

Economic Trends

Managing Editor: Prabhat Vaze

Editor: Paul Dickman

London: TSO

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In Brief

Articles

This month we feature two articles.

Please note that the Jobs in the Public Sector article is the same one that has also been published in the September 2003 Labour Market Trends.

Ole Black, lan Richardson and Rhys Herbert of ONS provide commentary, tables and charts to illustrate changes in Jobs in the Public Sector to June 2002 from the 1960s onwards. The general government and public non-financial corporations sectors are defined and details of changes in coverage from 1998 to 2002 provided.

Robin Lynch and Tony Clayton of ONS give an account of Globalisation – new needs for statistical measurement. The term 'globalisation' is explained and the reasons why we need to measure it discussed. The article covers four measurement areas, and gives a brief UK perspective on statistical needs and how they could be met. They are (a) the increasing specialisation by firms in specific processes and some examples of what it means for measurement, (b) measurement issues associated with national units in multinationals, (c) the role of intangibles, especially those which can be transferred or sold electronically and (d) financial flows of capital, or payments for goods and services by multinationals.

Recent economic publications

Annual

Share Ownership 2002. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p930.asp

Quarterly

Consumer Trends: 2003 quarter 1. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p242.asp

United Kingdom Economic Accounts: 2003 quarter 1. TSO, ISBN 0 11 621639 5. Price £26. Also available for downloading from the National Statistics website www.statistics.gov.uk/products/p1904.asp

UK Trade in Goods analysed in terms of industries (MQ10): 2003 quarter 2 (published 12 September). Available for downloading from the National Statistics website www.statistics.gov.uk/products/p731.asp

Monthly

Financial Statistics: August 2003. TSO, ISBN 0 11 621599 2. Price £23.50.

Focus on Consumer Price Indices: July 2003. Available for downloading from the National Statistics website www.statistics.gov.uk/products/p867.asp

Monthly Review of External Trade Statistics (MM24): July 2003 (published 12 September). 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 or online at www.tso.co.uk/bookshop

Economic Update - September 2003

Rhys Herbert, Macroeconomic Assessment - Office for National Statistics

Address:D110, Government Buildings, Cardiff Road, Newport, NP10 8XG tel: 01633816162, E-mail: rhys.herbert@ONS.gov.uk

Overview

GDP growth recovered only slightly in the second quarter of 2003 after the weak first quarter with external indices of output only slightly stronge showing little sign of a strong recovery. Retail sales picked up in the second quarter, particularly in June but fell back slightly in July. Private investment demand seemed to stabilise during 2002 but shows little sign of recovering. While the financial position of the corporate sector has improved, the leve of indebtedness is nevertheless still high. Government spending is currently a significant contributor to economic growth but the public sector finances are falling further into deficit. Export performance has fallen back after the improvement at the start of 2003. Overall labour market aggregates remain fairly stable, and private sector wage pressures are minimal. Producer prices have gone up slightly as the oil price has risen once again. The RPIX measure of consumer prices remains above target but is gradually falling

GDP activity - overview

Gross Domestic Product (GDP) is estimated to have risen by 0.3 per cent in the second quarter of 2003, slightly faster than the 0.1 per cent recorded in the first quarter of 2003 but significantly below the last three quarters of 2002 (figure 1). The annual rate of growth in the second quarter, at 1.8 per cent, is the lowest for a year.

Figure 1 **GDP** growth 3.5 3 2.5 quarter on quarter a year ago 1.5 quarter on previous quarter 0.5 1997 1998 1999 2000 2001 2002 2003

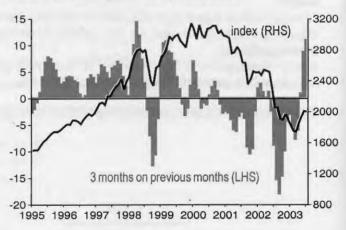
Overall, movements in the UK economy are similar to those around the world, as number of economies experienced some pick up in growth in the second quarter of 2003, after little or no growth in the first quarter. Both the US and Japanese economies have recently showed some sign of acceleration though whether this will be sustained must be debatable particularly as in the case of the former it was partly due to higher defence spending. By way of contrast, activity Europe, particularly within the EMU area seems to have remained subdued.

Financial Market activity

World stock markets including that of the UK have continued to pick up in

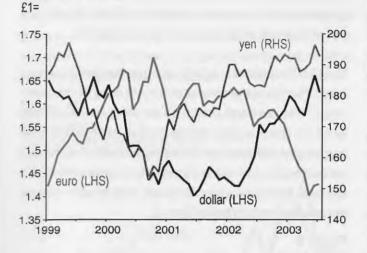
recent days. After declines in the first three months of this year the UK FTSE all share index has subsequently made up more than all of its losses on the year. As of late August the index was up over 20% from its low for the year and over 10% from its level at the start of the year. UK equities are still down by about a third from their level in December 1999 (figure 2). Bond markets have by and large been moving in the opposite direction to equity markets rising initially this year before subsequently selling off over the last month or so. Sterling money market rates have also risen over the last month, implying that financial market participants feel that the July cut in base rates to 3.5% will be the last move for this cycle.

Figure 2 FTSE - all share price index, end month



The movement of sterling during 2003 has been more marked than in recent years and may have potential implications for the economy. The start of 2003 saw sterling depreciate against the euro and strengthen against the dollar, with the effective exchange rate falling 7.2 per cent between December 2002 and May 2003. The pound's subsequent performance has been more stable but as of late August the effective exchange rate was still over 6% below its level at the start of the year (figure 3).

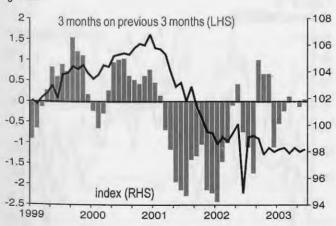
Figure 3
Exchange rates



Output

Manufacturing activity rose slightly in quarter two for the second quarter in a row and the 0.1 per cent gain meant that activity was also flat when compared with a year ago (figure 4). It is though worth remembering that the figure for the second quarter of last year was distorted downward by the Jubilee holiday. Some of the second quarter rise was due to big gains in the manufacture of weapons and ammunition that were presumably Gulf related. Transport equipment including cars and car body parts were other areas of strength. Finally a second successive quarterly rise in the production of investment goods provided tentative evidence that the investment cutbacks that have occurred over the past couple of years may now have run their course. It appears then that manufacturing activity is flattening out after the very weak performance of the last couple of years.

Figure 4
Manufacturing output
growth



External surveys of production, which were much weaker than official numbers in the first quarter, have shown only tentative signs of a rebound in quarter two. The CBI survey is still showing little sign of a recovery in

orders or output. The latest CIPS index rose slightly but is still below the crucial 50 point, which is taken to mean that manufacturing activity is still contracting (figure 5).

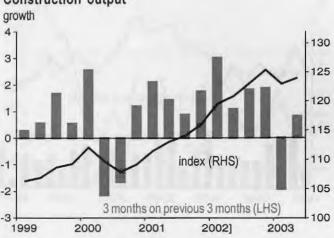
Figure 5
External Manufacturing



Energy output fell significantly during in the first quarter. Activity in mining and quarrying, in electricity production and oil and gas extraction were all down when compared with the back end of last year. The second quarter picture, however seems to be more mixed, as electricity rebounded possibly due to air conditioning demands, while the other two sectors declined further.

One of the main causes of the sluggish first quarter growth in output was a 1.9 per cent fall in construction activity. Construction has been a considerable support to the economy over the last year or so. Last year, it rose by 7.5 per cent following on from 3.7 per cent in 2001. So the first quarter fall in output came as a considerable shock. Fortunately the second quarter numbers suggest that this was an aberration. Construction output rose by 0.8 per cent in the second quarter when compared with the previous three months and by 2.6 per cent compared with a year ago (figure 6). External surveys meanwhile suggest that output was continuing to rise at the start of the third quarter.

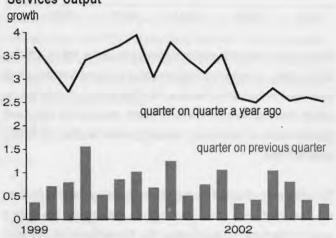
Figure 6 Construction output



A weakening in the service sector's growth rate was the other principle cause of the first quarter slowdown. The quarterly growth rate went from 0.8 per cent in the last quarter of 2002 to 0.4 per cent. This reflected a slowdown in most areas of services outside government. As strength in the service sector has been the main reason why the economy's slowdown has so far been so mild by historic standards, the question of whether this was a blip or the start of a trend is an important one.

Fortunately the second quarter figures provide some reassurance. The quarterly growth rate slowed a little further to 0.3 per cent but hardly looks like the beginnings of a major slide. The area of fastest growth over this period was distribution, presumably because of the rapid retail sales growth over the quarter, while it was business services that saw the bulk of the slowdown (figure 7).

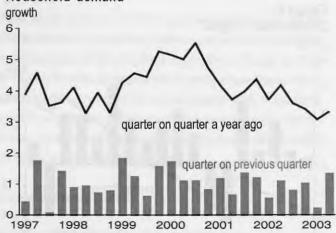
Figure 7 Services output



Household demand

Consumer spending appears to have accelerated markedly in the second quarter. A weakening in household demand growth was one of the key causes of the slower first quarter growth rate on the expenditure side.

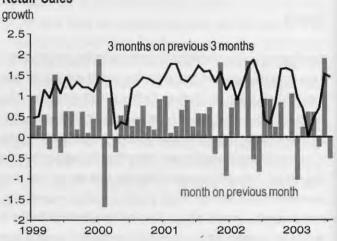
Figure 8 Household demand



The quarterly rate eased from 1.0 per cent in the fourth quarter of 2002 to 0.2 per cent in the first three months of 2003. In quarter two though the consumer seems to have come roaring back with spending up 1.3 per cent on the quarter and 3.3 per cent on the year (figure 8).

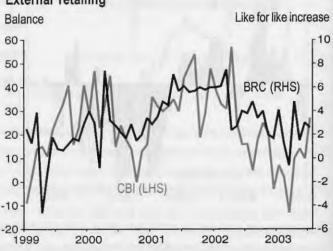
The bulk of this acceleration is due to a pick up in retail sales. These were up by 1.5% on the quarter a marked contrast with a sluggish first quarter. The bulk of this rise though was due to a very strong June, as sales rose by 2.0 per cent compared with the previous month. Indeed when comparing the retail sales in the first and second quarters it is noticeable that the difference in the quarterly growth rates is almost solely due to a very weak January and a very strong June, while activity in the other four months was broadly similar (figure 9).

Figure 9 Retail Sales



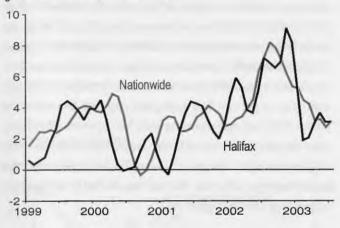
While the June surge may partly reflect a rise in spending previously kept in check by geopolitical factors it also is likely to reflect an extreme reaction to the unseasonably hot weather. Indeed sales fell back slightly by 0.4 per cent on the month in July.

Figure 10 External retailing



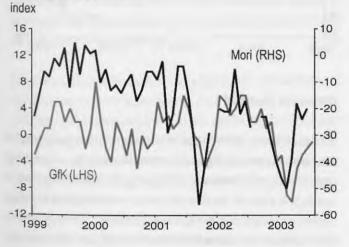
External figures provide a partial confirmation of the picture painted by the retail sales figures. Both the BRC and CBI retail surveys have bounced since the end of the Iraqi war (figure 10) but while the BRC number was strong for June, the CBI survey was more subdued. However, the latter recorded a marked acceleration in July and overall both seem consistent with the recent upturn in the official figures.

Figure 11 House prices growth:3 months on previous 3 months



Another positive external sign is consumer confidence, which weakened sharply in early 2003 but has now recovered much of its losses (figure 12). Less positive news though is provided by surveys of house prices. Rapid house price growth has been a key support for consumer spending over the last few years. Both the Halifax and Nationwide surveys confirm that the rises have now moderated substantially, and so a further lift to expenditure from this area looks to be less likely (figure 11).

Figure 12 Consumer Confidence



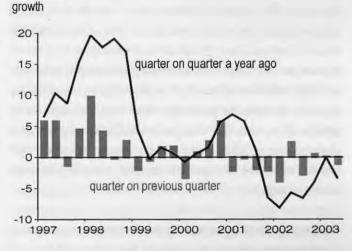
Business demand

Much of the weakness in investment over the last few years has been

due to business investment, which fell sharply during 2001 before seeming to have stabilised in 2002.

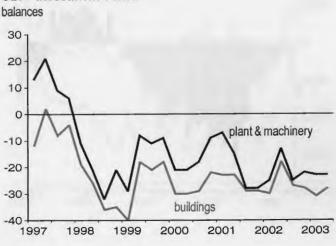
The first quarter of 2003 saw fixed investment flat both compared with the last quarter of 2002 and with the same quarter a year ago (figure 13). However, the second quarter saw a further small fall in spending of 1.1 per cent, which was due to more cut backs in spending on equipment.

Figure 13 Business investment



An increase in investment depends upon firms finding it both affordable and profitable to invest. While the first quarter has seen a welcome improvement in the financial balance sheets of private non-financial corporations (PNFCs) this is relatively minor and the level of debt remains high. Firms continue to report a lack of pricing power, and are reporting very low capacity utilisation. The combination of these makes it unlikely that investment will pick up without a sharp increase in demand and surveys of investment intentions continue to show no plans to increase spending (figure 14).

Figure 14 CBI - Investment Plans



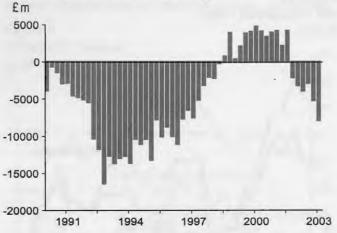
Dis-aggregated investment figures show that falls in investment, relative to a year ago reflect a by now familiar picture. Weakness is still primarily due to cut backs in machinery and equipment spending, which has been partially offset by positive growth in transport equipment and by strong growth in construction both of new dwellings and of other structures.

Government demand

Government demand picked up sharply in the first quarter of 2003, posting 2.5 per cent constant price growth in the first quarter of 2003, the highest figure since 1991. Spending fell back to only 1.1 per cent in the second quarter but due to the earlier acceleration the year on year growth rate rose to 4.9 per cent. Much of the slowdown between the first and second quarter was due to weaker defence spending and reflects the difficulty of deciding to which period exactly the spending on the war should be allocated. In cash terms government expenditure has been growing significantly faster than GDP since the start of 2000, and in the year to the second quarter of 2003 it grew by 9.5 per cent, compared with GDP growth of 4.7 per cent. This has lead to a significant rise in the government consumption deflator.

The ongoing growth in government expenditure has come as revenue growth is slowing, reflecting the slowdown in the economy and as a result the government sector is now a major net borrower once again. Non-seasonally adjusted monthly public sector net borrowing data now extends to the end of the second quarter of 2003 and shows the extent of the rise in the deficit. April and May saw only slightly higher net public sector borrowing than a year ago, however June saw net borrowing of £5.0 billion compared with £1.9 billion the previous year. Initially figures for July saw a net lending figure of £1.5 billion, however this was well down on the positive balance for July of last year of £3.3 billion (figure 15).

Figure 15
Central Government Net Lending



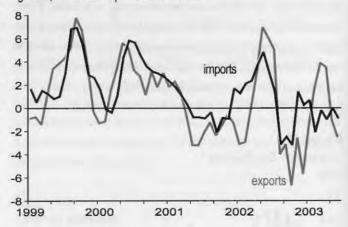
Imports

Recently the detection of customs fraud has lead to major revisions in import data. These revisions have lead to higher imports and a correspondingly more negative trade balance over the last five years. The import data used in the GDP figures do not as yet reflect these adjustments but they will do after revisions are published in late September.

