extraction + imports - exports)	700	730	797	804	771	715	709	689	706	702	697	694	698	691	677
Total Material Requirement	1,929	1,987	2,098	2,118	2,065	2,009	2,038	1,984	2,075	2,069	2,059	2,093	2,113	2,067	2,099

or hidden flows associated with extraction in the UK and imports from other countries.

In the UK, the Total Material Requirement was 35.1 tonnes per person in 2000, having increased from 31.8 tonnes per person in 1970. It is relatively low by international standards. The EU total for 1997 was calculated at 50 tonnes per person, while the material requirement of the United States has been estimated at 88 tonnes per person in 1994¹¹ (all figures are excluding soil erosion).

One of the weaknesses of TMR as an indicator of resource use is that it is dominated by hidden flows, the estimates of which are mainly based on ratios of unused to used extraction from studies carried out outside the UK. The figure for unused extraction related to opencast mining is particularly significant in the calculations. Another weakness is that it includes flows associated with the production of both imports and exports. This means that the UK might implicitly be held responsible for the movement of natural resources within the UK which are related to goods consumed by other countries (exports), as well as accepting some responsibility for the movement of material in other countries which is related to goods imported into the UK. In this sense the indicator double-counts trade flows.

Direct Material Input and Domestic Material Consumption

DMI measures the input of materials used directly in the economy, that is those materials that form part of products or are used in production and consumption activities. DMI equals used extraction in the UK (including that which is used or contained in the production of exports) plus imports. DMI is not affected by the weakness of the estimates of indirect flows, but suffers from the same limitations as TMR in the sense that it double-counts trade flows.

DMC measures the total amount of material directly consumed by the UK economy, i.e. it excludes exported goods. DMC equals DMI minus exports. For this reason, it is the input indicator which is most closely related to the consumption activities of the economy, as measured in the estimate of Gross Domestic Product (GDP). However, an indicator which included an estimate of the used material consumed in the production of imports to the UK would be even closer to a measure of the direct resource implications of UK consumption. To make domestic extraction of raw materials and imports fully comparable, the imports would ideally be converted to their raw material equivalent, i.e. showing the used material consumed in the production of imports to the UK. If the UK exports were also converted to their raw material equivalent and then deducted from the total, a UK raw material consumption indicator could be derived that would be even closer to a measure of the direct resource implications of the UK economy.

In the UK, the DMI and DMC, which exclude hidden flows, were 14.6 tonnes per head and 11.3 tonnes per head respectively in 2000.

Changes in input indicators 1970 to 2000

Figures 3 to 5 show how these indicators have changed between 1970 and 2000, compared with GDP in constant (1995) prices.

During the 1970s (Figure 3) TMR grew by 6 per cent, mainly as a result of the increasing extraction (partly for export) of North Sea oil and gas production and hidden flows related to increased opencast mining, while GDP rose by 24 per cent in real terms. DMC on the other hand fell by 3 per cent, since exports and indirect flows are excluded from this indicator.

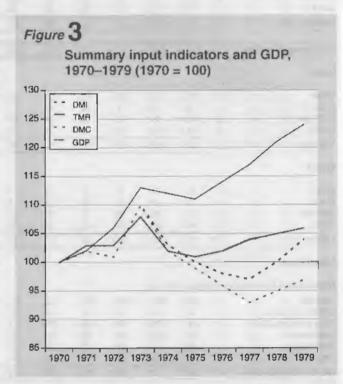
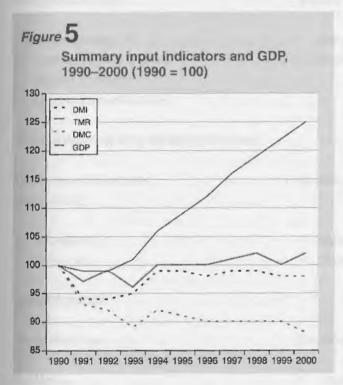


Figure 4 shows that, after the recession of the early 1980s, the three input indicators all rose steadily during the late 1980s, suggesting that the economic growth of that period was closely linked to increasing resource use. In contrast, Figure 5 indicates that the economy increased independently of resource use during the 1990s, with only a small (2 per cent) increase in TMR and a fall of 12 per cent in DMC. The fall in DMC resulted from an increase in the quantity of goods exported relative to the amounts imported, in particular with regards to fossil fuels during the early and later parts of the 1990s.

Figure 4 Summary input indicators and GDP. 1980-1989 (1980 = 100) 130 DMI TMR 125 DMC GDP 120 115 110 105 100 95 90 85 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989



Next Steps

The material flows account is a framework for recording the physical amounts of material that are used or moved by economic activities in the UK. At an aggregate level, the accounts can provide some indicators of changes in the resource productivity of the economy. These are summary indicators which require careful interpretation, since the weight of the different resources recorded in the accounts is in general inversely related to their environmental impact. None of the three input indicators discussed in this note is ideal, although

of the three the estimate of total resources directly consumed by the economy (DMC) is most consistent with the way that National Accounts aggregates such as GDP are measured in that imports and exports are treated in the same way. The author welcomes views on the relative merits of the different indicators.

There are a number of ways in which the range of indicators derived from the accounts could be improved. First, more information is needed about the amounts of solid waste and emissions to water generated by the economy, both in order to obtain a more complete understanding of how the economy is growing in material terms, and because the accounts could then be used to develop more sophisticated indicators of resource use based on environmental impact or toxicity. DEFRA, together with the Environment Agencies, are working on a new survey of waste arisings, but more research will be needed before reliable estimates of emissions to water can be incorporated into the accounts.

Second, the estimates of the hidden flows from domestic and overseas extraction are particularly weak, and further research on the ratio of unused to used material for different materials within the UK, and on how the ratios have changed over time, would help to improve the reliability of the accounts. It would also be useful to investigate how the production of goods for import into the UK is associated with waste arisings in other countries.

Conclusions

The recent Performance and Innovation Unit report on resource productivity¹² and DTI's launch of their sustainable development strategy in March 2001¹³ in addition to DEFRA's emphasis on sustainable development¹⁴ all highlight the importance of improving resource productivity in achieving sustainable development. There is a widespread recognition that it will be important to develop a range of measures, from resource- and industry- specific indicators to economy-wide indicators of overall resource use. The summary input indicators described in this note fall into the second category, but (as made clear above) some of the more meaningful indicators can only be fully developed once the data gaps have been filled.

However, the underlying account already provides the basis for making comparisons of the resource use, emissions and waste of particular industrial sectors with their contribution to economic prosperity. The accounts as they stand can also be used to throw light on the indirect consequences of material consumption, for example by revealing how much mining waste is avoided by recycling, or how changes in the levels of imports into the UK are related to movements of unused material in other countries.