Monthly goods figures, including the adjustments for fraud, are available up to June. These show imports falling by 0.9% when compared with the previous three months. The performance of imports from the EU and non-EU areas has been significantly different in recent months. Volumes of imports from the EU have fallen by 3.9 per cent when compared with the previous three month period, while imports from the rest of the world went up by 2.7 per cent. This discrepancy may partly be explained by the rise of the euro against sterling and other currencies but it is hard, which will probably have caused EU exporters to lose out when compared with their competitors. However, it is unlikely that this fully accounts for the recent divergence, which may also have been affected by the adjustment to the numbers for fraud (figure 16).

Figure 16 UK trade

growth, 3 months on previous 3 months



Overseas Demand

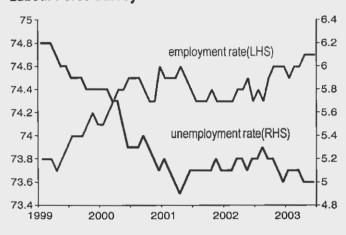
After strengthening in the first half of last year, exports subsequently fell back in the second half. The early months of this year saw a recovery of exports, so much so that they contributed significantly to GDP growth in quarter one. However, this strength has not been maintained and since April the volume of exports has subsequently declined. This erratic monthly path partly reflects extreme fluctuations in non-EU exports, which are partially due to problems with monthly custom returns. However, the fall in total exports over the last three months by 2.6% when compared with the previous three months is primarily due to falling exports to the EU area and so must be a result of other factors. In particular the clamp down on

illegal activity is likely to have been at least a partial contributor (figure 16).

Labour Market

Headline labour market statistics continue to remain fairly stable. Employment is high, with the labour force survey (LFS) employment rate at 74.7 per cent in the three months to June, slightly up on the previous three months, while the LFS count of employment increased by 54,000 over the same period. The employer survey 'workforce jobs' data has shown a more modest rise of 45,000 in March 2003 compared with December. The ILO unemployment rate was 5.0 per cent in the three months to June (figure 17), unchanged from last month and still slightly below that of 2002. The claimant count unemployment rate, at 3.1 per cent in June, has not changed since the start of 2002.

Figure 17
Labour Force Survey



Full-time employment has been falling recently, with the number of full-time employees down by 54,000 in the three months to June when compared with the previous three months. In contrast the number of employees working part time was flat over the past three months and was up by 1.1 per cent on a year ago.

Many recent job gains have been in self-employment, with the number of self-employed workers in the three months to June up 4.1 per cent compared with the previous three months and 6.0 per cent compared with a year ago. In comparison the number in employment has been flat, showing growth of only 0.2 per cent on a year ago and the number of unpaid family workers and people on government programmes have both shown sharp falls.

The industry dis-aggregation from 'workforce jobs' figures shows that the manufacturing sector continues to lose jobs, whilst echoing the output data the main sources of job creation have been 'public administration, health and education', construction and 'distribution, hotels and restaurants'. In the year to March manufacturing lost 125,000 jobs, whilst services gained

208,000 of which 157,000 were in been 'public administration, health and education' and 63,000 in 'distribution, hotels and restaurants'.

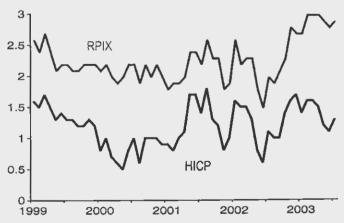
The average earnings index points to continued weakness in wage gains, with the headline rate moderating to 3.1 per cent, in June from 3.5 per cent in May. This is well below the 4.5 per cent figure that the Bank of England considers broadly consistent with their inflation target. The gap between public and private sector earnings growth widened out once again in June, as public sector wage growth remained stable at 5.1 and private sector wages slowed to a 2.6 per cent growth rate.

Prices

Output price inflation rose in July for the second month in a row, as annual inflation rose went up from 1.2 to 1.4 per cent. This was due to higher oil prices and to a slight rise in underlying inflation. Excluding food, beverages, tobacco and petroleum output prices rose by 1.3 per cent in July compared with 1.2 per cent in June, suggesting that underlying price inflation is still moderate but has probably now stabilised after falling from its March peak. Input prices showed sharp rise in July, accelerating to 2.8 per cent compared with a year ago. Input prices tend to be more responsive to changes in oil prices and exchange rate movements than output prices.

Consumer price inflation rose slightly in July breaking the pattern of two consecutive months of declines in inflation. The Government's current target measure RPIX was 2.9 per cent in May, which is still down from the recent peak of 3.0 per cent in February-April, while the RPI was also up at 3.1 per cent. The rise was due to higher seasonal airfares and to sales prices being marked down by less than a year ago. The HiCP also rose slightly to 1.3 per cent from 1.1 per cent in June (figure 18).

Figure 18
Prices
growth, month on a year ago



Forecasts for the UK Economy

A comparison of independent forecasts, August 2003

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 2003 and 2004, updated monthly.

	Inde	ependent Forecasts for 200	3
	Average	Lowest	Highest
GDP growth (per cent)	1.8	0.8	2.2
Inflation rate (Q4: per cent)			
- RPI	2.5	2.1	3.4
- RPI excl MIPs	2.5	2.0	3.2
Unemployment (Q4, mn)	0.99	0.92	1.09
Current Account (£ bn)	-16.7	-39.3	-2.7
PSNB *(2003-04, £ bn)	31.5	24.6	35.2

	Inde	pendent Forecasts for 200)4
	Average	Lowest	Highest
GDP growth (per cent)	2.4	-0.2	3.2
Inflation rate (Q4: per cent)	2.7	1.7	3.6
RPI excl MIPs	2.3	1.5	3.0
Unemployment (Q4, mn)	1.02	0.79	1.30
Current Account (£ bn)	-20.7	-43.4	-1.2
PSNB* (2004-05, £ bn)	33.8	27.0	44.9

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 Claire Coast-Smith, Public Enquiry Unit 2/S2, HM Treasury, 1 Horse Guards Road, London SW1A 2HQ (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 - September 2003

Gladys Asogbon, Marcoeconomic Assessment - National Statistics

Address: D4/20, 1 Drummond Gate, London, SW1V 2QQ, tel: 020 7533 5925, E-mail: gladys.asogbon@ONS.gov.uk

Overview

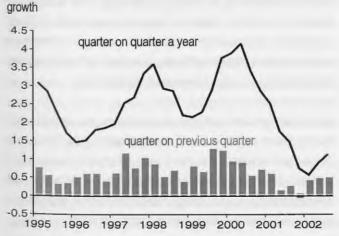
Output growth was low or negative in all the major economies in the first quarter of 2003, contracting in Germany and Italy driven mainly by low or falling investment and negative contributions from trade. Growth was marginal and fairly subdued in France, Japan and the US. Consumer demand is still weak in most major economies although it made modest contributions to quarterly GDP in 2003 quarter one. Trade also slowed from a strong second half of 2002 and investment demand is still at best weak or in decline in most major economies. The decline in industrial output was reversed in most major economies in 2003 quarter one. Unemployment is flat or inching up in most economies and employment growth is weakening. Inflation has increased slightly in the latest period but inflationary pressures overall remained subdued.

EU15

The latest data for 2002 quarter three shows that the EU economy grew by 0.4 per cent, the same rate of growth as the two preceding quarters.

EU GDP growth has been subdued since the start of 2001(figure 1). The main drivers of this in 2001 were falls in investment and exports. In 2001 quarter four GDP declined for the first time since 1993 quarter one. A demand breakdown shows a modest strengthening in consumer expenditure and a stronger increase in exports in the second and third quarters of 2002. Investment demand also made a positive contribution to quarterly GDP after six consecutive quarters of contraction.

Figure 1 GDP: EU15



As with GDP, industrial production in the EU has been subdued since 2001, when the index grew by just 0.2 per cent. For 2002 as a whole, the index fell by 1.0 per cent. In 2003 quarter one, the index grew by 0.3 per cent following strong monthly increases in January and February, partially offset by a fall in March. This growth came after a contraction in the index in the previous quarter of 0.4 per cent.

June 2003 figures show consumer price inflation increasing slightly to 2.1 per cent from 2.0 per cent in the previous month. Prices at the factory gate are have increased by 0.6 per cent in both May and June, a slower increase than in the previous months of this year.

EU employment figures continue to show growth, although at a lower rate. Annual growth in the year to the third quarter was 0.5 per cent. The unemployment rate is inching up with 8.1 per cent of the workforce unemployed as of June up from a trough of 7.3 per cent in the second quarter of 2001.

Annual earnings showed growth in the year to the third quarter, of 3.3 per cent, following growth in the second quarter of 2.5 per cent and 3.4 per cent in the first quarter; the figures are volatile and show no signs of slowing in response to the rise in unemployment.

Germany

The German economy contracted by 0.2 per cent in the first quarter of 2003, having posted no growth in the previous quarter. Overall GDP grew by just 0.2 per cent for 2002 as a whole compared with 0.8 per cent in 2001.

The negative GDP in 2003 quarter one was mainly due to negative contributions from investment and trade (as imports grew faster than exports), which have been the main causes of the global slowdown in 2001/2002, partially offset by a modest increase in private consumption. More generally however there had been a lack of any appreciable domestic momentum in the German economy. Household consumption made a negative contribution of 0.3 per cent in 2002 and investment expenditure has been in decline, showing contractions in annual growth in both 2001 and 2002. Government demand has made only small contributions in recent years and did not make any contribution to GDP in

quarter one. The impetus that came mainly from exports in 2002 quarters two and three has slowed considerably in the last two quarters. Germany's growth rate remains below the EU average with quarterly GDP being below the quarterly GDP growth rate of the EU as a whole in every guarter of 2002.

The IOP on the other hand grew by 0.7 per cent in quarter one rebounding from a 0.3 per cent contraction in the previous quarter. This was dominated by a very large monthly increase in January of 1.9 per cent. Growth in the index has been subdued since 2001, when it grew by only 0.5 per cent, compared to growth of 6.2 per cent in 2000. Overall in 2002, the index fell by 1.1 per cent

The CPI shows consumer prices growing by 0.9 per cent in the year to June slightly higher than the 0.6 per cent increase in prices in May. Prices have grown by less than one per cent for three months in a row since April and are well below the EU average of 2.1 per cent (figure 2). Germany has the lowest consumer price inflation of the large Euro economies. Figures for the PPI for the same period show prices at the factory gate increasing by 1.3 per cent in the year to June, the same increase as in the previous month.

Figure 2 CPI:Germany & EU 15 growth, month on a year ago



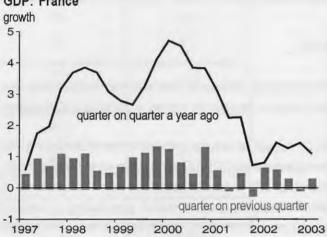
Unemployment in Germany has shown an upward trend recently, with the rate in June at 9.4 per cent, the same as the previous two months and the highest rate since April 1998. There has been a gradual increase in the unemployment rate from the recent trough of 7.6 per cent in quarter one 2001. Similarly employment growth contracted for the sixth consecutive quarter in the first quarter of 2003, with annual growth figures for the quarter showing a decline of 1.3 per cent, accelerating from a decline of 1.1 per cent in the previous quarter.

Having hovered between 1.0 per cent and 1.1 per cent between 2001 quarter three and 2002 quarter two and despite the increase in unemployment, earnings growth has picked up in the year to the fourth quarter, growing by 2.4 per cent, the largest growth in earnings since 2000 quarter four.

France

GDP growth in the first quarter of 2003 was 0.3 per cent having contracted by 0.1 per cent in the previous quarter (figure 3). Overall in 2002, the economy grew by 1.2 per cent, the lowest growth rate since 1996 but still one of the highest growth rates of the major Euro economies that year.

Figure 3 GDP: France



The French economy has slowed significantly over the last two years, in line with global trends, although it outperformed the EU 15 average in the first two quarters of 2002. France's performance has been helped by recent income tax cuts, which have underpinned growth in disposable income and consumer spending. In quarter one of 2003, GDP was supported by small increases in household spending, investment and stocks, offset by a negative contribution from trade due to falling exports. Government consumption did not add to quarterly GDP.

As with Germany, industrial production in France grew considerably in the first quarter, by 0.9 per cent due to significant monthly increases in January and February. It was also strongly influenced by energy output in March. However, industrial production fell by 0.8 per cent in April reflecting primarily a fall in energy output from relatively high levels in quarter one, consistent with prevailing weather conditions.

Consumer price inflation rose steadily from the second half of 2002 and this continued into the first guarter of 2003 reaching 2.6 per cent in March. However since then inflation has slowed to 1.9 per cent in June and is 0.2 percentage points higher than the previous month. This primarily refected increases in fresh fruit prices in the wake of drier weather conditions. Producer prices had also been rising since the second half of 2002, having fallen in the first half of the year. However, this increase is easing with the PPI slowing from 0.8 per cent in April to 0.5 per cent in June.

The French unemployment rate, like that in most major economies has also been rising steadily over the past year. It has risen from 9.1 per cent at the start of the year to 9.4 per cent in June. This is the highest rate sine July 2000. Employment growth also continued its slowdown in the first quarter of 2003, with no annual growth following 0.3 per cent growth in the previous quarter and well down on growth of 2.3 per cent at the start of 2001.

Following on from the labour market conditions, annual earnings growth continued to ease, slowing from 4.1 per cent in the fourth quarter of 2001 to 2.9 per cent in the first quarter of 2003.

Italy

Data for 2003 quarter one shows the Italian economy contracting by 0.1 per cent after growing by 0.4 per cent in the previous quarter. Overall in 2002, the economy grew by 0.4 per cent compared to growth of 1.7 per cent in the previous year and 3.3 per cent in 2000.

A breakdown of the components of quarterly GDP show a substantial contribution from stockbuilding of 1.5 per cent offset by negative contributions from trade (there was a large fall in both exports and imports) and investment, which deteriorated quite sharply in the first quarter. Government demand made a small positive contribution of 0.1 percentage points to quarterly GDP. Household demand, which had helped hold up quarterly GDP in the last three quarters of 2002, did not make a contribution in 2003 quarter one. More generally, Italy has had one of the lowest annual growth rates in EU15 over the last few years.

The IOP contracted in the first quarter of 2003 by 0.6 per cent, making two consecutive quarters of contraction in the index. Industrial production contracted for all four quarters of 2001. Annual figures show that for 2002 as a whole, the index contracted by 1.3 per cent, following a fall of 1.0 per cent in the previous year.

Inflation in Italy has been steady at 2.7 per cent for the three months since March 2003. However in the latest month, the index has fallen by 0.1 percentage points to 2.6 per cent. Italian inflation is still abve the EU 15 average of 2.1 per cent in June. Producer prices increases have also slowed over the last four months with the index falling from 2.8 per cent in February to 1.4 per cent in June.

Figures on the Italian labour market show unemployment in 2002 broadly flat at 9.0 per cent, but an improvement on 9.5 per cent in 2001. Recently updated figures show small improvements to unemployment in the last three months from February. The rate is currently 8.7 per cent in April

2003, a decline of 0.2 percentage points from January 2003 (figure 4). Employment growth was 0.8 per cent in the year to the first quarter of 2003 down from growth of 0.9 per cent in the year to 2002 quarter four.