References

- Department of the Environment, Transport and the Regions (1999). Quality of life counts. Indicators for a strategy for sustainable development for the United Kingdom: a baseline assessment.
- The material flows account (MFA) related work of the Wuppertal Institute for Energy is available at www.wupperinst.org/Sites/ Projects/material-flow-analysis/index.html
- Eurostat (2000). Economy-wide material flow accounts and derived indicators - a methodological guide.
- 4. DEFRA's website is at www.defra.gov.uk
- Office for National Statistics (2001). United Kingdom National Accounts (The Blue Book) 2001. The Stationery Office: London.
- Food and Agricultural Organization (FAO), available at: http:// apps.fao.org
- 7. British Geological Survey (2000). UK Minerals Yearbook 2000.
- HM Customs and Excise trade data available at www.uktradeinfo.com
- Department of the Environment, Food and Rural Affairs (2001).
 Digest of Environmental Statistics, November 2001.
- The National Atmospheric Emissions Inventory, available at www.aeat.co.uk/netcen/airqual/naei/index.html
- Eurostat (2000). Material use indicators for the European Union 1980-1997.
- Cabinet Office (2001). Resource Productivity: making more with less. A Performance and Innovation Unit Report, November 2001.
- Department of Trade and Industry (2001). Sustainable Development Strategy.
- Department for Environment, Food and Rural Affairs (2002).
 Achieving a better quality of life. Review of progress towards sustainable development. Government Annual Report, March 2002.
- See in particular the environmental-economic data at www.statistics.gov.uk/themes/environment/ environmental_accounts/data_publications.asp

Breakdown of the material flow components Annex 1

Extraction in the UK (used materials

Industrial n	ninerals:
--------------	-----------

- Barite
- Industrial clay
- Feldspar
- Fluorspar
- Potash
- Salt
- Industrial sand & gravel
- Industrial crushed stone
- Talc

Construction minerals:

- Construction sand & gravel

Biomass from agriculture:

- Cereals
- Roots and tubers
- Pulses
- Oilcrops
- Vegetables and melons
- Fruit
- Fibre crops
- Other extraction including grazing

Fossil energy carriers:

- Hard Coal
- Crude oil
- Natural gas
- Peat

- Construction clay
- Gypsum & anhydrite
- Construction crushed stone

Biomass from forestry and fishing:

- Fish catch
- Roundwood

Metal ores:

- Iron ore
- Tin ore
- Lead ore

Unused materials from UK extraction from:

Overburden etc from mining and quarrying:

- of fossil fuels
- of minerals

Biomass harvest

- Wood harvesting losses
- By-catch

Material outputs

Dissipative losses

- Manure
- **Fertilisers**
- Pesticides

Emissions and waste

- Emissions to air
- Emissions to water
- Waste landfilled

Imports and exports (classified in the same way)

Raw materials, semi-manufactured products finished products from:

- Fossil fuels
- Metallic minerals
- Non-metallic minerals
- **Biomass**

Excavation:

- **Dredgings**
- Soil excavation

Electronic Commerce and Business Change

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Change brought by Electronic Commerce

The technology behind the 'Information Society' has brought changes in four key areas for business.

The first is the ability to turn ideas into marketable innovation for a wider range of customers. A new idea can now be presented to potential buyers outside a firm's immediate local market or distribution channels in ways which were previously not possible. Technology can reduce the costs of search for buyers, and the costs of access to market for suppliers.

Second, increased speed to market, and reduced costs of access may lead to more innovation by firms. The technology itself makes possible methods of purchase, and forms for delivery of services, that are novel. Particularly in the field of digitally delivered products – entertainment or information – access to new products for customers connected to the Internet has undergone a revolution.

Third, e-business has changed processes within and between enterprises. Electronic Data Interface (EDI), widely introduced twenty five years ago on dedicated links between firms, showed how information could be directly passed from the operating systems of one enterprise into the order processing, production and logistics systems of another. The principles have now become much more widespread; available to a much wider spread of individual customers through the internet.

An important economic effect of this change is that it makes 'vertical disintegration' of value chains – in which companies focus on specific parts of the delivery of products and services – easier as the interface costs of integrated electronic processes are lower. It may no longer be necessary for a firm to own a process in order to control it. Efficiency gains from outsourcing parts of a firm's value chain can, in some cases, be realised without additional co-ordination cost and without loss of control.

Vertical disintegration shows in overall economic aggregates. The gross value added / output ratio for all industries over the 1990s has shown a perceptible decline; the effect is not evenly spread across sectors, nor a completely steady year on year effect, but it is visible (see also¹).

Finally, the availability of information changes the balance of power between suppliers and customers. For the first time, producers in many industries have the potential for direct access to more buyers. Extra choice is available to more consumers, who have more scope to shop around on price and quality. Usually, by opening up choice, e-commerce moves the odds in favour of buyers.

Table 1 Total Output and Gross Value Added; UK All Industries

£bn	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GVA	524	546	575	609	640	680	721	761	795	832
Output	1,048	1,100	1,172	1,271	1,363	1,455	1,540	1,631	1,722	1,819
Ratio (per cent)	50.0	49.7	49.1	47.9	<i>46.9</i>	<i>46.7</i>	46.8	46.7	46.2	45.8

Source: UK National Accounts; Blue Book 2001, table 2.2.

Measuring Impact of e-commerce and Electronic Business Processes

Macro vs. Micro Approach

Much published work so far on the impact of the new economy has been based on macro-economic or sector studies, using growth accounting approaches. To arrive at conclusions on the impact of ICT these analyses track the inputs to economies or sectors, usually capital, labour and technology assets, relate them to outputs and identify the differential effect of each. This requires assumptions to be made about the relative effect of different inputs on overall output of economies or sectors. These assessments have given rise to widely differing estimates, over different time periods and in different economies.

At two per cent of estimated UK business sales in 2000, e-commerce is probably too small to show a statistically reliable impact on business output in macro-economic models. Even ICT activity – comprising less than 10 per cent of UK business value added, and under 20 per cent of gross fixed capital formation, might not show consistent effects. An alternative is to examine case studies, and some of the literature of the 1990s on ICT productivity effects relies on this approach.

However, several thousand businesses respond to surveys on business inputs each year in the UK, and to surveys on business performance. If these surveys can be brought together and matched, and the results of successful and unsuccessful business compared, the resulting data pool should be wide enough to draw conclusions on business behaviour, and performance. In the US, where e-commerce has been longer established, this approach is seen as a good basis for estimating impact in the wider economy as e-business adoption spreads.

Work under way by the US Centre for Economic Studies based on Bureau of Census manufacturing data shows a range of estimates for the correlation between electronic process interaction or integrated computer network use and business productivity. The estimates of association are around 5 per cent or more (for the specific impact of computer networks) depending on how models are specified.² The CES work does not, at this stage, seek evidence of causal relationships which might show how gains are achieved. Nor does it cover the service sector, where many e-commerce applications have been implemented.