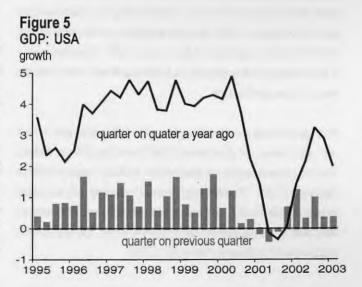
Figure 4
Italy: Unemployment
percentage of workforce

12
11.5
11
10.5
10
9.5
9
8.5
1995 1996 1997 1998 1999 2000 2001 2002 2003

Earnings growth picked up to 2.8 per cent in the year to the fourth quarter of 2002, but has now fallen back a touch in the first quarter of 2003 to 2.5 per cent although the figures are volatile from quarter to quarter.

USA

The latest figures for the US economy for 2003 quarter one show the economy growing by 0.4 per cent, following growth in the previous quarter of 0.3 per cent (figure 5).



Growth in 2003 quarter one was driven by personal consumption, which was also the main driver throughout 2002. Growth was also impacted positively by the substantial decline in imports, which had been fairly strong in 2002 especially in quarter two. However all other contributors

to quarterly GDP growth were weak or negative and the impetus of the early quarters of 2002 seems to have stalled. More generally, quarterly GDP growth in 2002 had been well below growth rates seen in the 1990s although performance was better than in every quarter in 2001 except quarter four. Overall, growth in 2002 was 2.4 per cent, driven mainly by strong consumer spending (stimulated in part by interest free credit on car deals) and strong government demand.

The index of production did not grow in the first quarter, a fairly strong growth in the index in January being offset by an equivalent contraction in March. This follows a fall of 0.9 per cent in 2002 quarter four. Overall in 2002, the index contracted by 0.8 per cent which although negative is an improvement over the previous year's 3.5 per cent contraction.

Inflationary pressures had remained subdued since January 2002 and only started increasing in October. This increase was particularly marked in the first quarter of 2003. Inflation rose from 2.6 per cent in January to 3.1 per cent in March, the highest rate since June 2001. The inflation rate fell considerably in April, to 2.2 per cent as the effect of previous high oil prices dropped out. However, there was a slight rebound of 0.1 percentage points between May and June and the index is currently up 2.1 per cent on the year. Similarly, producer prices growth which had fallen substantially from 4.6 per cent in March (the highest rate since June 2000) also showed an increase in the latest month from 1.7 per cent in May to 2.0 per cent in June.

The US saw a sharp increase in unemployment in 2001 from 4.1 per cent in January to 5.8 per cent in December. The deterioration stopped in the first three months of 2002, but the volatility in the figures since then offers no clear signs of recovery. The unemployment rate rose to 6.0 per cent in December 2002, falling back slightly in the first three months of 2003 and then returning to 6.0 per cent in April. There has been a 0.3 percentage point increase in the latest figures with unemployment now at 6.4 per cent in June.

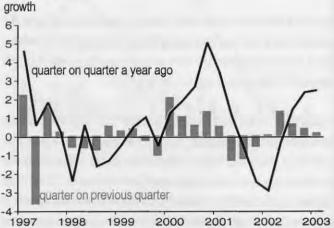
Average earnings growth in the year to the first quarter was 3.5 per cent, an increase of 0.2 percentage points over the previous quarter. This has occured despite the deterioration in labour market conditions that began in 2001. This blip though seems to have been fully accounted for by an erratic rise of 4.1 per cent in February and since then earnings have risen at 3.3 per cent for four months in a row. Earnings growth had previously declined continuously in 2002.

Japan

The Japanese economy grew by 0.1 per cent in the first quarter of 2003. This followed growth of 0.4 per cent in the fourth quarter of 2002 (figure 6).

All components of GDP growth for the first quarter were either weak or negative. Households, government and stocks each made small contributions to quarterly GDP and investment continues the contraction that started at the beginning of 2001 when the global slowdown began. Trade did not contribute to quarterly GDP in the latest quarter. More generally, Japan has had low or negative GDP growth since 1997 (except in 2000 when growth was 2.7 per cent, although this was still below the growth rates of most major economies for that year). Annual figures for 2002 shows the economy growing by just 0.1 per cent. The stronger growth in the later quarters of 2002 had been driven by a combination of stronger consumer demand (although this fell back again in 2002 quarter four), substantial stockbuilding in quarters two and three and a fairly strong rebound in exports.

Figure 6 GDP: Japan



The index of production grew by 0.4 per cent in quarter one following growth of 0.5 per cent in the previous quarter. The index has grown in every quarter since the last quarter of 2001. This performance is a significant improvement over 2001 when the index contracted in all four quarters. Overall in 2002, the index contracted by 1.3 per cent, which, although negative, is a substantial improvement over the previous year's contraction of 6.2 per cent.

Consumer and producer price falls continue the deflation that began in mid-1998, although the pace of price declines had slowed since the end of 2002. However, the latest figures for the year to June which show the consumer prices index declining by 0.4 per cent and the producer price index by 1.2 per cent suggest that the rate of deflation may be gathering pace again.

The unemployment rate in June was 5.3 per cent, a slight improvement over the previous three months when the rate was 5.4 per cent. Recent rates of unemployment are very high by historical standards for Japan (unprecedented since 1960 when OECD records began). Employment growth is negative, declining by 0.8 per cent in the year to 2003 quarter

one.

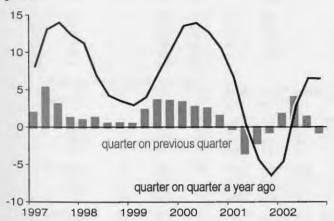
Despite the present unemployment situation, earnings growth declines reversed in the latest two quarters to show a moderate increase in earnings of 0.1 per cent in the year to the fourth quarter and 1.8 per cent in the year to first quarter of 2003. This is a significant improvement over the third quarter of 2002 when earnings were 2.2 per cent lower than in the same quarter of the previous year.

World Trade

Some data for world trade for OECD countries now extends to quarter four and generally shows a fall back in trade from the levels seen in the first half of 2002.

Manufacturing exports of OECD countries contracted by 0.7 per cent compared to growth of 1.4 per cent in the previous quarter (figure 7). At

Figure 7
OECD exports of manufactures
growth



the same time imports of manufactured goods into the OECD area slowed considerably from a quarterly growth rate of 1.9 per cent in quarter three to 0.6 per cent in quarter four.

Exports of goods by OECD countries also show a similar picture; in quarter four growth was 0.5 per cent lower than in the previous quarter, when growth was 1.4 per cent. On the import of goods side, growth in the fourth quarter was still positive although slowing considerably from 1.7 per cent in the third quarter to 0.9 per cent in the fourth.

Notes

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

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

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

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			C	ontribution	to change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk ¹	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Porcentano	change on	2 V02r 02r	lier											
rercentage	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
1998	2.9	1.9	0.3	1.3	0.4	2.1	3.1	3.7	2.9	1.7	-0.4	2.8	1.9	9.4
1999	2.8	2.1	0.4	1.1	-0.2	1.8	2.4	1.8	1.9	1.2	-	2.7	1.9	8.7
2000	3.6	1.8	0.4	1.0	-0.1	4.3	3.9	4.6	2.2	2.4	4.6	3.3	1.9	7.8
2001	1.6	1.3	0.4	-	-0.4	0.9	0.6	0.2 -1.0	2.5	2.4	1.2	3.0	1.3	7.4
2002					-									
1999 Q4	3.8	2.1	0.4	1.2	-	3.3	3.4	4.3	2.5	1.6	2.2	2.7	1.8	8.4
2000 Q1	3.9	1.8	0.4	1.1	-0.1	4.3	3.7	4.2 5.4	2.3 3.5	2.1	4.1	3.6	1.7	8.1
Q2 Q3	4.1 3.4	1.8	0.4	1.2	_	4.4	4.1	4.7	2.1	2.5	4.9	3.6 2.6	1.9	7.9 7.7
Q4	2.9	1.5	0.4	0.9	-0.2	4.2	3.9	4.2	1.2	2.6	4.8	3.5	2.1	7.5
2001 Q1	2.5	1.4	0.4	0.5	-0.3	3.1	2.6	4.2	3.3	2.4	3.1	2.6	1.9	7.4
Q2	1.8	1.2	0.3	0.2	-0.2	1.5	1.3	0.6	2.4	2.8	2.3	3.4	1.4	7.3
Q3	1.5	1.2	0.4	-0.1 -0.4	-0.4 -0.7	0.2 1.1	-0.2 -1.4	-0.7 -3.4	2.5 1.8	2.5	0.7 -0.9	3.4 2.5	0.8	7.4
Q4	0.8	1.2												
2002 Q1	0.6	0.7	0.5	-0.6	-0.1	-1.1	-1.2	-3.1	0.4	2.2	-0.6	3,4	0.7	7.5
Q2 Q3	0.9	0.7	0.6	-0.7 -0.4	-0.3 -0.1	0.2	-0.4 0.8	-1.0 -0.4	0.6	1.9	-0.4 0.3	2.5 3.3	0.7	7.7 7.7
Q3	161	0.0	0.5	-0.4	-0.1	1,1	0.0	0.8	1.2	2.4	1.2	3,3	0.5	7.8
2003 Q1						**		0.7	1.2	2.5	1.9			8.0
		-	-								0.1			
2002 Jul Aug	4+	**		**				-1.2	1.8	1.9	0.4	**		7.7
Sep					**			-0.3	0.9	1.9	0.5			7.8
Oct					44	41		0.9	2.7	2.2	1.0	**		7.8
Nov					**	**		1.7	0.9	2.5	1.0			7.8
Dec	**	**	**				**	-0.2	-	2.5	1.4	**		7.9
2003 Jan	.,				**			0.6	1.8	2.4	1.6			7.9
Feb	**	**		.,			44	1.7	1.8	2.6	2.0			8.0
Mar							**	-0.1	-	2.4	1.9			8.0
Apr	**	4.4		**			**	-0.2	1.8	2.3	0.9		1+	8.0
May		10					**	-1.0	_	2.0	0.6		**	8.0 8.1
Jun	**	**	**	**				**		2.1	0.0	**	**	0.1
Percentage	change on ILGL	previous HUDY	quarter HUDZ	HUEA	HUEB	HUEC	HUED	ILHE	ILHZ				ILIT	
1999 Q4	1.2	0.6	0.1	0.3	0.3	1.0	1.0	1.6	1.2				0.1	
2000 Q1	0.9	0.5	0.1	0.2	-0.2	1.2	1.0	0.1	-0.3				-0.4	
Q2	0.8	0.5	0.1	0.3	-	1.0	1.0	1.9	0.9				1.3	
Q3	0.5	0.2	0.1	0.2	-0.1	1.0	0.9	1.0	0.3				0.7	
Q4	0.6	0.2	0.1	0.2	0.1	0.9	0.9	1.1	0.3				0.4	
2001 Q1	0.5	0.5	0.1	-0.1	-0.3	0.1	-0.2	0.1	1.8				-0.6	
Q2	0.1	0.3	0.1	-0.1	-	-0.5	-0.3	-1.5	-				0.8	
Q3	0.2	0.2	0.1	-0.1	-0.3	-0.3	-0.6	-0.3	0.4				0.6	
Q4	-0.1	0.2	0.2	-0.1	-0.2	-0.4	-0.3	-1.6	-0.4				-	
2002 Q1	0.4	-	0.1	0.2	0.3	-	-0.1	0.4	0.4				-0.6	
Q2	0.4	0.3	0.1	-0.1	-0.1	0.8	0.5	0.5	0.3				0.8	
Q3	0.4	0.3	0.1	0.1	-0.1	0.6	0.6	0.3	1.2				0.3	
Q4	1-				14			-0.4	-0.5					
2003 Q1		**	14				**	0.3	0.3					
Percentage	change on	previous	month											
2002 Jul								ILKF 0.2	ILKP 0.9					
Aug								0.2	0.9					
Sep								-0.2	-0.9					
Oct								-0.2	-					
Nov								0.3	-					
Dec								-1.0	-0.9					
2003 Jan								0.7	0.9					
Feb								0.9	0.9					
Mar								-1.0	-1.7					
Apr								-0.1	1.8					
May Jun								-0.7	-1.7					

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
IoP = Industrial Production

Sales = Retail Sales Volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Eamings = Average Wage Eamings (manufacturing), definitions of coverage
and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total labour force
Source: OECD - SNA93

¹ This series has been discontinued

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	1oP	Sales	CPI	PPI	Earnings	Empl ¹	Unemp
Percentage ch	hange on a	vear earli	er											
ercentage of	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1998	1.7	0.9	0.4	0.5	0.3	1.8	2.2	4.2	1.0	1.0	-0.4	1.8	1.5	9.1
1999	1.9	2.0	0.2	0.8	-0.4	1.5	2.3	1.5	0.4	0.6	-1.0	2.6	-0.1	8.4
2000	3.1	0.9	0.2	0.7	0.2	4.4	3.3	6.2	1.4	1.5	3.4	2.7	0.6	7.8
2001	8.0	0.9	0.2	-1.1	-0.6	1.8	0.4	0.5	1.1	1.9	2.9	1.5	0.3	7.8
2002	0.2	-0.3	0.3	-1.4	-	0.9	-0.7	-1.1	-2.2	1.5	-0.4	1.7	-0.9	8.6
1999 Q4	3.3	1.9	0.2	1.2	-0.2	3.3	3.0	4.4	0.7	1.0	0.6	3.0	-0.2	8.2
2000 Q1	2.9	0.5	0.2	0.8	-0.1	4.4	2.8	5.0	-0.2	1.5	2.3	2.8	0.3	7.9
Q2	4.5	1.9	0.3	0.9	0.2	4.2	2.9	6.7	4.4	1.1	2.6	2.4	0.6	7.8
Q3	3.0	1.1	0.1	0.6	0.2	4.0	3.0	7.0	1.6	1.3	3.7	3.3	0.4	7.3
Q4	1.9	0.3	0.4	0.4	0.3	4.9	4.4	5.8	-0.1	1.8	4.5	2.4	0.8	7.0
2004 04	1.0	4.4	0.2	-0.4	-0.3	3.4	2.3	5.9	2.3	1.7	4.8	2.0	0.7	7.6
2001 Q1	1.8	1.1		-1.0	-0.3	2.3	1.4	1.4	0.4	2.5	4.7	2.0	0.7	7.3
Q2	0.7	0.8	0.2						1.5	2.2	2.6			
Q3 Q4	0.4	0.8	0.2	-1.5 -1.6	-1.0 -0.9	1.8 -0.2	-0.1 -1.8	-1.3 -3.7	0.2	1.6	0.3	1.1	0.2 -0.3	7.9
						0.2								
2002 Q1	-0.2	-0.3	0.2	-1.4	-0.8	-	-2.0	-3.8	-4.2	1.9	-0.2	1.1	-0.5	8.3
Q2	-0.1	-0.7	0.4	-1.8	0.1	0.6	-1.3	-1.9	-2.1	1.3	-0.9	1.0	-0.8	8.
Q3	0.5	-0.4	0.4	-1.4	0.5	1.3	-	-0.3	-1.0	1.1	-1.0	2.1	-1.0	8.6
Q4	0.7	-0.1	0.2	-1.0	0.4	1.8	0.6	1.5	-1.6	1.2	0.5	2.4	-1.1	8.8
2003 Q1	0.2	0.7	0.1	-0.9	1.0	1.9	2.5	1.8	1.0	1.2	1.7	+6	-1.3	9.2
2002 Jul	**							-0.1	-1.7	1.2	-1.0			8.6
Aug		**	F4				**	-0.5	-1.1	1.2	-1.0			8.6
Sep								-0.5	-0.3	1.1	-0.9			8.7
Oct		4.5					**	0.9	1.3	1.3	0.3			8.
Nov			14					3.7	-3.3	1.2	0.4			8.
Dec		**		**		-		0.1	-2.6	1.2	0.9			8.9
2003 Jan								1.6	1.5	1.1	1.6			9.0
Feb		**	**	**				2.5	1.5	1.2	1.9			9.2
Mar		44					44	1.4		1.2	1.7			9.3
Apr		**	**					0.1	-0.6	0.9	1.6			9.4
May	**	**	**	**				0.7	-2.5	0.6	1.3		**	9.4
Jun	••	**	**	**	**	**			**	0.9	1.3	**	**	9.4
Percentage cl				LUICE	LUIGE	ULICC	HILICH	11.110	ILHW				".10	
1999 Q4	ILGI 1.1	HUCC 0.5	HUCD 0.1	HUCE -0.1	HUCF 0.2	HUCG 0.7	HUCH 0.3	ILHC 1.5	1.9				ILIQ 0.6	
2000 Q1	0.7	_	0.1	0.3	_	1.4	1.0	0.4	_				-1.9	
Q2	1.1	0.8	-0.1	0.2	-	0.9	0.8	2.9	1.2				1.0	
Q3	-	-0.1	-0.1	0.2	_	0.9	0.8	2.0	-1.4				0.7	
Q4	0.1	-0.3	0.4	-0.2	0.3	1.6	1.7	0.4	0.2				1.0	
		0.0	0.4			_	-1.0	0.5	2.4					
2001 Q1 Q2	0.6	0.8	-0.1	-0.6 -0.3	-0.6	-0.2	-0.1	-1.5	-0.7				-1.9 1.0	
Q3	-0.2	-0.1	_	-0.4	-0.7	0.4	-0.7	-0.7	-0.4				0.2	
Q4	-0.3	-0.3	0.2	-0.3	0.4	-0.3	_	-2.0	-1.1				0.5	
2002 Q1	0.3	-0.4	0.1	-0.4	-0.5	0.2	-1.3	0.3	-2.1				-2.2	
Q2	0.3	0.1	0.1	-0.4	0.8	0.4	0.6	0.4	1.5				0.7	
Q3	0.3	0.2	0.1	-0.7	-0.3	1.1	0.7	0.9	0.8				0.7	
Q4	-	-	-0.1	0.2	0.3	0.1	0.6	-0.3	-1.7				0.4	
2003 Q1	-0.2	0.3	_	-0.4	0.1	0.3	0.6	0.7	0.5				-2.4	
Percentage c			onth											
-	mange on p	JIEVIOUS II	Ontil					ILKC	ILKM					
2002 Jul								-0.4	8.0					
Aug								1.1	0.5					
Sep								-0.9	0.5					
Oct								-0.1	-0.3					
Nov Dec								1.5 -2.5	-2.5 -0.7					
2003 Jan								1.9	1.8					
Feb								0.3	0.6					
Mar								-0.6	-1.2					
								-0.9	0.7					
Apr May								-0.7	-1.9					