One reason for this is that US business level data, although providing excellent detail on e-commerce and electronic process use, does

not cover innovation. It is therefore difficult to tell whether the 'e-commerce winners' are also the innovative early adopters – firms which would anyway grow and achieve higher productivity as a result of managerial or market strengths. UK business data could be used to distinguish these relationships, as well as others which influence productivity and output.

Over recent months work has been in progress in the ONS Business Data Linking branch to relate results from different surveys on business innovation, ownership, R&D investment, e-commerce activity, output and productivity.³ This has already produced initial conclusions on productivity, related to multinational business scope. It is now possible to start work on e-commerce.

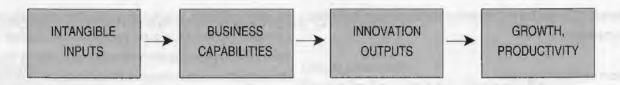
Impact Analysis based on Micro Data

In testing for relationships to see if there are e-commerce effects on business performance, we need a basic model or hypothesis, and data to relate e-commerce use for a large sample of businesses to the complex influences on business output. Available relevant business level data sources from National Statistics surveys, as at April 2002, can be summarised as follows:

- Annual Business Inquiry (ABI) firm performance surveys 1994– 2000 (2001 to be added late in 2002);
- E-commerce survey 2000 (the larger 2001 survey now available from June 2002):
- Community Innovation Surveys (CIS) for 1996, and for 2000;
- · Business Enterprise R&D surveys for each year;
- ICT investment surveys, which quantify IT assets purchased by firms.

Each of these surveys asks a range of questions, aimed at delivering answers on specific topics, ranging from overall economy and sector output statistics (ABI) to quantifying and categorising business innovation activity (CIS). The main question types in each are summarised in Appendix 1.

The business model round which we are building the analysis is one developed in 1996–1998 based on work commissioned by DG Enterprise, using alternative sources of micro-data. This relates intangible business inputs (technical and market related) to the creation of business capabilities, to innovation outputs, then to business growth and to productivity improvement. It is related to other work, which has since been done on intangibles and intellectual capital.



This chain has been found to be statistically significant in other datasets⁴, and tested in part using Community Innovation Survey data for a number of EU markets. Its value to this study is as a framework to look at the impact of e-commerce and electronic business processes. Our analysis aims to identify the business impact of e-commerce and electronic processes in specific steps in the chain:

- as a means of improving effectiveness of R&D (an intangible input) in delivering innovation, through more effective links to suppliers, customers and strategic partners;
- as a means of improving commercial communication, through access to wider markets, or by cutting the costs of interacting with customers, which might increase the rate of effective innovation outputs from given inputs;
- as a means of improving the efficiency of business processes, and of making the links between processes faster and more reliable, which should improve productivity over and above the impact that might be due to innovation and business growth.

The study has begun to address these issues in a series of steps or questions:

Step 1 How far firms using e-commerce or the Internet are:

- more R&D intensive than others in their sectors (from R&D surveys);
- more effective compared to sector peers in turning given levels of R&D spending into innovation output in the market (from innovation surveys).

Step 2 To look for evidence of how far:

- e-commerce users are more likely to turn innovation activity into sales growth;
- e-commerce users are able to grow value added more effectively as a result of innovation;
- there is evidence that e-commerce users grow within their sectors as a result of e-commerce use (this 'sector share' approach is similar to one used by Statistics Canada in related work on innovation).

Step 3 To look at the cumulative impact

- of innovation and growth;
- of e-commerce as an independent factor;
 on business productivity levels. For this stage of the exercise

we will need plant level data on other factors that may drive productivity - especially capital stock and ICT investment. These are not yet available to us, but are feasible to develop.

Data Availability and Overlap

This staged approach to the analysis has two advantages. First, it should enable us to pinpoint the links – where they exist – between electronic processes as inputs and overall business outputs. Second, it helps to make best use of the available data, which is constrained by the sampling processes and response rates from different surveys. Because surveys are carried out on a sample basis – particularly for enterprises with fewer than 250 employees – the probability that smaller businesses are measured simultaneously on output (from ABI), on innovation (from CIS) and on e-commerce use (from the e-commerce survey) is relatively small. But the overlaps between pairs of surveys are significantly better – and permit a step by step approach.

a) ABI business output data

At present data is only available over a long period for performance in manufacturing enterprises and initial work will focus in this area. However, data for the mid 1990s on service businesses should be added to the available data set by mid 2002 (after additional data linking work), and this will be analysed in the second half of the year. The importance of the service sector, and of electronic processes in it justifies specific efforts to assemble the data, and to identify e-commerce impact in this area.

b) E-commerce survey data

From June 2002 output from the e-commerce survey for 2001 is available⁵, and provides a significantly larger sample over which to test the evidence on the core study questions evidence on electronic business processes, other than transactions, which is being collected for the first time in the UK, following the US model in an abbreviated format.

c) Community Innovation Survey

We already have survey datasets for 1996 and 2000, plus additional innovation data⁶, mainly on smaller enterprises, as a result of a 'top-up' survey to cover businesses in specific regions of the UK; this may extend our ability to look at small and medium size enterprise (SME) performance.

Initial Analysis

Building on Complementary Data

As well as looking at overlap between the surveys above, which will grow as additional data is received, we have also looked at the scope for complementary analysis – using results from one survey to add to those from another. As shown in Appendix 1, and summarised below, all three surveys (ABI, CIS and e-commerce) asked questions about e-commerce in the year 2000.

Table 2 Which information do we want and where is it?

	ABI	CIS	E-commerce
Turnover	1	/	1
Employment	1	1	1
Value Added	1	×	X
IT expenditure	1	×	×
Commercial communication	1	×	×
E-commerce Activity	1	1	/
Amount / type of e-commerce	×	×	1
Innovation	×	1	X
Skills	×	1	x

In order to assess the impact of electronic processes and transactions on business performance we need to be able to distinguish between those enterprises which invested sufficiently to change their approach to suppliers and customers. A simple yes / no answer to the question of technology use is insufficient, and a measure of 'sophistication' of Internet / e-commerce use is required.

To secure a larger sample for initial work, answers to questions on e-commerce have been brought together. From the data at hand we define users of e-commerce from all three surveys as:

Non-users, do not use the Internet:

- ABI 2000 business answers "NO" to all three questions on ecommerce (no purchases via Internet or EDI, no sales via Internet or EDI and no Web page);
- CIS3 no basic Internet presence, no Internet used for information, customers cannot place orders through Internet site, and business does not use e-commerce with other businesses;
- . E-commerce no Intranet, no EDI and no Web-access.

Some presence on the Internet:

- ABI 2000 business has a Web page but does not purchase or sell via Internet or EDI;
- · CIS3 business has only some basic Internet presence;
- E-commerce business has its own or third party web page but does not sell/purchase over the Internet.

Passive Users:

- ABI 2000 business purchases but does not sell over the Internet or "via Internet or EDI";
- CIS3 Internet is used for information, but customers cannot place orders through Internet site and business does not use ecommerce with other businesses:
- E-commerce business purchases, but does not sell, over the Internet.

Active Users:

- ABI 2000 the business sells via Internet or EDI:
- CIS3 customers can place orders through Internet site, and / or business does e-commerce with other businesses;
- E-commerce business answers yes to the question "does your business use e-commerce to make sales".

Table 3 How many surveyed firms fell into these 'e-activity' categories in 2000

e-activity category	Number of Enterprises	Per cen
Non users	13.749	21.9
Some presence	28.943	46.0
Passive users	6.995	11.1
Active users	13,218	21.0
Total		100.00

Source: Weighted analysis of ABI / CIS / e-commerce survey 2000

Where are the 'active users'?

As expected (and shown by other surveys) the heaviest concentration of 'active users' is among larger enterprises, reflecting the technical resources available to them. There is also clear evidence that electronic commerce is more likely to be well developed in multiplant enterprises. Relatively few multi-plant firms remain without ecommerce activity, perhaps reflecting the value to such firms of electronic processes for co-ordination.

Table 4 Per cent of firms by type

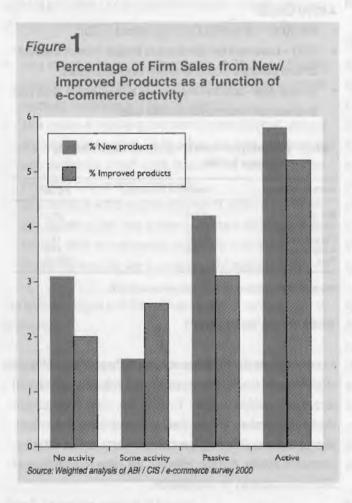
Type of firm	No e-activity	Some or passive	Active	Total
Single plant	24	57	19	100
Multi-plant	12	58	30	100

Source: Weighted analysis of ABI / CIS / e-commerce survey 2000

The pattern of development by sector also shows significant differences, not all of them expected. In some sectors, such as food, drink and tobacco and insurance services, almost a majority of enterprises are 'active' e-commerce users. In others, such as mining and quarrying, the figure is less than 5 per cent.

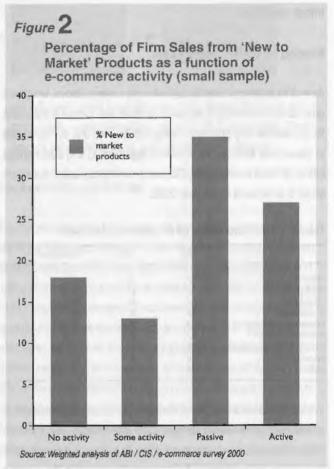
Links between e-commerce use and business performance measures

Results from the initial sample show that there are positive relationships between the composite measure of e-commerce activity and measures of innovation used in the Community Innovation Survey. 'Active' e-commerce users - on average - report twice the proportion both of new products in their sales mix, and of significantly improved products.



A similar pattern shows for business reporting sales of products that are new to their markets. These are pioneers in product introduction, and again the use of e-commerce appears, from this initial data, to be related to a doubling of the percentage of observed sales from such new products or services

For an initial assessment of impact of e-commerce use - prior to receipt of the complete innovation data set - we have looked at firms' own evaluation of the success of aspects of innovation. The Community Innovation Survey asks a range of questions on this, including:



- impact of product oriented innovations to open new markets or increase market share;
- impact of process oriented innovations to improve production flexibility;
- impact of innovations in marketing concepts or strategies.

In the area of product / service innovation the self assessed impact of innovations made appear to be related to e-commerce use. Businesses rating as 'high' the impact of their product or service innovation designed to increase market share or access new customers are twice as likely to be active e-commerce users, compared to businesses that have not innovated, or who rate the impact of their innovation activity as low.

From this initial data we can also comment on the human resources needed to support active e-commerce use. From the CIS survey we can look at the proportion of employees by firm who are qualified to degree level or above. Active e-commerce use by firms is usually associated with around 20 per cent employees educated to this level, compared to less than 10 per cent for non-users.

Figure 3

Percentage of new product/service/ market innovators, by innovation impact rating, which are active e-commerce users

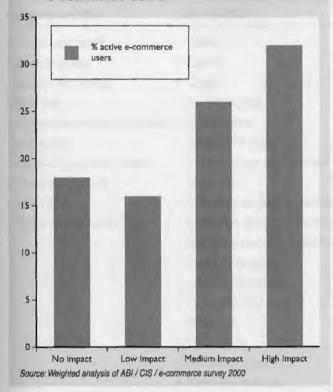
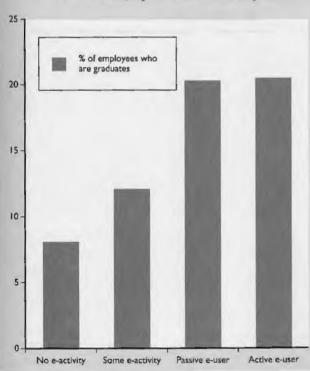


Figure 4

Proportion of employees educated to degree level or above, by level of e-activity



These interim illustrative statistics show that:

- there are observable relationships between e-commerce use by firms and their achieved innovation;
- the self-assessment of success in innovation by firms is also related to their use of electronic commerce;
- e-commerce use is also related to skills in firms, which we would also expect to be true of other measures of success including innovation, firm growth and productivity.

Next Steps

Work is now underway – with the full data set from all of the 2000 surveys – to test the 'perception' of a link between e-commerce use and performance which is apparent from the results above. The first step in this process is to link reported business performance – in terms of growth over time and productivity from the Annual Business Inquiry – to detailed innovation and e-commerce use data. This process should be largely completed for the manufacturing sector during June/July.

We are also planning to identify the characteristics of successful businesses – in terms of growth and productivity. Their profiles on innovation, electronic business use, skills and other inputs will inform our approach to analysis of the 'chain' spelled out earlier.

During July we aim to start work on service business performance, and should be able to look at the differences in performance levels and performance influences for these sectors separately.

After June we will have data on the 2001 e-commerce survey, including measures of electronic business process integration, which can then be linked to the 2001 ABI when it is available later in the year.

It will not be surprising if overall survey data show a degree of 'noise' and irrational behaviour in e-commerce businesses during 1999/2000. The sample will include businesses in 'start-up' phase, in which productivity and margins are less important than creating market awareness. It is most unlikely that reliable links to financial (profit) performance will be visible. However, the initial data shows a core of businesses which are advanced in adopting e-commerce, and where effects can be observed through self-assessment.