GDP = Gross Domestic Product at constant market prices
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GFC = Government Final Consumption at constant market prices
GFCF = Gross Fixed Capital Formation at constant market prices
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Exports = Exports of goods and services
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Sales = Retail Sales volume
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Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
Source: OECD - SNA93

¹ Excludes members of armed forces

			Co	ntribution t	o change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI ¹	Earnings	Empl ²	Unempl
Percentage c	hange on a	year earl	ier											
-	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1998	3.6	2.0	-	1.3	0.8	2.1	2.6	5.2	2.6	0.8	-0.9	2.2	1.9	11.4
1999	3.2	1.9	0.3	1.6	-0.3	1.1	1.5	1.9	2.4	0.5	-1.6	2.5	2.2	10.7
2000	4.2	1.6	0.7	1.7	0.5	3.6	3.8	3.6	0.5	1.7	2.0	5.2	2.8	9.3
2001	2.1	1.6	0.6	0.4	-0.6	0.5	0.4	1.1	-0.2	1.7	1.2	4.2	1.7	8.5
2002	1.2	8.0	0.9	-0.3	-0.4	0.3	0.2	-1.0	-	1.9	-0.2	3.6	0.5	8.8
1999 Q4	4.1	1.9	0.6	1.7	-	2.2	2.3	4.2	2.1	1.0	-	3.4	2.5	10.2
2000 Q1	4.7	2.1	0.6	1.9	0.3	3.1	3.2	3.9	1.9	1.5	1.2	5.2	2.6	9.8
Q2	4.5	1.7	0.7	1.8	0.2	3.9	3.7	3.8	1.4	1.5	2.0	5.4	2.9	9.4
Q3 Q4	3.9 3.8	1.4	0.8	1.4 1.5	1.0 0.5	3.4 3.8	4.2	3.7 2.9	0.1 -1.3	1.9	2.7	5.2 5.0	2.8	9.1 8.8
2001 Q1	3.1	1.5	0.6	1.0	-0.3	2.7	2.4	2.9	1.1	1.2	2.4	4.3	2.3	8.6
Q2	2.2	1.5	0.6	0.5		0.7	1.0	1.8	-0.4	2.1	1.7	4.2	1.9	8.5
Q3 Q4	2.3 0.7	1.7 1.5	0.7	0.4 -0.1	-1.0 -1.4	0.1 -1.4	-0.3 -1.6	1.6 -1.9	-0.7 -0.8	1.9 1.4	0.7	4.2	1.4 1.1	8.5 8.5
2002 Q1 Q2	0.8	0.9	1.0	-0.3 -0.1	-0.4 -0.8	-0.9 0.5	-0.6	-1.6 -0.7	-1.6 -0.6	1.6	-0.7 -0.5	3.9 3.9	0.7 0.5	8.6 8.8
Q3	1.3	0.7	0.9	-0.3	-0.1	0.7	0.5	-1.9	1.0	1.8	0.1	3.5	0.5	8.9
Q4	1.4	0.8	1.0	-0.5	-0.1	1.0	0.8	0.1	1.0	2.2	0.2	3.4	0.3	9.0
2003 Q1	1.1	0.9	0.7	-0.3	-	0.4	0.6	0.9	-0.8	2.4	0.6	2.9	_	9.2
2002 Jul	73						**	-1.8	1.7	1.7	0.1			8.8
Aug		47	**					-2.8	2.7	1.8	0.2			8.9
Sep							**	-1.1	-1.3	1.8	0.2	**		8.9
Oct								-0.4	3.0	1.9	0.2			9.0
Nov								0.9	2.1	2.2	0.1	**	**	9.0
Dec								-0.3	-1.8	2.3	0.3	**		9.1
2003 Jan	**		**	**				0.7	3.0	2.0	0.4			9.1
Feb	**							1.7	-0.7	2.6	0.7	**		9.2
Mar	**		44		**			0.6	-4.6	2.6	0.7	**		9.2
Apr								-0.5	1.8	2.0	0.8			9.3
May	**	**	44	**	**			-1.5	-2.0	1.7	0.6	-		9.3
Jun	**	**	**			**	**	**	**	1.9	0.5		1+	9,4
Percentage c														
1999 Q4	ILGJ 1.3	HUBQ 0.5	HUBR 0.3	HUBS 0.4	HUBT 0.6	HUBU 0.6	HUBV 1.0	ILHD 2.2	ILHX 1.0				ILIR 0.7	
2000 Q1	1.2	0.4	0.2	0.6	0.1	1.0	1.1	-0.3	-0.2				0.8	
Q2	0.8	0.2	0.2	0.4	-0.1	1.1	1.0	0.6	-0.7				0.7	
Q3 Q4	0.4 1.3	0.2	0.1	0.1	0.4	0.7 1.0	1.0 0.9	1.2	-0.4				0.6	
2001 Q1 Q2	0.6 -0.1	0.7	0.1	0.1	-0.7	-0.1	-0.5	-0.3	2.3				0.4	
Q3	0.1	0.2	0.1	-0.2 -	0.2	-0.9	-0.4	-0.4	-2.2				0.3	
Q4	-0.2	0.1	0.3	-0.1	-0.7 -0.2	0.1 -0.5	-0.3 -0.4	1.0 -2.2	-0.3 -0.5				0.2	
2002 Q1	0.6	0.1	0.3	-0.1	0.3	0.4	0.5							
Q2	0.6	0.2	0.3					0.5	1.4				-	
Q3	0.3	0.2	0.3	-0.1	-0.1 -	0.5	0.3	0.5	-1.2				0.1	
Q4	-0.1	0.2	0.2	-0.2	-0.3	0.3 -0.2	0.2 -0.2	-0.2 -0.3	1.3 -0.5				0.1	
2003 Q1	0.3	0.3	-	0.1	0.4	-0.2	0.3	0.9	-0.4				-0.3	
Percentage c	hange on p	revious n	nonth											
2002 Jul								ILKD	ILKN					
Aug								-0.2	3.1					
Sep								0.3	1.0					
Oct								-0.6	-3.8 2.8					
Nov								0.9	2.0					
Dec								-1.1	-2.7					
2003 Jan								1.0	4.1					
Feb								0.7	-1.9					
Mar								-0.3	-3.9					
Apr								-0.8	4.6					
								-1.4	-2.3					
May														

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Source: OECD - SNA93

			Co	ntribution to	change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage cl		year earli	er						*****	10/44		11.40	0.0	GABE
1998 1999 2000 2001	1.8 1.7 3.3 1.7	1.9 1.6 1.7 0.7	0.2 0.3 0.6	0.7 0.9 1.5 0.5	0.3 0.3 -1.1 -0.1	HUCM 1.0 - 3.3 0.3	HUCN 2.1 1.4 2.4 0.3	1.4 -0.2 4.2 -1.1	1.0 0.8 -0.8 -0.1	1.7 2.5 2.7	0.1 -0.3 6.1 1.9	2.8 2.3 2.0 1.8	1.1 1.2 1.9 2.0	11.7 11.3 10.4 9.5
2002 1999 Q4	3.0	0.3	0.3	1.3	0.4	-0.3 2.1	2.1	-1.3 2.8	-0.6 2.2	2.5	2.1	2.8	1.4	9.0
	3.4	1.4	0.2	1.8	-1.2	4.1	2.8	3.5	-1.9	2.4	4.7	2.0	1.0	10.9
2000 Q1 Q2 Q3 Q4	3.3 3.3 3.0	1.7 1.8 1.7	0.2 0.3 0.3	1.6 1.6 1.0	-0.4 -1.2 -1.3	3.0 3.6 2.6	2.7 2.8 1.4	5.5 3.7 3.8	1.3	2.6 2.6 2.6	6.2 6.7 6.6	2.5 2.0 1.9	1.6 2.1 2.8	10.5 10.3 9.9
2001 Q1 Q2 Q3 Q4	2.7 2.1 1.5 0.7	1.5 0.9 0.3	0.6 0.6 0.6 0.7	1.0 0.5 0.2 0.4	-0.6 -0.6 0.6 0.2	1.7 1.4 -0.8 -1.0	1.4 0.8 -0.6 -0.5	3.0 -0.3 -1.9 -4.9	1.6 0.3 1.0 0.6	2.9 3.0 2.8 2.5	4.7 3.2 1.1 -1.1	1.8 1.2 2.2 2.3	3.2 2.0 1.8 1.2	9.7 9.5 9.4 9.2
2002 Q1 Q2 Q3 Q4	-0.1 0.3 0.4 0.9	-0.5 0.5 1.1	0.4 0.3 0.3 0.2	-0.4 -0.3 0.3 1.0	1.8 0.6 -0.3 -0.4	-3.0 -0.5 1.3 1.0	-1.6 -0.2 1.6 2.0	-3.9 -2.1 -0.2 0.8	-0.3 -1.0 -1.3	2.4 2.2 2.4 2.7	-1.0 -0.6 0.5 1.7	2.4 3.4 2.4 2.8	1.7 1.9 1.3 0.9	9.0 9.0 9.0 8.9
2003 Q1	0.8	1.1	0.3	0.1	-	0.9	1.5	-0.4	-0.6	2.7	2.6	2.5	0.8	8.9
2002 Jul Aug Sep Oct Nov Dec					**			-0.2 -0.7 0.3 - 1.7 0.6	-1.0 -1.0 -1.9 -	2.2 2.4 2.6 2.7 2.8 2.8	0.4 0.5 0.8 1.6 1.5 2.0	2.4 2.4 2.5 2.9 2.8 2.8		9.0 9.0 9.0 8.9 8.9 8.9
2003 Jan	**	44	**		41			0.3	-1.0	2.8	2.4	2.9	**	8.9
Feb Mar Apr May Jun			**		**			-0.5 -0.9 0.5 -3.1	-1.0 2.9 1.0	2.6 2.7 2.7 2.7 2.6	2.8 2.8 2.0 1.5 1.4	3.0 1.7 1.8 1.8		8.9 8.8 8.7
Percentage c		revious q	uarter	LILICO	инсп	HUCS	HUCT	ILHE	ILHY				ILIS	
1999 Q4	1.0	HUCO 0.2	HUCP 0.1	HUCQ 0.3	HUCR 0.8	0.9	1.3	1.3	2.6				-0.1	
2000 Q1 Q2 Q3 Q4	1.1 0.5 0.6 0.7	0.6 0.5 0.4 0.2	0.1 0.1 0.1	0.7 0.3 0.2 -0.2	-1.2 0.3 -1.1 0.7	2.0 -0.6 1.3 -0.1	0.3	0.2 1.7 0.4 1.5	-4.1 2.3 0.6 -1.3				-1.2 1.6 1.9 0.6	
2001 Q1 Q2 Q3 Q4	0.7 - - -0.1	0.4 -0.3 -0.1	0.3 0.1 0.1 0.2	0.6 -0.2 -0.1	-0.5 0.3 0.1 0.2	1.1 -0.8 -1.0 -0.3	1.1 -0.5 -1.1	-0.5 -1.6 -1.3 -1.6	0.3 - -1.0				-0.8 0.4 1.7	
2002 Q1 Q2 Q3 Q4	0.3 0.1 0.4	-0.1 0.4 0.3 0.5	0.1	-0.2 -0.1 0.5 0.8	1.2 -0.9 -0.8 0.1	-0.9 1.6 0.9 -0.5	0.9 0.7 0.4	0.6 0.3 0.6 -0.7	0.3 -0.3 -0.3 0.3				-0.4 0.6 1.1 -0.4	
2003 Q1	-0.1	-	0.1	-1.1	1.5	-1.0	-0.4	-0.6	-0.3				-0.5	
Percentage of	hange on	orevious r	nonth											
2002 Jul Aug Sep Oct Nov Dec								1.0 -1.3 0.5 -0.7 0.4 -0.4	-1.0 1.0					
2003 Jan Feb Mar Apr May Jun								-0.4 0.1 -0.4 0.2 -1.6	-1.0 2.0 -1.9 3.9 -1.9					