We are now developing methodology to identify links to real performance and to permit comparative analysis of the effects of both e-commerce and e-business processes.

Thanks are due to Marc Thomas, Brian Stockdale, Magdalen Williams, Jane Morgan, Debra Prestwood, Mark Pollard, Andrew Walton and others for providing data on which this – and subsequent analysis is based.

References

- Clayton T (1999). Has the Single Market led to Scale Economies? LBS Strategy Review, Spring 1999.
- 2. Atrostic and Nguyen (2002). CES working paper, January 2002.
- Barnes M and Martin R (2002). Business Data Linking an Introduction: Economic Trends No. 581, pp. 34–42.
- Clayton T and Carrol C (1996). Building Business, Panorama of EU Industry.
- Office for National Statistics (2002). First Release; E-Commerce survey 2001.
- Stockdale B (2002). UK Innovation Survey 2001. Economic Trends No. 580, pp. 36–42.

Appendix 1

Business level data from different survey sources includes the following:

E-Commerce 2000	CIS 1996/2000	R&D 1996-2000	ABI 1996–2000
IT use, and extent	• Sales	For top 400 'big spenders'	• Sales
 Internet access 	• Exports	R&D spending	Other income
 Access technology 	• Capex	Pattern of R&D spend by type	No of employees
Past use	No. employees	 Pattern of R&D by basic 	Employment costs
E-commerce use (for purchases	Qualifications	research/applied research/	Purchases of goods/
and sales)	Geographic scope	development	materials/services
Types of purchases / sales	· Innovation per cent (product	 Source of R&D funding 	Gross value added
Geographic scope	or service)	 Internal / external spending 	(calculated)
B2B / B2C	Innovation product leadership	Number and types of R&D	Capex
EDI and other network use	• Innovation per cent (process)	employees	Service exports
	· Innovation process leadership		E-commerce use (for 2000)
	Failed innovation	For 3,600 sample companies	IT software spending (for
	R&D spend and split	R&D spend	2000 onward)
	Other non-R&D costs of	 Internal/external 	
	innovation	No of R&D people	
	R&D people		In addition;
	Innovation effect		
	Innovation sources		· the quarterly investmen
	· Collaboration with other bodies		survey gives total ICT capex
	· External (public) support for		to help split hardware from
	innovation		software.
	Intellectual capital		
	Non-technical innovation		
	E-commerce use		

Experimental Monthly Index of Services

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- On 8 May 2001 the 'experimental' label was dropped from the Index of Distribution (IoD) and a monthly IoD First Release was introduced.
- The timeliness of the IoD and experimental Index of Services (IoS) has been improved by four weeks; they are now published around 91/2 weeks after the end of the month.
- Detailed documentation of the IoS is now available on the National Statistics (NS) website.
- Reviews of the motor trade and wholesale industries have been completed. Data will be revised to take on the new methodology on 28 June, when the national accounts Blue Book data set is published.
- Six new experimental Corporate Services Price Indices (CSPIs) have been introduced since December 2000, bringing the total number of CSPIs to 28. A further 15 series are currently being developed.
- Developments in methodology include improvements to the method of interpolating monthly turnover data and sampling improvements for ONS's Monthly Inquiry into the Distribution and Service Sector (MIDSS).
- Future plans include continuing the programme of industry reviews, taking on more monthly data and making further improvements to timeliness.

Introduction

This article sets out the progress made since the launch of the experimental IoS in December 2000 and it gives details of the further work that must be done before the IoS can be launched as a mainstream statistic.

The article covers:

- background and conceptual basis;
- achievements since the launch of the experimental monthly IoS in December 2000;
- · future plans;
- conclusion.

Background

In December 2000 ONS introduced an experimental constant price monthly IoS. An article in the December 2000 edition of Economic Trends' explained that the introduction of an experimental IoS was the first step towards providing, for the service industries the periodicity, range and quality of output indicators that have existed for the production industries for many years. The article described the work that had been done to produce the experimental IoS and it gave details of the planned future developments.

Conceptual basis

The experimental monthly IoS uses the same concepts and data sources as the output approach to measuring GDP for services. The monthly IoS is intended ultimately to replace the present quarterly total services index within the output approach to measuring GDP (GDP(O)); it shares exactly the same industry coverage and is

Measurement of gross value-added (GVA) for loS

The UK economic accounts are based on the European System of Accounts (ESA)², which in turn is based on the UN System of National Accounts (SNA)³. Under the ESA, the level of GVA for each industry is measured in basic prices as:

GVA = outputs

less inputs

Or, in more detail:

GVA = turnover

less purchases for intermediate

consumption

plus changes in inventories

plus own account capital formation

It is impractical to collect the data relating to each industry which are necessary to carry out the GVA calculation every month. So the IoS generally uses indirect indicators to estimate the short-term change in GVA.

The 'ESA-preferred' type of indicator is one which measures deflated gross output (or turnover) for an industry. These use an appropriate price change estimator to remove the effects of inflation.

The use of volume indicators is also acceptable under ESA regulations. This requires no deflation but will usually miss quality changes, or changes in the mix of outputs.

Other types of indicator, which measure inputs to an industry, are not now regarded as satisfactory, but for some industries they are the only short-term indicators available. The most obvious and widely used of these is employment.

consistent with the corresponding quarterly series in GDP(O). The conceptual basis for the IoS is explained in the article in the December 2000 edition of *Economic Trends*.¹ The main concepts are summarised in the box 'Measurement of gross value-added (GVA) for IoS'.

Achievements since launch of experimental IoS

This section covers:

- developments in published outputs, including: launching an IoD
 First Release; speeding-up monthly publication; and the publication of detailed documentation on IoS methodology;
- indicator developments, including: a description of the industry review process; and reviews of the motor trade and wholesale industries:
- · price developments;
- methods developments.

Published outputs

IoD First Release

The article in the December 2000 Economic Trends¹ which launched the experimental monthly IoS explained that the next key milestone in the IoS development was to launch the distribution component of the IoS as a mainstream statistic. On 8 May 2001 the experimental label was dropped from the Index of Distribution and the first IoD First Release was published. The First Release shows the output of each of the distribution industries: retail, wholesale and the motor trades, which together account for 12 per cent of the economy. Nearly all the source data used to construct the IoD have been available monthly for some years.

Before the IoD was introduced as a mainstream statistic it underwent a formal process of quality assurance. This was a joint procedure between the statisticians involved in developing the index and ONS's methodologists. The process included an ONS Peer Group Appraisal, involving all key stakeholders within ONS, and the production of an evaluation report (which is available on the National Statistics website at www.statistics.gov.uk/iod).

The conclusion from the review was that there was no argument for retaining the experimental nature of the series but some quality related issues should be addressed. In particular it was recommended that we should:

- provide users with advice on limitations of the index and a statement of the programme of improvements planned;
- give priority to developing appropriate user documentation including technical documentation on index number construction;
- put in hand work to address the concerns listed within the report through a review of the distribution industries' sources and methods.

The progress made in producing user documentation and in reviewing the distribution industries is explained later within this article.

A note on loD quality issues was made available when the loD First Release was initially published in May 2001; it can be found on the National Statistics website at www.statistics.gov.uk/iod

The experimental IoS now comprises the monthly index for total services and the published components: hotels and restaurants; transport and communication; business and finance; and government and other services.

Speeding-up the loS

On the day the IoD First Release was launched, the timeliness of the IoD publication was improved by four weeks; from 13½ to about 9½ weeks after the end of the month. On 3 January 2002 the timeliness of the experimental IoS was also improved by about 4 weeks, to match the timeliness of the IoD. Plans to further speed up the production of the IoS are set out later in this article.

Now that the IoS is produced faster, for one month in every three, the monthly IoD and the experimental monthly IoS show data for a period that is ahead of the published quarterly GDP estimate. For example, the estimates of IoD and the rest of the IoS for January 2000 were published on 4 April, whilst the preliminary estimate of GDP for the first quarter of 2002 was published on 26 April. Also the

IoD First Release publishes quarterly estimates for retail, wholesale and motor trades before this level of detail has been published within the quarterly national accounts and the experimental IoS reveals a quarterly estimate for hotels and restaurants before it has been published within the quarterly national accounts.

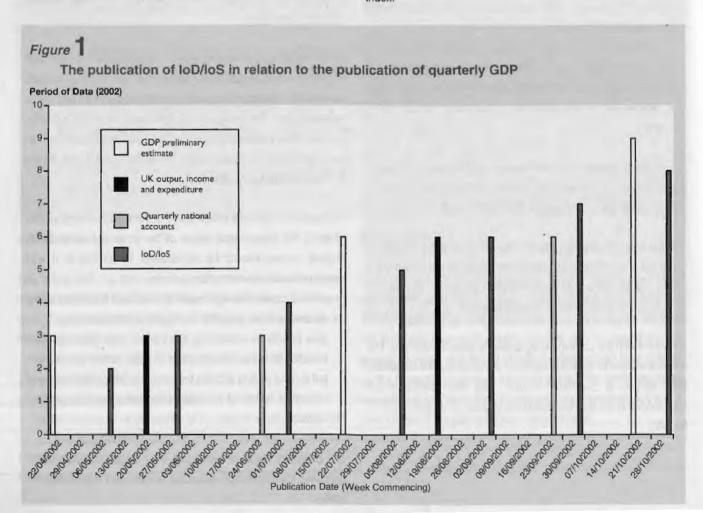
Figure 1 below shows the current timing of the monthly IoD and experimental IoS compared to the publication dates of the quarterly national accounts.

Use of National Statistics website

Every month since the launch of the experimental monthly IoS in December 2000 an IoS release has been published in the experimental statistics area of the National Statistics website. The IoS press release receives over 300 hits each month.

Documentation

In April 2001, ONS gave a presentation on the IoS development to the Official Statistics Section of the Royal Statistical Society. In the discussion that followed, we offered to make details of the construction of the IoS available once the experimental index had bedded in. Also when the IoD First Release was launched we committed ourselves to publishing detailed documentation for the index.



In January 2002 we placed detailed documentation for the experimental monthly IoS and the IoD on the National Statistics website. The IoS documentation comprises a main section under eight headings and five annexes providing more detailed descriptions (e.g. Annex A provides an algebraic description of the index construction). The documentation can be found at www.statistics.gov.uk/iosmethodology

The main page of the documentation has been receiving up to 200 hits a month and many of the pages providing detail have been receiving 50 or more hits a month.

Indicator developments

A commitment was made at the launch of the loS in December 2000 to improve both the range and quality of the indicators used to measure the loS and the service sector of GDP(O). In order to take forward the development of this work, an industry review programme has been set-up to tackle these issues. The programme for industry reviews has been decided in conjunction with the Bank of England (BoE), HM Treasury (HMT) and the Department of Trade and Industry (DTI).

The approach adopted has been to evaluate and improve the methodology on an industry-by-industry basis. The first two reviews looked at the motor and wholesale trades. The methodological changes of both reviews will be introduced on 28 June 2002, in the monthly production round coinciding with the publication of the annual UK National Accounts – the *Blue Book*.

Industry Review Process

The review process starts by quality assuring the existing data sources and methods. This involves documenting the methodology, meeting with data suppliers to fully understand the data and flagging up any issues with the data. The current methods are then evaluated against the Eurostat guidance for annual price and volume measurement⁴, in order to assess the indicators' conceptual appropriateness.

The next stage is to look at how the current methods can be improved, e.g. what alternative data sources are available. This includes both internal sources (this is mainly through taking on more of the MIDSS turnover data that has not yet been used within IoS and quarterly GDP(O)) and external data sources (i.e. other government departments, external organisations). Following the assessment of alternative sources the preferred data sources are tested and the recommendations are presented to a Peer Group Appraisal of ONS national accounts experts and methodologists.

Consultations are held throughout the review process, where appropriate, with other government departments, trade associations, industry experts, academics and other National Statistical Institutes.

Motor trade industry review Current methodology

The motor trade represents 3.0 per cent of services and 2.1 per cent of the whole economy by gross value added (GVA) weight.

Short-term movements in GVA in the motor trades are currently estimated by a combination of four output indices for: new cars; used cars; other new vehicles; and fuel. The new vehicles data are based upon Driver and Vehicle Licensing Agency (DVLA) new vehicle registrations data, while the fuel data are based upon the volume of fuel deliveries from refineries to retail fuel outlets. More detail of the specific indicators used to estimate each Standard Industrial Classification (SIC) sub-division can be found in the IoS methodology found on the National Statistics website at www.statistics.gov.uk/ iosmethodology

The main reasons for changing this approach are:

- the availability of conceptually better data sources that were previously not in existence;
- the fuel series is used as a proxy to measure two-thirds of SIC division 50, whereas it should only be used for 8 per cent;
- the current methodology uses new vehicle registration data as a proxy for sales of new and used vehicles;
- the fuel data include retail activity from companies outside SIC division 50 (e.g. supermarkets, which are part of the retail industry (SIC division 52)).

Issues faced

The main issues faced in the industry review have been listed below:

- · which deflators should be used for the motor trade;
- · how these deflators should be weighted together;
- for automotive fuel, the choice between the current method of using census data on automotive fuel deliveries against the conceptually more appropriate method which uses survey data.