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Source: OECD - SNA93

			Coi	ntribution to	o change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP	Sales	CPI	PPI	Earnings	Empl ¹	Unempl
Percentage c						LW (B)	111100							
4000	ILGC	HUDG 3.2	HUDH 0.2	HUDI 2.0	HUDJ 0.2	HUDK 0.3	HUDL 1.6	ILGW 5.6	ILHQ 7.1	ILAA 1.6	ILAJ -1.1	ILAS 2.4	ILIK	GADO
1998 1999	4.3 4.1	3.3	0.4	1.6	-0.2	0.3	1.6	4.2	8.8	2.1	1.8	2.9	1.5 1.5	4.5 4.2
2000	3.8	2.9	0.4	1.2	-0.2	1.1	2.0	4.7	5.5	3.4	4.1	3.4	2.5	4.0
2001	0.3	1.7	0.5	-0.6	-1.4	-0.7	-0.5	-3.5	4.8	2.8	0.7	3.3	2.5	4.8
002	2.4	2.2	0.6	-0.4	0.7	-0.2	0.6	-0.8	5.3	1.5	-0.6	3.3	-0.3	5.8
999 Q4	4.3	3.3	0.5	1.3	0.1	0.6	1.7	5.0	8.2	2.6	3.2	3.6	1.5	4.1
000 Q1	4.2	3.4	0.4	1.6	-0.4	1.0	2.0	5.2	7.8	3.2	4.6	3.9	2.8	4.0
Q2	4.9	3.0	0.6	1.4	0.7	1.3	2.2	6.0	5.8	3.3	4.4	3.3	2.8	4.0
Q3	3.7	2.9	0.4	1.0	0.2	1.4	2.2	4.8	5.2	3.5	3.9	3.2	2.3	4.1
Q4	2.3	2.4	0.3	0.7	-0.4	0.9	1.7	2.7	3.5	3.4	3.3	3.2	2.3	3.9
001 Q1	1.5	1.9	0.5	0.1	-0.8	0.4	0.8	-0.2	2.9	3.4	2.1	2.9	0.8	4.2
Q2	-0.1	1.6	0.4	-0.5	-1.6	-0.4	-0.2	-3.4	4.5	3.4	2.1	3.2	0.1	4.5
Q3	-0.4	1.2	0.5	-0.9	-1.4	-1.3	-1.2	-4.6	3.8	2.7	0.6	3.4	_	4.8
Q4	0.1	1.9	0.7	-1.0	-1.7	-1.4	-1.4	-5.7	7.9	1.8	-1.5	3.7	-0.8	5.6
002 Q1	1.4	2.0	0.7	-0.9	_	-1.1	-0.7	-3.8	5.9	1.2	-1.8	3.7	-1.2	5.6
Q2	2.2	2.1	0.7	-0.6	0.7	-0.4	0.4	-1.3	5.5	1.3	-1.7	3.4	-0.5	5.8
Q3	3.3	2.6	0.6	-0.2	0.9	0.3	1.1	0.8	7.0	1.5	-0.6	3.0	0.1	5.8
Q4	2.9	1.9	0.6	0.2	1.3	0.4	1.6	1.5	3.0	2.2	1.6	3.3	0.3	5.9
003 Q1	2.0	1.7	0.5	0.1	0.4	0.3	1.0	1,1	4.4	2.9	3.9	3.5	1.0	5.8
002 ปนไ	**	**	**	**		**	**	0.6	6.9	1.5	-0.6	2.5	-0.5	5.8
Aug						**	**	0.6	6.5	1.8	-0.7	3.3	0.4	5.8
Sep						**	**	1.2	7.6	1.5	-0.5	3.3	0.4	5.7
Oct			**				**	1.0	0.3	2.1	1.5	3.3	0.5	5.8
Nov Dec		**	**				T-	1.8 1.5	3.5 5.3	2.2	1.5	3.3 3.3	0.2	5.9 6.0
DCC							**	1.0	3.3	2.5	1.5	3.3	0.5	0.0
003 Jan						**	**	1.6	5.5	2.6	3.0	3.3	1.3	5.7
Feb	**		**	**	**	e t-	*-	1.4	2.6	3.0	4.2	4.1	0.7	5.8
Mar	**		**	**	**	8.6		0.4	5.2	3.1	4.6	3.3	0.9	5.8
Apr May	**	**	4+	н	**	**		-0.5	4.9	2.2	1.9	3.3	1.1	6.0
Jun					**			-0.8 -1.0	6.4 5.4	2.0	1.7	3.3 3.3	0.7 1.0	6.1 6.4
ercentage c	hange on n	revious au	iarter											
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
999 Q4	1.7	0.8	0.2	0.2	0.5	0.4	0.4	1.6	2.0				0.3	
2000 Q1	0.6	0.9	-0.1	0.6	-0.5	0.2	0.5	1.3	2.2				0.7	
Q2	1.2	0.5	0.3	0.2	0.5	0.4	0.7	1.7	-0.4				1.2	
Q3	0.1	0.6	-	-	-0.3	0.3	0.5	0.1	1.3				0.1	
Q4	0.3	0.3	0.1	-0.1	-	-0.1	-0.1	-0.4	0.4				0.3	
001 Q1	-0.2	0.4	0.2	-	-0.9	-0.2	-0.3	-1.6	1.6				-0.7	
Q2	-0.4	0.2	0.1	-0.4	-0.3	-0.4	-0.3	-1.5	1.2				0.5	
Q3	-0.1	0.2	0.1	-0.4	-	-0.6	-0.5	-1.2	0.5				_	
Q4	0.7	1.0	0.3	-0.2	-0.4	-0.3	-0.2	-1.5	4.3				-0.5	
002 Q1	1.2	0.5	0.1	0.1	0.8	0.1	0.3	0.4	-0.2				-1.1	
Q2	0.3	0.3	0.1	-0.1	0.4	0.4	0.8	1.1	0.8				1.1	
Q3	1.0	0.7	0.1	-	0.1	0.1	0.1	0.9	2.0				0.6	
Q4	0.3	0.3	0.2	0.2	0.1	-0.2	0.3	-0.9	0.4				-0.4	
003 Q1	0.4	0.3	-	-	-0.2	-	-0.3	-	1.1				-0.4	
Percentage c	hange on p	revious m	onth											
002 Jul								ILKG	ILKQ				ILLA	
Aug								0.7 -0.2	1.4 0.4				0.3	
Sep								-0.1	-1.5				-0.2 0.1	
Oct								-0.6	0.2				0.1	
Nov								0.2	0.8				-0.6	
Dec								-0.8	1.8				_	
003 Jan								0.6	0.4				-0.5	
Feb								0.1	-2.1				0.4	
Mar								-0.6	2.2				0.3	
Apr								-0.5	0.5				0.5	
May								0.1	0.7				0.1	
Jun									0.6					

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			Co	ntribution to	change in	GDP								
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	loP ¹	Sales	CPI	PPI	Earnings ²	Empl	Unempl
Percentage ch	ange on a	year earli	er											
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
998	-1.2	-	0.3	-1.1	-0.6	-0.2	-0.6	-5.9	-6.0	0.7	-1.5	0.9	-0.6	4.1
999	0.2	0.1	0.7	-0.2	-0.3	0.1	0.2	0.6	-2.6	-0.3	-1.5	-0.7	-0.8	4.7
2000	2.7	0.5	0.7	0.7	0.3	1.3	0.7	5.1	-1.1	-0.7	0.1	1.7	-0.3	4.7
001	0.4	1.0	0.4	-0.3	_ =	-0.7		-6.2	-1.2	-0.7	-2.3	. 5	-0.5	5.0
002	0.1	0.7	0.4	-1.3	-0.4	0.9	0.1	-1.3	-3.1	-1.0	-2.0	-1.0	-1.3	5.4
1999 Q4	-0.5	-0.9	0.7	0.2	-0.2	0.7	8.0	4.4	-1.1	-1.0	-0.6	-0.3	-0.2	4.6
2000 Q1	1.3	0.3	0.6	-	-0.1	1.2	0.7	3.5	-2.2	-0.6	0.6	1.9	-0.5	4.8
Q2	2.0	0.2	0.9	0.2	0.1	1.4	0.8	6.3	-1.5	-0.7	0.4	2.1	-0.4	4.7
Q3	2.7	. =	0.8	0.9	0.5	1.3	0.8	5.4	-0.4	-0.6	0.7	1.7	-0.4	4.7
Q4	5.1	1.5	0.8	1.8	0.6	1.2	0.8	5.1	-0.4	-0.8	-0.7	1.1	0.2	4.7
001 Q1	3.5	1.1	0.7	1.2	1.0	0.2	0.7	1.5	2.3	-0.5	-1.9	0.3	0.5	4.7
Q2	1.1	1.1	0.4	0.3	0.1	-0.6	0.2	-4.4	-1.1	-0.7	-2.0	0.5	-0.4	4.9
Q3	-0.6	0.8	0.3	-0.4	-0.4	-1.0	-0.2	-9.1	-2.6	-0.8	-2.5	-0.2	-0.8	5.1
Q4	-2.4	0.7	0.4	-2.3	-0.6	-1.2	-0.6	-12.3	-3.4	-1.0	-2.8	-0.6	-1.3	5.4
002 Q1	-2.9	0.5	0.4	-2.3	-1.6	-0.3	-0.5	-9.2	-4.4	-1.4	-2.6	-1.5	-1.5	5.3
Q2	-0.3	0.5	0.4	-1.6	-0.4	0.8	-	-3.6	-2.6	-0.9	-2.2	-0.8	-1.6	5.4
Q3 Q4	1.5	1.2 0.8	0.5	-1.2	0.3	1.1	0.5	2.7 5.9	-2.7 -2.7	-0.8 -0.5	-2.2 -1.3	-2.2 0.1	-1.0 -1.1	5.4 5.4
	2.5	0.6	0.3	0.1	1.0	1.2	0.6	5.7	-1.2	-0.2	-0.9	1.8	-0.8	5.4
2003 Q1	2.5	0,0	0.5	0.1	1.0	1.2		0.7	-4.5	-0.8	-2.3	-4.9	-1.2	5.4
2002 Jul		**	**			**	**	2.3	-1.1	-0.9	-2.3	-2.8	-1.1	5.5
Aug		**	/* <u>,</u>	4.0				5.1	-2.3	-0.7	-2.1	1.3	-0.7	5.4
Sep	**	**			**		**	5.2	-2.3	-0.9	-1.4	1.0	-0.8	5.5
Oct		>=			**	**		6.8	-2.3	-0.4	-1.2	0.5	-1.3	5.3
Nov Dec		-		**				5.4	-3.5	-0.3	-1.3	-1.3	-1.1	5.5
003 Jan								8.0	-2.3	-0.4	-1.0	1.2	-1.0	5.5
Feb					**	**		4.9		-0.2	-0.9	1.7	-0.9	5.2
Mar			**				**	4.4	-1.2	-0.1	-0.8	2.5	-0.5	5.4
Apr			**		**	***		3.4	-3.5	-0.1	-0.9	1.5	-0.4	5.4
May				-	**		**	1.6 1.6	-2.3 -1.2	-0.2 -0.4	-1.1 -1.2	2.2	0.1	5.4 5.3
Jun		-			**	**		1.0	1.2	-0.4	-1.2	2.5	0.0	0.0
Percentage ch	hange on p	revious q HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1999 Q4	-1.0	-0.9	0.1	-	-	0.2	0.3	1.4	-0.7				-0.6	
2000 Q1	2.1	0.9	0.2	0.4	_	0.6	-	0.6	-0.7				-2.1	
Q2	1.0	0.3	0.4	0.1	0.3	0.3	0.3	2.6	0.4				2.3	
Q3	0.6	-0.1	0.2	0.4	0.1	0.2	0.2	0.7	0.8				_	
Q4	1.3	0.5	0.1	0.9	0.1	0.1	0.3	1.1	-0.7				-	
001 Q1	0.5	0.5	-	-0.2	0.4	-0.4	-0.1	-2.9	1.9				-1.8	
Q2	-1.3	0.1	0.1	-0.7	-0.5	-0.4	-0.2	-3.3	-2.9				1.4	
Q3	-1.2	-0.3	0.1	-0.4	-0.4	-0.3	-0.2	-4.3	-0.8				-0.4	
Q4	-0.5	0.4	0.2	-1.0	-0.1	-0.2	-0.2	-2.5	-1.5				-0.5	
2002 Q1	_	0.3	0.1	-0.2	-0.6	0.6	0.1	0.5	0.8				-2.0	
Q2	1.3	0.2	-	-0.2	0.7	0.7	0.3	2.8	-1.2				1.3	
Q3	0.6	0.4	0.1	_	0.4	-	0.2	2.0	-0.8				0.2	
Q4	0.4	_	-	0.2	-0.2	0.5	0.1	0.5	-1.6				-0.6	
2003 Q1	0.1	0.1	0.1	-0.1	0.1	-	-	0.4	2.4				-1.7	
Percentage cl	hange on r													
								ILKH	ILKR				ILLB	
2002 Jul								1.0	-1.2				-	
Aug								0.3	2.4				0.2	
Sep								0.6	-1.2 -1.2				-0.3	
Oct Nov								-0.1	1.2				-0.1	
								-0.2	-3.5				-0.9	
Dec								1.7	3.7				-1.3	
Dec								-1.7	2.4				-0.2	
Dec 2003 Jan														
Dec 2003 Jan Feb														
Dec 2003 Jan Feb Mar								0.1	-2.3				1.1	
Dec 2003 Jan Feb														

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

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

EmpI = Total Employment not seasonally adjusted

UnempI = Standardised Unemployment rates: percentage of total workforce loP=Index of Production

Source: OECD = SNA93

Source: OECD - SNA93

¹ Not adjusted for unequal number of working days in a month 2 Figures monthly and seasonally adjusted