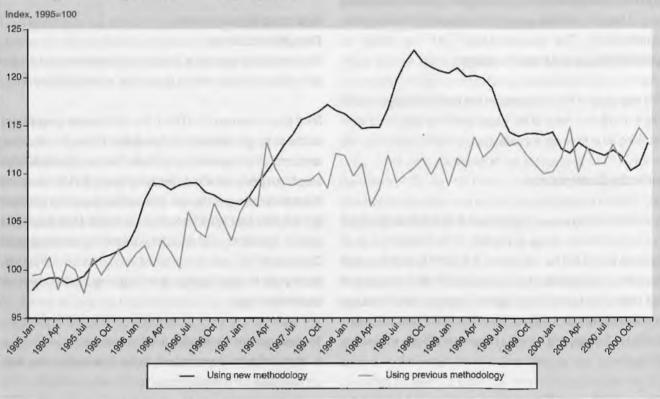
The industry review report gives full details of the issues faced (see link at the end of this section).

New methodology

For all five SIC sub-divisions we will be changing to use monthly turnover data from the MIDSS deflated by Retail Price Index (RPI) components and, in one case, a CSPI to measure the output of the motor trades. This is a conceptually better methodology in

Figure 2

Sale, maintenance and repair of motor vehicles, retail sale of automotive fuel (SIC92 division 50), constant prices, seasonally adjusted



accordance with international guidance. These five series will be weighted together by Annual Business Inquiry (ABI) turnover weights.

The graph above shows the monthly path of the new methodology for division 50 compared with the current methodology up to December 2000. These data are subject to the national accounts balancing process, which may possibly lead to coherence adjustments being applied to some months.

Benefits of new methodology

- survey turnover sources include the other revenue activities currently not being measured (servicing, repairs, parts);
- measures used car sales rather than via new car registrations;
- quality changes are conceptually accounted for within the price series.

A report explaining the motor trade industry review process in full is available from the following weblink

www.statistics.gov.uk/themes/economy/Articles/ shorttermindicators/loS_Methodology/ future_improvements.asp#irr

Wholesale industry review Current methodology

Wholesale represents 6.5 per cent of services and 4.6 per cent of the whole economy by GVA weight,

Short-term movements in gross value added in the wholesale trade are currently estimated by a combination of Retail Sales Index (RSI) proxies (42 per cent), Index of Production (IoP) proxies (35 per cent) and deflated monthly wholesale turnover (23 per cent). The turnover data come from the MIDSS and are deflated by weighted combinations of Producer Price Indices (PPIs). More detail of the specific indicators used to estimate each SIC sub-division can be found in the IoS methodology found on the National Statistics website at www.statistics.gov.uk/iosmethodology

The main reasons for changing this approach are:

- the availability of conceptually better data sources that were previously not in existence;
- seventy-seven per cent of wholesaling output is currently measured indirectly (i.e. by the use of production and retail proxies);

- current methods assume that there is no time interval between
 production and wholesale, or between wholesale and retail (using
 the RSI as a proxy for parts of wholesale meant that there was a
 one month lag e.g. the peak in wholesaling is in November but
 at the moment the data indicates December);
- the IoP proxies do not capture the wholesaling of imported goods;
- the RSI and IoP proxies do not correspond exactly to the products being wholesaled;
- the RSI proxies include retail activity not originating from wholesalers:
- more appropriate PPIs are now available to use as deflators.

Issues faced

The main issues faced in the industry review have been listed below:

- whether to use PPIs or RPIs to deflate the wholesale of goods that are bought by households (e.g. food, drink, tobacco and household goods);
- · how we should deflate of the wholesale of computers.

The industry review report gives full details of the issues faced (see link at the end of this section).

New methodology

For all SIC sub-divisions we will be using MIDSS turnover deflated by PPIs and Import Price Indices (IPIs) to measure the output of wholesale. This is a conceptually better methodology in accordance with international guidance. These series will be weighted together using weights from the ONS Prodcom survey.

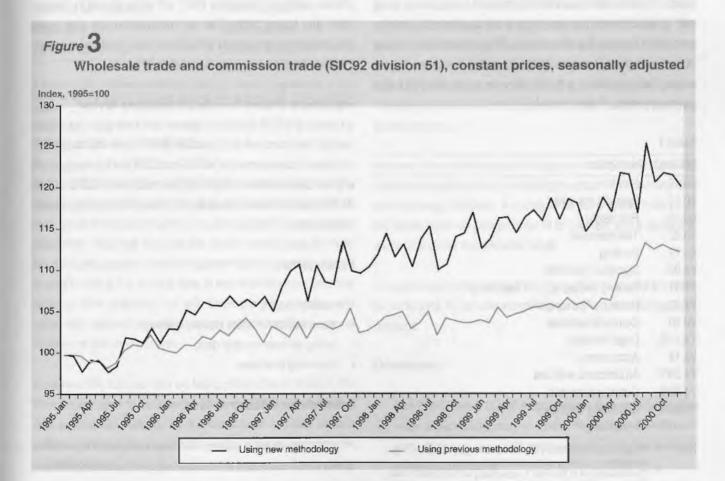
The graph below shows the monthly path of the new methodology for division 51 compared with the current methodology up to December 2000. These data are subject to the national accounts balancing process, which may possibly lead to coherence adjustments being applied to some months.

Benefits of new methodology

- the lag between retailing and wholesaling is accurately measured:
- · import activities of wholesalers will be captured;
- deflators are more appropriate and representative and include the effects of imported goods.

A report explaining the wholesale industry review process in full is available from the following weblink

www.statistics.gov.uk/themes/economy/Articles/ shorttermindicators/IoS_Methodology/ future improvements.asp#irr



Increased monthliness

We have expanded the monthly data sources for loS by:

- completing the process of converting ONS's Quarterly Inquiry into the Distribution and Service Sector (QIDSS) to monthly collection;
- receiving monthly data for air transport from the Civil Aviation Authority.

However, although the data are collected monthly we are still aggregating and treating as quarterly until there is a larger time-series of monthly data (to allow reliable seasonal adjustment of the monthly series).

Price developments

The article in the December 2000 edition of *Economic Trends*¹ mentioned the progress being made by the CSPI development programme. CSPIs measure the price movements of services provided to businesses and central and local government, but any element where the service is provided directly to the individual for final consumption is excluded (as these are measured by the RPI). An article in the July 2000 edition of *Economic Trends*⁵ outlined the progress made in developing CSPIs.

Improved range of CSPIs

Indices for 28 industries are currently released every quarter, along with an experimental top-level index in the experimental statistics area on the National Statistics website. This represents an increase of six series since December 2000. As well as the series that are already being published, a further 15 series are undergoing active development (see Table 1 below).

Table 1

Table I		
SIC code	description	
55.10	Hotels	
60.10	Inter-city services	
60.10	Rail freight	
60.22	Taxi operation	
65.12	Banking	
66.03	Insurance (non-life)	
71.31	Renting and agricultural machinery	
71.33	Renting office machinery	
72.20	Computer services	
74.11/9	Legal services	
74.12	Accountancy*	
74.20/1	Architectural activities	
74.20/3	Quantity surveyors	
74.20/4	Consulting engineers	
74.40	Advertising**	

Note:- * In due course, a separate index will be developed for management

consultancy - currently combined with accountancy,

The development of the index for advertising will be divided between

The development programme for CSPIs involves close liaison with the IoS development programme, to ensure that the priorities for indices being developed by CSPI take account of the requirement for deflators within IoS and GDP(O).

Methods developments

Order of processing

Where monthly data are not available we derive the monthly path using the Holt-Winters method to forecast data and a cubic spline to interpolate the monthly path (these methods are explained within the loS documentation at www.statistics.gov.uk/iosmethodology). We have improved the method of interpolating monthly data by changing the order of processing so that we now forecast three quarters (or years) ahead before we interpolate a monthly path using a cubic spline. This approach avoids the potential for distortion at the end of a series when a cubic spline is applied to series without employing forecasts beforehand.

Optimal allocation of MIDSS sample

A review of the MIDSS highlighted that the allocation of the sample between industries was no longer optimal due to changes in the mix of industries. Therefore, in June 2001, the sample was redesigned using a Neyman allocation, whilst maintaining the overall sample size. For practical reasons, the reallocation was introduced in three phases starting in September 2001, with other phases in January 2002 and March 2002. The full reallocation has now been implemented and the sample will continue to be monitored to ensure it reflects the industrial composition of services.

Implications of Short-Term Output Indicators Review⁶

A number of STOIR recommendations have been addressed since the IoS was launched in December 2000. These include the coordination of developments of MIDSS and CSPI and the development of practical acceptance criteria for the inclusion of CSPIs in IoS/GDP(O) (which would be taken on through the industry review programme).

Future plans

This section covers:

- · the schedule for future industry reviews;
- taking on more monthly data;
- improving timeliness.

Schedule for industry reviews

An industry-by-industry approach has been adopted to improve the quality of indicators used to measure output in the IoS and GDP(O).

As this article has already explained, the first two industries reviewed were motor trade and wholesale.

The rationale for reviewing these industries was to review the components that make up the IoD, which has First Release status.

In planning the future programme of reviews, we have been faced with competing priorities. These include:

- targeting industries that have scope for conceptual improvement;
- · taking on new data sources;
- · reviewing rapidly changing industries;
- · importance by GVA weight.

After consultation with our main users, we have set out the future programme of reviews that yields a balanced approach to address these various priorities.

Table 2

Industries to be Reviewed	Implementation date	
Retail (excluding motor trade)	Blue Book 2003	
Computer services	Blue Book 2003	
Hotels and restaurants	Blue Book 2003	
Business services (pt 1)*	Blue Book 2003	
Post and telecommunications	Blue Book 2003	
Recreation, culture and sport	Blue Book 2004	
Business services (pt 2)*	Blue Book 2004	
Real estate	Blue Book 2004	
Land transport	Blue Book 2004	

Business services (which includes accountancy, architecture, legal services, market research and many other corporate services) has been split into two for practical reasons.

Taking on more monthly data

In April 2000, around 70 per cent of QIDSS were converted to monthly and the remainder were converted in January 2001. However, at least two to three years' monthly data are required to allow seasonal adjustment. Now that we have two years' monthly data for those industries that became monthly inquiries in the first tranche we have started to look at the monthly data to see whether stable seasonal patterns have emerged. We will revise the data to reflect the seasonally adjusted monthly series as reliable monthly seasonal adjustment becomes possible.

Where monthly turnover data are being collected for an industry, but they are not used to compile the IoS and GDP(O), the review of data sources and methods for that industry will consider whether deflated turnover data would be a more appropriate proxy for estimating GVA. A number of indicators in the IoS are provided by non-ONS data suppliers (e.g. other government departments). Where these are not provided as monthly data we are exploring whether monthly data could be made available.

Improving timeliness

Both the IoD and the experimental IoS are currently published around 9½ weeks after the end of the month. We aim to improve the timeliness of the IoD and the experimental IoS by around 1½ weeks at the end of 2002. The exact relationship with the quarterly national accounts is still to be resolved but the monthly IoD and the experimental IoS will either be published coincident with, or a day or two after, the publication dates of the quarterly GDP First Releases (Preliminary GDP, UK Output, Income and Expenditure and the UK Quarterly National Accounts). We expect to achieve this mainly by becoming more efficient at quality assuring the data and compiling the indices, as the procedures become more established. There will be very little impact on the availability of source data.

Conclusion

Good progress has been made in the development of the IoS since the launch of the experimental index in December 2000. The experimental label has been dropped from the IoD and it is now being published monthly as a First Release. Both the IoD and the experimental IoS are now being published after 9½ weeks, four weeks earlier than they were published in December 2000. The programme of work to review and improve data sources is well under way. Two industries have been reviewed and the new methodologies and data sources will be introduced on 28 June. A further five reviews are in progress.

However, there is still much to do in terms of reviewing and improving data sources and methods, increasing the proportion of monthly data and improving timeliness. It is likely to be some two to three years before the IoS is considered to be 'fit for purpose' and a decision is made to drop the 'experimental' label.

Any questions or comments on this article are welcome, as are offers to participate in the process of improving industry sources and methods.

References

 Pike R and Reed G (2000). Introducing the Experimental Monthly Index of Services. Economic Trends, No. 565, pp. 51–68.
 www.statistics.gov.uk/themes/economy/articles/general/ extracts/downloads/

Experimental_Monthly_loS_Aug_2000.pdf

- Eurostat. European System of Accounts 1995 (ESA95). ISBN 92 827 7954 8.
- UN, OECD, IMF, EU. System of National Accounts 1993 (SNA93). ISBN 92 1 161352 3.

http://esa.un.org/unsd/sna1993/handbooks.asp

- Eurostat. Handbook on price and volume measures in national accounts, ISBN 92 894 2000 6. Available for download from: http://europa.eu.int/comm/eurostat/Public/datashop/printcatalogue/EN?catalogue=Eurostat&product=KS-41-01-543--N-EN
- Palmer N (2000). Corporate Services Prices: Publication of Prototype Index. Economic Trends, No. 560, pp. 33–45.
 www.statistics.gov.uk/themes/economy/Articles/ pricesandinflation/downloads/cspi_July_00.pdf
- Office for National Statistics (2000). National Statistics Quality
 Review Series No 1 Review of Short-Term Output Indicators.
 Available for download from
 www.statistics.gov.uk/nsbase/methods_quality/
 quality_review/downloads/STOIR2000_econ.pdf

For more information on the IoS, including latest data and some of the articles above, please visit the IoS area on the National Statistics website www.statistics.gov.uk/ios