	Export	of manufacto	ıres	Import	of manufact	ures	Ex	port of go	ods	lm	port of go	ods	Total tr	ade
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufact- ures	goods
Percentage of 1992 1993 1994 1995 1996	hange on a ILIZ 4.5 4.1 11.5 10.2 6.6	year earlier ILJA 3.3 2.2 9.9 9.9 6.5	ILJB 9.5 12.2 17.3 11.2 6.9	ILJC 5.6 3.8 12.0 10.6 8.0	ILJD 4.2 0.7 12.3 10.1 8.0	ILJE 9.7 12.8 11.3 12.0 7.9	ILJF 4.3 3.7 10.3 9.4 6.8	ILJG 3.6 2.2 9.3 9.3 6.5	ILJH 6.3 8.1 13.0 9.1 7.6	ILJI 5.3 3.4 10.9 9.9 7.1	1LJJ 4.2 0.7 11.0 9.0 7.2	ILJK 8.7 11.1 10.7 12.4 6.6	ILJL 5.0 4.0 11.7 10.4 7.3	ILJM 4.8 3.6 10.6 9.6 6.9
1997 1998 1999 2000 2001	12.1 5.2 6.4 14.3 -1.4	11.9 6.3 6.1 12.6 -1.1	12.9 1.2 7.2 20.4 -2.3	11.7 6.1 7.9 14.7 -0.2	11.3 9.5 10.8 13.9 -1.2	12.7 -2.5 -0.3 17.3 2.6	11.2 4.8 5.6 12.6 -0.3	11.0 5.7 5.7 12.1 -0.4	11.7 2.2 5.4 13.9 -0.2	10.3 5.5 6.5 12.6 0.4	9.7 8.1 9.0 12.2 -0.6	11.9 -1.2 -0.5 14.0 3.6	11.9 5.6 7.2 14.5 -0.8	10.8 5.1 6.1 12.6
2002	**	2.7			2.7			2.5	**	**	2.5			**
1996 Q3 Q4	6.9 8.6	6.7 8.2	7.3 9.7	8.1 9.0	8.8 8.9	6.3 9.4	7.1 9.2	6.6 8.9	8.3 9.9	6.8 8.3	7.7 8.5	4.6 7.8	7.5 8.8	6.9 8.7
1997 Q1 Q2 Q3 Q4	9.0 13.4 13.9 12.1	8.0 13.1 14.0 12.3	12.3 14.5 13.6 11.4	9.3 12.8 12.9 11.8	8.2 12.2 12.4 12.3	12.2 14.3 14.0 10.6	8.7 12.6 12.7 10.8	7.6 12.4 12.9 11.1	11.7 13.0 11.9 10.2	8.3 11.3 11.3 10.4	7.3 10.5 10.5 10.4	10.8 13.3 13.3 10.3	9.1 13.1 13.4 11.9	8.5 11.9 12.0 10.6
1998 Q1 Q2 Q3 Q4	10.1 5.7 3.0 2.3	11.2 6.9 4.2 3.5	6.4 1.7 -1.3 -1.8	10.0 6.7 4.2 3.7	12.6 9.7 8.0 8.0	3.6 -1.1 -5.2 -7.0	9.5 5.2 2.5 2.0	10.8 6.2 3.3 2.7	6.0 2.4 0.4 0.2	9.0 6.0 4.0 3.3	11.0 8.2 6.9 6.6	4.1 0.1 -3.5 -5.2	10.0 6.2 3.6 3.0	9.2 5.6 3.2 2.7
1999 Q1 Q2 Q3 Q4	2.0 3.9 8.1 11.6	2.9 4.0 7.2 10.4	-1.2 3.3 11.0 15.8	3.9 6.2 9.1 12.5	7.7 9.6 11.6 14.3	-6.3 -3.3 1.9 7.0	1.7 3.7 7.2 9.8	1.9 3.7 7.2 10.0	1.3 3.7 7.3 9.4	3.4 5.1 7.3 10.2	6.2 7.9 9.7 12.1	-4.2 -2.5 0.4 4.6	2.9 5.0 8.6 12.0	2.6 4.4 7.2 10.0
2000 Q1 Q2 Q3 Q4	15.5 16.1 14.4 11.6	13.5 13.9 12.6 10.5	22.5 24.2 20.3 15.3	14.7 15.7 16.1 12.6	15.0 15.1 14.7 11.1	13.7 17.8 20.3 17.4	13.5 13.8 12.7 10.5	13.4 13.1 12.0 10.1	13.7 15.7 14.6 11.6	12.5 13.4 13.9 10.8	13.3 13.2 12.9 9.5	10.2 14.0 16.9 14.7	15.1 15.9 15.2 12.1	13.0 13.6 13.3 10.7
2001 Q1 Q2 Q3 Q4	6.6 -0.1 -4.8 -6.8	6.6 0.2 -4.4 -6.5	6.6 -1.0 -6.3 -7.8	7.3 1.0 -3.7 -4.9	6.2 -0.1 -4.5 -5.8	10.8 4.2 -1.2 -2.3	6.2 0.7 -3.0 -4.9	6.3 0.7 -3.0 -5.3	5.9 0.5 -2.9 -4.0	6.7 1.4 -2.5 -3.4	5.8 0.2 -3.6 -4.4	9.5 4.9 1.0 –0.4	7.0 0.5 -4.2 -5.8	6.5 1.0 -2.7 -4.2
2002 Q1 Q2 Q3 Q4	-3.8 3.6 7.7	-4.6 2.8 6.5 6.5	-1.3 6.1 11.7	-2.5 2.9 6.3	-3.7 2.2 6.0 6.8	1.0 5.0 7.2	-2.7 3.5 6.7	-3.8 2.6 5.6 5.9	0.4 5.7 9.6	-1.8 2.6 5.4	-3.1 2.0 5.1 6.2	1.9 4.6 6.3	-3.1 3.2 7.0	-2.2 3.0 6.1
2003 Q1			**	**		***	٠.	**	**	**	**	10		**
Percentage 1996 Q3 Q4	change on p ILJN 2.5 2.9	previous qua ILJO 2.3 2.8	ILJP 3.4 3.2	ILJQ 2.7 2.7	ILJR 2.8 2.2	ILJS 2.3 3.9	ILJT 2.6 3.0	ILJU 2.3 3.0	1LJV 3.4 2.9	ILJW 2.4 2.5	ILJX 2.5 2.0	ILJY 2.1 3.7	ILJZ 2.6 2.8	ILKA 2.5 2.7
1997 Q1 Q2 Q3 Q4	2.4 4.9 3.0 1.3	2.0 5.4 3.1 1.3	3.8 3.5 2.5 1.2	2.8 4.1 2.8 1.7	2.0 4.7 3.0 2.0	4.6 2.7 2.1 0.8	1.7 4.8 2.7 1.3	1.1 5.5 2.8 1.3	3.2 3.0 2.3 1.3	2.0 4.0 2.3 1.7	1.1 4.5 2.5 2.0	4.2 2.7	2.6 4.5 2.9 1.5	1.8 4.4 2.5 1.5
1998 Q1 Q2 Q3 Q4	0.6 0.8 0.3 0.6	1.0 1.3 0.5 0.6	-0.9 -1.1 -0.5 0.6	1.1 1.0 0.4 1.2	2.3 2.1 1.4 2.0	-2.0 -1.8 -2.2 -1.2	0.4 0.7 0.1 0.8	0.9 1.1 — 0.7	-0.7 -0.5 0.3 1.1	0.7 1.1 0.4 1.0	1.6 1.9 1.2 1.7	-1.6	0.8 0.9 0.4 0.9	0.6 0.9 0.3 0.9
1999 Q1 Q2 Q3 Q4	0.3 2.6 4.4 3.8	0.5 2.4 3.6 3.5	-0.2 3.4 7.0 4.9	1.2 3.2 3.2 4.3	2.1 3.8 3.2 4.5	-1.2 1.3 3.0 3.8	0.2 2.6 3.4 3.3	0.1 2.9 3.3 3.3		0.8 2.8 2.5 3.8	1.3 3.6 2.9 3.9	0.5 1.3	0.8 2.9 3.8 4.1	0.5 2.7 3.0 3.5
2000 Q1 Q2 Q3 Q4	3.9 3.2 2.8 1.3	3.3 2.7 2.5 1.5	5.6 4.8 3.7 0.5	3.2 4.2 3.5 1.2	2.7 3.9 2.9 1.2	5.0 4.9 5.2 1.3	2.4	3.2 2.7 2.3 1.6	3.7 2.7	2.9 3.6 2.9 1.0	3.5 2.6	4.0 3.9	3.7 3.1	3.3 2.7
2001 Q1 Q2 Q3 Q4	-0.7 -3.3 -2.1 -0.8	-0.2 -3.5 -2.2 -0.7	-2.4 -2.7 -1.8 -1.1	-1.6 -2.0 -1.3 -0.1	-1.9 -2.2 -1.7 -0.2	-0.9 -1.3 -0.3 0.2		-0.3 -2.8 -1.5 -0.8	-1.6 -0.8	-0.9 -1.5 -1.0	-1.9 -1.3	-0.4	-2.6	-2.0 -1.1
2002 Q1 Q2 Q3 Q4	2.4 4.1 1.9	1.7 4.0 1.4 -0.7	4.5 4.6 3.4	0.9 3.4 1.9	0.3 3.8 1.9 0.6	2.5 2.5 1.8	3.7 1.8	1.3 3.7 1.4 -0.5	3.7 2.9	0.7 3.0 1.7	3.2 1.7	2.3 1.6	3.8 1.9	3.3 1.7
2003 Q1			**		**									

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

Source: OECD - SNA93

CORPORATE SERVICES PRICE INDEX (EXPERIMENTAL) - 2nd QTR 2003

What is the CSPI?

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).

The top-level CSPI is constructed by weighting together the currently available industry-level indices. Overall coverage is currently 50 per cent of the targeted corporate services sector.

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.

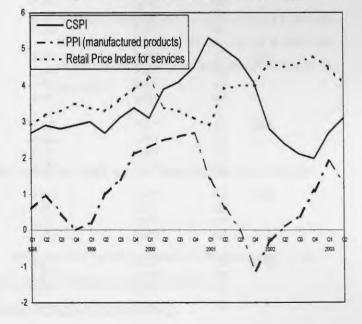
Results for Quarter 2, 2003

Prices of business-to-business services as measured by the Corporate Services Price Index (CSPI) rose by 3.1 per cent in the year to the second quarter of 2003, compared to 2.7 per cent in the previous quarter. This is the second successive increase in the annual rate of the top-level CSPI after a period of decline throughout most of 2001 and 2002.

The graph opposite shows how the trend for the CSPI contrasts with the retail price index for services and with the producer price index for manufactured products.

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).

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

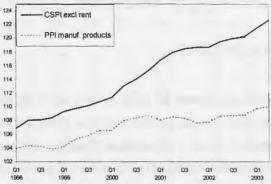


In Q2 2003, the CSPI (including property rental payments) rose by 1.2 per cent. The key contributions to this were price increases for property rentals and national post parcels.

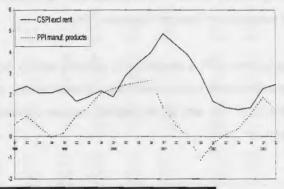
The top-level CSPI (excluding property rental payments) is compared to the net sector output PPI for manufactured products in the graphs on the right." Prices of corporate services covered by this inquiry have shown a relatively smooth upward path for the last 5 years but have been rising at a greater rate over this period than that of the PPI.

The annual rate for the CSPI (excluding property rental payments) was 2.5 per cent in Q2 2003 as compared to 2.3 per cent in the previous quarter. The annual rate for the PPI fell in Q2 2003 following increases in each of the preceding 5 quarters.

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



		Quarterly CSPI inde	x values (1995=100)		e on same quarter in s year (%)
		Including rent	Excluding rent	Including rent	Excluding rent
1997	Q1	104.5	104.6	3.8	4.2
	Q2	105.4	105.5	3.7	3.9
	Q3	105.9	106.0	3.9	4.2
	Q4	106.3	106.2	2.9	2.8
1998	Q1	107.3	106.9	2.7	2.2
	Q2	108.4	108.0	2.9	2.4
	Q3	108.8	108.1	2.8	2.1
	Q4	109.4	108.4	2.9	2.1
1999	Q1	110.5	109.3	3.0	2.3
	Q2	111.3	109.8	2.7	1.7
	Q3	112.2	110.2	3.1	1.9
	Q4	113.1	110.8	3.4	2.2
2000	Q1	114.0	111.4	3.1	1.9
	Q2	115.6	113.1	3.9	2.9
	Q3	116.8	114.1	4.1	3.5
	Q4	118.2	115.3	4.5	4.0
2001	Q1	120.0	116.8	5.3	4.9
	Q2	121.4	118.0	5.0	4.4
	Q3	122.3	118.5	4.7	3.9
	Q4	123.1	118.7	4.1	3.0
2002	Q1	123.4	118.7	2.8	1.7
	Q2	124.4	119.6	2.4	1.4
	Q3	124.9	120.0	2.1	1.3
	Q4	125.6	120.3	2.0	1.4
2003	Q1	126.7	121.5	2.7	2.3
	Q2	128.3	122.6	3.1	2.5

Industry-specific indices

The tables on the next 5 pages contain the series for the 31 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 the business use of hotels rose by 1.9 per cent this quarter and by 2.3 per cent over the year, the first increase in the annual rate since Q1 2001. This is reportedly due to an improvement in the hotel market and seasonal changes;
- bus and coach hire prices rose by 1.7 per cent in Q2 2003 and were 7.1 per cent higher over the year. The increases are reportedly due to higher wages, increases in the price of fuel and a rise in insurance premiums;
- sea and coastal freight prices rose by 0.7 per cent this
 quarter and show an increase of 4.5 per cent over the
 year, the first increase in the annual rate since Q3 2001.
 This is reportedly due to market driven price reviews;
- property rental payments rose by 1.9 per cent this quarter. Increases for retail and industrial properties have been largely responsible for the rise this quarter, as reported by data suppliers IPD;

- prices for national post parcels rose by 6.0 per cent this quarter due to an annual increase reported by data suppliers Parcelforce;
- prices charged by employment agencies rose by 0.9 per cent this quarter and increased 3.5 per cent over the year, the highest increase since Q4 2001. This is reportedly due to price reviews and increases in supply and demand for staff;
- industrial cleaning prices rose by 1.5 per cent, the largest quarterly increase for 5 years. The annual increase of 2.1 per cent was also the largest since Q4 1998. This is reportedly due to price reviews, pay reviews and rising costs;
- commercial film processing rose by 8.0 per cent this
 quarter and increased by 8.0 per cent over the year.
 This is reportedly due to reviews which resulted in
 general price increases throughout a large sector of the
 market;
- sewerage services charges rose by 5.0 per cent this quarter, due to annual price increases in the industry reported by the data suppliers Ofwat;
- prices for waste disposal services rose by 2.4 per cent this quarter. According to the industry this is partly due to the increase in landfill tax that came into effect on 1st April 2003.

Next results

The next set of CSPI results will be issued on 14th November 2003 via the National Statistics website www.statistics.gov.uk (search for "CSPI").

Further information

- An article published in the July 2000 issue of Economic Trends contained background details of the development of the CSPI (also available at http://www.statistics.gov.uk/CCI/article.asp?ID=60)
- Other information on the CSPI is available at http://www.statistics.gov.uk/cspi
- Inquiry Contact:

Nick Palmer

UK Office for National Statistics

Tel: (01633) 813493

email: cspi@ons.gov.uk

	Maintenance						reignt dails	port by road
	and repair of motor vehicles*	Hotels	Canteens and catering	Business rail fares*	Rail freight	Bus and coach hire	Total	International component
SIC(92):	50.20	55.10	55.50	60.10/1	60.10/2	60.23/1	60.24	
1995 net sector weights (%):			- C					
(including property rentals)	3.81	1.82	0.76	0.40	1.22	0.57	19.12	
(excluding property rentals)	5.43	2.60	1.08	0.57	1.74	0.81	27.23	
Annual 1998	106.0	113.3	112.0	109.3	92.9	114.9	113.2	104.8
1999	108.0	114.7	114.8	114.7	94.0	119.3	115.8	102.0
2000	110.0	117.6	116.3	119.9	93.0	130.3	123.5	103.4
2001	112.6	121.5	120.9	123.6	93.6	135.7	132.9	104.9
2002	115.5	120.0	123.4	127.2	94.7	140.6	135.2	107.3
Percentage change, latest year								
1998	1.4	5.1				5.9	2.8	0.1
1999	1.9	1.3	2.6	4.9	1.3	3.9	2.4	-2.7
2000	1.9	2.5	1.3	4.5	-1.1	9.2	6.6	1.3
2001	2.4	3.3	3.9	3.1	0.6	4.1	7.6	1.5
2002	2.6	-1.2	2.1	2.9	1.2	3.7	1.8	2.3
Quarterly results (not seasons 1998 Q1	ally adjusted)	1101	440.0	100.2	02.0	1116	440.0	104.0
	105.4	112.1 113.0	110.8	109.3	93.0 93.3	111.6	112.0	104.8
Q2	106.4		111.9	109.3		115.2	113.3	105.3
Q3 Q4	106.3 106.1	113.8 114.3	112.4 112.8	109.3 109.3	92.6 92.6	115.9 116.8	113.5 113.9	105.4 103.8
1999 Q1	106.1	114.3	113.9	114.7	93.7	118.2	114.2	103.8
1999 Q1 Q2	107.0	114.3	114.9	114.7	94.1	119.4	114.2	103.5
Q3	108.2	114.0	115.1	114.7	94.1	119.9	116.1	101.5
Q4	108.9	115.3	115.4	114.7	94.2	119.9	118.2	101.4
2000 Q1	109.2	115.1	115.5	119.9	94.7	126.4	118.6	102.3
Q2	109.5	117.8	116.5	119.9	92.5	130.6	121.9	102.3
Q3	110.1	118.9	116.7	119.9	92.4	131.6	125.0	102.9
Q4	111.2	118.4	116.7	119.9	92.4	132.8	128.4	106.0
2001 Q1	111.9	119.1	120.0	123.6	93.4	134.2	131.2	106.0
Q2	112.6	122.5	120.9	123.6	94.1	135.1	132.3	106.3
Q3	113.1	122.2	120.9	123.6	93.8	136.3	133.6	102.2
Q4	112.8	122.0	121.6	123.6	93.0	137.0	134.5	105.2
2002 Q1	114.4	122.7	121.6	127.2	94.0	137.4	133.8	105.1
Q2		119.6	123.6	127.2	94.7	139.3	135.1	105.1
Q3	116.0	118.3	124.2	127.2	95.0	141.9	135.9	109.5
Q4		119.3	124.2	127.2	95.1	143.8	136.2	109.6
2003 Q1	118.2	120.1	124.9	131.7	95.1	146.6	138.3	110.1
Q2		122.4	124.9	131.7	95.8	149.1	139.0	110.0
Percentage change, latest qua	arter on previous qu 0.5	2.8	0.0	3.9	0.6	1.9	0.7	+1.0
1998 Q1 Q2		0.9	1.0	0.0	0.2	3.3	1.2	0.5
Q3		0.6	0.5	0.0	-0.8	0.6	0.3	0.0
Q4		0.5	0.4	0.0	0.1	- 0.7	0.4	-1.5
1999 Q1	0.8	0.0	0.9	4.9	1.1	1.2	0.3	-0.3
Q2		0.2	0.9	0.0	0.5	1.0	0.5	-1.6
Q3		0.3	0.2	0.0	0.0	0.5	1.2	-0.3
Q4		0.3	0.3	0.0	0.1	0.0	1.9	-0.1
2000 Q1	0.2	-0.1	0.0	4.5	0.5	5.4	0.3	1.0
Q2	0.3	2.3	0.9	0.0	-2.3	3.3	2.8	0.0
Q3		0.9	0.1	0.0	-0.2	0.8	2.5	0.5
Q4		-0.4	0.1	0.0	0.0	0.9	2.8	3.
2001 Q1		0.6	2.8	3.1	1.0	1.1	2.1	0.0
Q2		2.9	0.8	0.0	0.8	0.7	0.9	0.2
Q3		-0.2	0.0	0.0	-0.4	0.9	1.0	-3.1
Q4	-0.3	-0.2	0.6	0.0	-0.8	0.5	0.6	2.9
2002 Q1	1.4	0.6	0.0	2.9	1.1	0.3	-0.5	-0.
Q2 Q3		-2.6 -1.1	1.6 0.5	0.0	0.8	1.4 1.9	1.0 0.6	0. 4.:
Q4		0.8	0.0	0.0	0.3	1.3	0.6	0.
2003 Q1		0.6	0.6	3.5	0.0	1.9	1.6	0.
Q2		1.9	0.0	0.0	0.7	1.7	0.5	-0.
Percentage change, latest qu								-
1998 Q1		6.7		3.9	-10.6	4.5	3.7	3.
Q2	1.9	4.0		3.9	0.9	6.3	2.8	-0.
Q3	1.4	4.7	1.3	3.9	0.1	6.1	2.4	-0.
Q4	1.2	4.9	1.8	3.9	0.2	6.7	2.5	-1.
1999 Q1		2.0	2.8	4.9	0.7	5.9	2.0	-1.
Q2		1.3	2.7	4.9	0.9	3.6	1.3	-3.
Q		1.0	2.4	4.9	1.7	3.4	2.2	-3.
Q4		0.8	2.3	4.9	1.7	2.7	3.8	-2.
2000 Q1		0.7	1.4	4.5	1.1	6.9	3.8	-1.
Q		2.8		4.5	-1.7	9.4	6.3	0.
Q		3.5		4.5	-1.9	9.7	7.6	1.
2001 04		2.7		4.5	-1.9	10.7	8.6	4.
2001 Q1		3.5		3.1	-1.5	6.2	10.6	3.
Q		4.0 2.8		3.1	1.7 1.5	3.5 3.6	8.5 6.9	-0.
Q		3.0		3.1	0.7	3.2	4.7	
2002 Q		3.1		2.9	0.7	2.4	2.0	
2002 Q		-2.4		2.9	0.6	3.1	2.1	-1.
Q		-3.2		2.9	1.3	4.1	1.7	
		-2.2		2.9	2.2	5.0	1.3	4.
0.				2.5	2.4	0.0	1.0	٠,
Q4 2003 Q		-2.2		3.5	1.1	6.7	3.4	

	Commercial vehicle of ferries	Sea and pastal water freight	Business air fares	Freight forwarding	National post parcels*	Courier	Business telecomm- -unications*	Proper rent payment
SIC(92):	61.10/1	61.10/2	62.10/1	63.40	64.11	64.12	64.20	70.2
995 net sector weights (%):								
(including property rentals) (excluding property rentals)	0.50 0.71	0.57	1.90	5.58	4.14	0.93	7.15	29.7
Annual	0.71	0.01	2.71	7.95	5.89	1.33	10.18	0.0
1998	96.9	88.6	123.5	99.1	119.8	105.6	83.4	110
1999		79.4	127.2	95.1	122.9	107.0	81.7	116
2000		82.3	135.3	96.0	128.6	110.0	77.7	122
2001		86.2	153.7	95.9	132.6	116.0	75.6	130
2002		77.4	162.9	92.2	137.9	119.3	75.7	136
ercentage change, latest year on 1998		-7.2	7.3	4.6		4.0		
1999		-10.4	3.0	-4.6 -4.0	6.6 2.5	4.2 1.3	-3.2 2.1	4
2000		3.7	6.3	1.0	4.7	2.8	-4.9	5
2001		4.7	13.6	-0.1	3.1	5.5	-2.6	
2002		-10.2	6.0	-3.9	4.0	2.8	0.1	
uarterly results (not seasonally a								
1998 Q1		93.7	119.8	102.2	113.8	102.6	83.5	108
Q2		88.4	124.3	99.7	121.9	105.8	83.1	109
Q3 Q4		88.1 84.0	124.9 125.1	97.9	121.9	106.8	83.5	110
1999 Q1		81.7	125.4	96.5 97.1	121.9	107.3	83.5	111
Q		80.6	127.5	94.5	121.9 123.2	107.3 106.9	83.5 83.0	11:
Q		77.0	127.7	94.0	123.2	106.9	81.5	110
Q4	99.3	78.0	128.3	94.9	123.2	107.0	78.7	11
2000 Q1		79.6	129.5	95.2	123.2	108.3	79.1	12
Q2		81.9	132.5	95.7	130.4	108.2	78.7	12
Q		83.1	135.8	96.2	130.4	110.0	77.0	12
Q4		84.7	143.3	97.1	130.4	113.3	75.9	12
2001 Q1		87.5	150.3	98.0	130.4	113.8	75.9	12
Q		88.4	151.7	96.8	133.3	115.6	75,5	12
Q3 Q4		86.5 82.3	154.9	94.8	133.3	117.2	75.5	13
2002 Q1		80.5	157.9	94.0	133.3	117.6	75.6	13
Q2		75.5	161.4 162.1	93.7 92.7	133.3 139.4	118.6	75.5	13
Q3		76.5	163.2	91.4	139.4	119.0 119.6	76.0	13
Q4		76.9	164.9	90.9	139.4	119.8	75.7 75.7	13
2003 Q1		78.4	165.1	92.0	139.4	121.5	75.8	13
Q2		78.9	166.7	90.9	147.7	121.8	75.9	14
ercentage change, latest quarter	on previous qua	rter						
1998 Q1		-1.9	2.2	-2.0	0.0	0.9	-1.1	
Q2		-5.6	3.7	-2.5	7.1	3.1	-0.4	
Q3		-0.3	0.5	-1.8	0.0	0.9	0.4	
Q4 1999 Q1		-4.6 -2.7	0.1	-1.4	0.0	0.4	0.0	
Q2		-1.4	1.7	0.6 -2.6	0.0 1.1	-0.4	0.0	
Q3		-4.5	0.2	-0.6	0.0	0.0	-0.5 -1.8	
Q4		1.4	0.5	0.9	0.0	0.1	-3.5	
2000 Q1		1.9	1.0	0.3	0.0	1.2	0.5	
Q2		2.8	2.3	0.5	5.9	-0.1	-0.5	
Q3		1.5	2.5	0.6	0.0	1.6	-2.1	
Q4		1.9	5.5	0.9	0.0	3.0	-1.4	
2001 Q1		3.4	4.9	1.0	0.0	0.5	0.0	
Q2		1.0	1.0	-1.2	2.2	1.5	-0.6	
Q3 Q4		-2.1	2.1	-2.1	0.0	1.4	0.0	
2002 Q1		-4.9 -2.2	2.0	-0.8 -0.4	0.0	0.3	0.2	
2002 Q1		-6.2	0.4	-1.0	0.0 4.5	0.9	-0.1	
Q		1.3	0.7	-1.4	0.0	0.3	0.7 -0.5	
Q4		0.6	1.1	-0.6	0.0	0.0	0.0	
2003 Q1		1.9	0.1	1.3	0.0	1.4	0.2	
Q2	0.7	0.7	1.0	-1.3	6.0	0.2	0.2	
ercentage change, latest quarter								
1998 Q1		-1.6	6.2	-1.2	4.9	1.4	-5.5	
Q		-7.3	9.3	-3.9	7.1	4.2	-3.5	
QS		-7.9	7.1	-5.8	7.1	5.6	-2.4	
1999 Q1		-12.0 -12.8	6.7 4.7	-7.5 -5.0	7.1 7.1	5.5	-1.1	
Q2		-8.8	2.6	-5.0	1.1	4.5 1.0	0.0 -0.1	
Q		-12.6	2.2	-4.0	1.1	0.0	-2.4	
Q4		-7.0	2.6	-1.7	1.1	-0.3	-5.8	
2000 Q1		-2.6	3.3	-2.0	1.1	0.9	-5.3	
Q		1.5	3.9	1.2	5.9	1.3	-5.3	
Q	-0.5	7.9	6.4	2.4	5.9	2.9	-5.5	
Q4	0.6	8.4	11.7	2.3	5.9	5.9	-3.5	
2001 Q1	1.5	9.9	16.0	3.0	5.9	5.1	-3.9	
Q		8.0	14.5	1.2	2.2	6.8	-4.1	
Q		4.2	14.0	-1.5	2.2	6.5	-2.0	
Q4		-2.8	10.2	-3.1	2.2	3.8	-0.4	
2002 Q1		-8.0	7.4	-4.4	2.2	4.2	-0.6	
Q		-14.6	6.8	-4.2	4.5	2.9	0.7	
Q: Q:		-11.6 -6.5	5.4	-3.5	4.5	2.1	0.2	
Q ²			4.4	-3.4	4.5	1.9	0.1	
2003 Q	1.8	-2.6	2.3	-1.7	4.5	2.5	0.4	

	Real estate agency activities	Car contract hire*	Construction plant hire*	Market research	Technical testing	Employment agencies	Securit
IC(92):	70.30	71.10	71.32	74.13	74.30	74.50	74.6
995 net sector weights (%):	444	4.00	4.00	4.00	4 47	6 40	
(including property rentals)	1.14	1.29 1.84	1.92 2.73	1.23 1.76	1.17 1.67	6.10 8.69	1.1
(excluding property rentals)	1.02	1.04	2.13	1.70	1.07	0.09	1.5
nnual 1998	* 120.8	97.5	99.8		106.7	115.7	100.
1999	126.6	99.2	103.9	112.2	109.1	121.9	103
2000	134.8	102.2	109.3	116.2	109.7	124.2	105
2001	139.2	97.0	113.9	120.7	110.9	131.1	108
2002	139.3	96.7	111.5	124.4	113.5	132.4	112
ercentage change, latest year on p		7.77					
1998		1.2	3.4			5.9	1.
1999	4.9	1.7	4.1		2.2	5.4	2
2000	6.4	3.0	5.1	3.5	0.6	1.8	2
2001	3.3	-5.1	4.2	3.9	1.1	5.6	3
2002	0.1	-0.3	-2.1	3.1	2.4	1.0	4
uarterly results (not seasonally ad	justed)						
1998 Q1	117.9	97.6	101.3	**	106.1	113.3	100
Q2	120.1	98.4	99.8		106.7	115.1	100
Q3	122.3	96.9	99.1	106.8	106.7	116.2	100
Q4	122.8	97.3	99.1	108.6	107.4	118.3	100
1999 Q1	123.4	97.8	105.3	111.7	109.1	120.9	101
Q2	125.5	98.1	102.6	112.0	109.1	121.9	102
Q3	127.7	99.6	103.0	112.5	109.0	122.3	104
Q4	130.0	101.4	104.9	112.8	109.3	122.7	104
2000 Q1	132.1	102.3	105.6	115.2	109.5	123.1	104
Q2	134.2	102.7	110.1	115.8	109.7	123.9	104
Q3	135.5	102.2	111.1	116.6	110.1	124.5	10
Q4	137.4	101.6	110.2	117.1	109.6	125.2	105
2001 Q1	138.8	99.4	111.3	120.2	109.5	127.9	106
Q2	139.2	96.6	118.0	120.7	110.9	131.1	10
Q3	139.5	96.2	114.8	120.7	111.5	132.9	108
Q4	139.3	95.7	111.4	121.2	111.8	132.6	110
2002 Q1	139.1	96.2	109.7	124.0	113.3	131.7	112
Q2	139.3	96.4	110.8	124.1	113.8	131.3	112
Q3	139.7	96.5	112.5	124.2	113.4	133.2	112
Q4	139.2	97.6	113.1	125.6	113.6	133.2	113
2003 Q1	137.7	96.5	113.8	126.5	114.1	134.7	115
Q2	136.8	89.5	114.8	126.7	115.1	135.9	117
ercentage change, latest quarter of	n previous qu	arter					
1998 Q1		1.1	4.8		**	2.3	C
Q2	1.9	0.8	-1.4		0.5	1.5	-(
Q3	1.8	-1,5	-0.7	**	0.0	0.9	(
Q4	0.4	0.4	0.0	1.6	0.7	1.8	0
1999 Q1	0.6	0.5	6.3	2.9	1.6	2.2	(
Q2	1.6	0.3	-2.6	0.3	0.0	8.0	
Q3	1.8	1.6	0.5	0.4	-0.2	0.3	
Q4	1.8	1.9	1.8	0.3	0.3	0.3	1
2000 Q1	1.6	0.9	0.7	2.1	0.2	0.3	
Q2	1.6	0.4	4.3	0.5	0.2	0.7	4
Q3	0.9	-0.5	0.8	0.7	0.3	0.5	
Q4	1.4	-0.6	-0.7	0.5	-0.4	0.6	
2001 Q1	1.0	-2.1	1.0	2.6	-0.1	2.1	
Q2	0.3	-2.9	6.1	0.4	1.2	2.5	
Q3	0.2	-0.4	-2.7	0.0	0.6	1.4	
Q4	-0.2	-0.5	-3.0	0.4	0.3	-0.2	
2002 Q1	-0.1	0.5	-1.5	2.3	1.4	-0.7	
Q2	0.1	0.2	1.0	0.1	0.5	-0.3	
Q3	0.3	0.2	1.5	0.0	-0.4	1.5	
Q4 2003 Q1	-0.3 -1.0	1.1 -1,1	0.6	1.1 0.8	0.1	0.0	
2003 Q1 Q2	-0.7	-7.3	0.9	0.1	0.8	0.9	
ercentage change, latest quarter of				0.1	0.0	0.5	
1998 Q1	oon ooponu	1.5	3.1			5.9	
Q2		1.8	3.6			5.8	
Q3		0.8	4.4			5.3	
Q4		0.8	2.5			6.8	
1999 Q1	4.7	0.2	4.0		2.8	6.7	
Q2	4.4	-0.3	2.8		2.3	5.9	
Q3	4.4	2.7	4.0	5.3	2.1	5.2	
Q4	5.9	4.2	5.9	3.9	1.7	3.7	
2000 Q1	7.0	4.7	0.3	3.1	0.3	1.8	
Q2	7.0	4.8	7.4	3.3	0.5	1.6	
Q3	6.1	2.6	7.8	3.6	1.0	1.8	
Q4	5.7		5.1	3.8	0.3	2.1	
2001 Q1	5.1	-2.8	5.4	4.4	0.0	3.9	
Q2	3.7		7.2	4.3	1.0	5.8	
Q2	3.0		3.4	3.6	1.3	6.8	
Q4	1.3		1.0	3.4	2.0	5.9	
2002 Q1	0.2		-1.4	3.1	3.5	3.0	
2002 Q1	0.2		-6.1	2.8	2.7	0.2	
		-U.Z	*0.1	2.0			
Q2			2.0	2.0	1.0	0.2	
Q2 Q3	0.1	0.3	-2.0	2.8	1.8	0.2	
Q2		0.3 1.9	-2.0 1.6 3.8	2.8 3.6 2.1	1.8 1.6 0.7	0.5	

	Industrial cleaning	Commercial film processing	Contract packaging	& secretarial services	Translation & interpretation services	Adult
SIC(92):	74.70	74.81/9	74.82	74.83 (part)	74.83 (part)	80.42
995 net sector weights (%): (including property rentals) (excluding property rentals)	2.20 3.13	0.08 0.12	0.47 0.67	0.18 0.26	0.14 0.20	0.56
nnual	101 5	405.5		400 5	100.0	***
1998 1999	101.5 102.0	105.5 105.6	109.4	108.5 111.1	106.9 108.7	111.1
2000	102.0	106.3	112.1	111.2	108.2	118.9
2001	102.2	107.9	112.1	109.6	107.2	123.7
2002	103.6	108.5	113.0	109.5	107.1	127.9
Percentage change, latest year on						
1998	2.7	0.8	**		4.0	2.7
1999	0.5	0.1	2.4	2.4	1.6	3.3
2000 2001	0.0 0.2	0.7 1.5	2.4 0.0	0.1 -1.4	-0.5 -0.9	3.6
2002	1.4	0.6	0.8	-0.1	-0.1	3.4
Quarterly results (not seasonally a			7.07	• • • • • • • • • • • • • • • • • • • •		•
1998 Q1	101.1	105.5		106.7	106.9	110.5
Q2	101.4	105.5		108.4	106.7	111.
Q3	101.6	105.5	**	109.4	106.9	110.
Q4	101.8	105.5		109.4	107.1	112.0
1999 Q1	101.9	105.5	109.2	110.5	108.6	114.0
Q2	101.9	105.6 105.6	109.5 109.5	111.6 111.0	108.7 108.7	114.4 115.0
Q3 Q4	102.0 102.0	105.6	109.5	111.3	108.7	115.
2000 Q1	102.0	105.9	111.8	111.5	108.7	117.
Q2	102.1	105.9	111.6	111.1	108.7	117.
Q3	102.0	106.5	112.8	111.5	107.8	119.
Q4	101.7	107.0	112.2	110.8	107.5	120.
2001 Q1	101.7	107.0	111.8	109.2	107.5	121.
Q2	101.7	107.0	111.9	109.5	107.6	123.
Q3	101.9	108.2	112.3	109.7	106.8	124.
Q4	103.3	109.5	112.4	110.1	106.9	125.
2002 Q1	103.5	108.5	112.5	109.4	107.1	127.
Q2	103.5 103.5	108.5 108.5	112.7 113.2	109.4 109.5	107.3 107.1	127. 128.
Q3 Q4	103.7	108.5	113.5	109.8	107.1	128.
2003 Q1	104.1	108.5	112.7	110.6	108.8	130.
Q2	105.7	117.2	112.6	109.9	109.6	131.
Percentage change, latest quarter						
1998 Q1	2.0	0.2		**	0.2	0.4
Q2	0.4	0.0	**	1.6	-0.1	0.0
Q3	0.2	0.0	**	0.9	0.2	-0.
Q4	0.2	0.0		0.0	0.2	1.
1999 Q1	0.1 0.0	0.0 0.1	0.3	1.0 1.0	1.4	1.
Q2 Q3	0.0	0.0	0.0	-0.6	0.0	0.
Q4	-0.1	0.0	0.0	0.3	0.0	0.
2000 Q1	0.1	0.3	2.1	0.3	0.0	1.
Q2	0.1	0.0	-0.2	-0.4	0.0	0.
Q3	-0.1	0.5	1.1	0.4	-0.9	1.
Q4	-0.2	0.5	-0.6	-0.6	-0.2	0.
2001 Q1	0.0	0.0	-0.3	-1.4	0.0	1.
Q2	0.1	0.0	0.1	0.2	0.0	1.
Q3	0.2	1.1	0.3	0.3	-0.7	0.
Q4	1.4	1.2	0.1	0.3	0.2	0.
2002 Q1	0.2	-0.9 0.0	0.0	-0.7 0.1	0.1 0.2	1.
Q2 Q3	0.0	0.0	0.5	0.1	-0.2	0.
Q4	0.2	0.0	0.3	0.2	0.0	0.
2003 Q1	0.4	0.0	-0.7	0.7	1.6	1.
Q2	1.5	8.0	0.0	-0.6	0.7	0.
Percentage change, latest quarter			ious year			
1998 Q1	2.3	1.1		**		3.
Q2	2.9	1.1	**	**		3.
Q3	2.7	0.8			0.4	2.
Q4	2.7	0.2	**	3.6	0.4	1 3
1999 Q1 Q2	0.9 0.5	0.0 0.1	**	3.0	1.7 1.8	3
Q2 Q3	0.4	0.1	**	1.4	1.6	3
Q3 Q4	0.4	0.1	**	1.7	1.5	3
2000 Q1	0.1	0.4	2.4	1.0	0.0	3
Q2	0.2	0.3	1.9	-0.5	0.0	2
Q3	0.0	0.9	3.0	0.5	-0.8	4
Q4	-0.2	1.3	2.4	-0.4	-1.0	4
2001 Q1	-0.4	1.0	0.0	-2.1	-1.1	3
Q2	-0.4	1.0	0.3	-1.4	-1.0	4
Q3	0.0	1.6	-0.5	-1.6	-0.9	3
Q4	1.6	2.3	0.2	-0.6	-0.6	4
2002 Q1	1.8	1.4	0.6	0.1	-0.5	4
Q2	1.8	1.4	0.7	-0.2	-0.3 0.3	3
			U.Ö	-0.2	0.3	-
Q3	1.5				0.3	
	0.4 0.6	-0.9 0.0	1.0	-0.3 1.1	0.2 1.7	2

			_	TOP-LEVEL	CSPI
02.00	Sewerage services*	Waste disposal	Commercial washing and dry cleaning	Including property	Excluding property
SIC (92) 995 net sector weights (%):	90.00/1	90.00/2	93.01	rentals	rentals
(including property rentals) (excluding property rentals)	1.28 1.82	2.31 3.29	0.56 0.79	100.00	100.00
1998	114.1	129.1	108.9	108.5	107.9
1999	118.1	138.1	112.1	111.8	110.0
2000 2001	107.9 105.7	145.2 149.6	115.0 116.5	116.2 121.7	113.4 118.0
2002	106.2	157.2	117.0	124.6	119.7
Percentage change, latest year on pr	revious year				
1998	3.8	1.8	2.0	2.8	2.2
1999 2000	3.4 -8.6	7.0 5.2	2.9 2.6	3.0 3.9	2.0
2001	-2.0	3.0	1.3	4.8	4.0
2002	0.5	5.1	0.5	2.3	1.4
Quarterly results (not seasonally adj 1998 Q1	111.0	128.5	107.3	107.3	106.9
Q2	115.2	129.3	109.2	108.4	108.0
Q3	115.2	129.0	109.8	108.8	108.1
Q4	115.2	129.4	109.4	109.4	108.4
1999 Q1 Q2	115.2 119.0	131.0 139.7	110.6 112.5	110.5 111.3	109.3 109.8
Q3	119.0	140.9	112.4	112.2	110.2
Q4	119.0	140.9	112.9	113.1	110.8
2000 Q1	119.0	141.9	114.5	114.0	111.4
Q2 Q3	104.2 104.2	147.6 146.2	115.1 115.6	115.6 116.8	113.1 114.1
Q4	104.2	145.2	114.7	118.2	115.3
2001 Q1	104.2	145.2	115.9	120.0	116.8
Q2	106.2	148.5	116.5	121.4	118.0
Q3 Q4	106.2 106.2	151.9 152.8	116.4 117.1	122.3 123.1	118.5 118.7
2002 Q1	106.2	152.7	117.4	123.4	118.7
Q2	106.2	157.7	117.1	124.4	119.6
Q3	106.2	158.3	116.9	124.9	120.0
Q4 2003 Q1	106.2 106.2	159.9 161.0	116.5 119.4	125.6 126.7	120.3 121.5
Q2	111.5	164.8	118.9	128.3	122.6
Percentage change, latest quarter or					
1998 Q1	0.0	0.4	-0.4	0.9	0.7
Q2 Q3	3.8	-0.2	1.7 0.6	1.0 0.4	1.1
Q4	0.0	0.3	-0.4	0.5	0.2
1999 Q1	0.0	1.2	1.1	1.0	0.8
Q2 Q3	3.3 0.0	6.6 0.9	1.8 -0.1	0.7 0.8	0.5
Q3 Q4	0.0	0.0	0.5	0.8	0.3
2000 Q1	0.0	0.7	1.4	0.7	0.5
Q2	-12.5	4.0	0.5	1.5	1.5
Q3 Q4	0.0	-1.0 -0.6	0.4 -0.8	1.0 1.2	0.9
2001 Q1	0.0	0.0	1.0	1.5	1.3
Q2	2.0	2.3	0.5	1.2	1.0
Q3	0.0	2.3	-0.1	0.7	0.4
Q4 2002 Q1	0.0	0.6	0.6 0.3	0.6 0.3	0.2
Q2	0.0	3.3	-0.3	0.8	0.7
Q3	0.0	0.4	-0.2	0.4	0.4
Q4	0.0	1.0	-0.4	0.5	0.2
2003 Q1 Q2	0.0 5.0	0.7 2.4	2.5 -0.4	0.9	1.0
Percentage change, latest quarter on o					0.0
1998 Q1	3.9	1.7	40	2.7	2.2
Q2	3.8	2.7	2.4	2.9	2.4
Q3 Q4	3.8 3.8	1.8	3.1 1.5	2.8 2.9	2.
1999 Q1	3.8	1.9	3.0	3.0	2.3
Q2	3.3	8.0	3.0	2.7	1.
Q3	3.3 3.3	9.2	2.3 3.2	3.1 3.4	1.9
Q4 2000 Q1	3.3	8.9 8.3	3.6	3.4	1.5
Q2	-12.5	5.7	2.3	3.9	2.
Q3	-12.5	3.7	2.8	4.1	3.
Q4 2001 Q1	-12.5 -12.5	3.1 2.3	1.6 1.2	4.5 5.3	4.
2001 Q1 Q2	2.0	0.6	1.2	5.0	4.
Q3	2.0	3.9	0.7	4.7	3.
Q4	2.0	5.2	2.1	4.1	3.
2002 Q1 Q2	2.0 0.0	5.2 6.2	1.3 0.5	2.8 2.4	1.
Q2 Q3	0.0	4.2	0.5	2.1	1.3
Q4	0.0	4.7	-0.5	2.0	1.
2003 Q1	0.0	5.4	1.7	2.7	2.

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 Water Services)				
National post parcels	Parcelforce				
Business rail fares	Strategic Rail Authority (SRA)				

Jobs in the public sector, June 2002

Ole Black

Director, Employment, Earnings and Productivity
Division

Office for National Statistics

Room 1207 Government Buildings Cardiff Road Newport, NP10 8XG

Ian Richardson

Employment, Earnings and Productivity Division Office for National Statistics

Room 1066 Government Buildings Cardiff Road Newport, NP10 8XG

Tel: 01633 812072

E-mail: ian.richardson@ons.gov.uk

Rhys Herbert

Economic Analysis and Satellite Accounts Division Office for National Statistics

Room D110 Government Buildings Cardiff Road Newport, NP10 8XG

Tel: 01633 819162

E-mail: rhys.herbert@ons.gov.uk

Key points

- Around 86,000 new jobs were created in the public sector last year, slightly less than the 118,000 rise in the previous year.
 Employment in the public sector has now grown in three of the past four years since 1998, by 354,000 in total or around 7 per cent.
- Before these gains, employment in the public sector had fallen for over 15 years in a row. The number of public sector jobs is therefore still well below the levels of the 1970s and 1980s.
- The fastest growing areas of public sector employment are consistent with those areas of public spending that have gone up most. Health had the bulk of the job gains in 2002, 61,000 in total in the 12 months to June 2002, while education and other central government employment added 11,000 and 20,000 jobs respectively.
- Job growth in the economy as a whole continued last year, despite the fact that output growth was below trend. The job gains were split fairly evenly between the public and private sectors but given that the public sector only constitutes about 19 per cent of total jobs, the contribution of the public sector to employment growth was unusually large.
- Despite the recent job gains in the public sector, the private sector

- still accounts for over 80 per cent of total jobs. The private sector is the dominant employer in production and construction and in many services. In contrast the public sector is the dominant employer in public administration, health and education.
- The composition of public sector employment has changed dramatically over the last two decades. Jobs have been transferred to the private sector with the privatisation of nationalised industries, and jobs were lost with the slimming down of the armed services and cutbacks in the Civil Service. In contrast employment in education and health has gone up.
- Together, education and health now account for just over half of total public sector employment compared with two-fifths 20 years ago.

Introduction

This is the latest in a series of annual articles on jobs in the public and private sectors. This article updates the figures to June 2002, the latest date for which there is comprehensive information. First it examines the latest figures for public sector jobs and also their historical context. It then goes on to look at relative movements in public and private sector jobs.

								_		governme	nt								
			entral go	vernment					_ocal go	vernment		Public corporation					is		
	HM Forces	National Health Service ^{1,2}	Other central govern- ment	Total central govern- ment	Education	Social sevices	Con- struction	Police (incl. civilians)	Other local govern- ment	Local authorities community programme	Total local govern- ment	Total general govern- ment	Nation- alised industries	NHS Trusts ¹²	Other public corporations	Total public corpora- tions	Total public sector	of which: Civil Service ³	
Head	CGYN	FHBR	FHBS	FHBT	FHBU	FHBV	FHBW	FHBX	FHBY	CUKE	DYBG	FHCA	FHCB	CGXN	FHCC	DYBH	FHCE	CGXU	
count		705	240	0.040	4 007	070	404	450	550		0.050	4.000	4.000		450	0.000	0.704	-	
1962	442	785	813	2,040	1,297	276	124	152	803		2,652	4,692	1,856		153	2,009	6,701	714	
1972	371	821	813	2,005	1,365	295	128	159	824	**	2,771	4,776	1,769		160	1,929	6,705	703	
1979	314	1,152	921	2,387	1,539	344	156	176	782		2,997	5,384	1,849	**	216	2,065	7,449	739	
1980	323	1,174	896	2,393	1,501	346	152	181	776		2,956	5,349	1,816	**	222	2,038	7,387	715	
1982	324	1,227	849	2,400	1,434	352	132	186	761		2,865	5,265	1,554		202	1,756	7,021	672	
1983	322	1,227	835	2,384	1,433	360	130	187	768	27	2,905	5,289	1,465			1,663	6,952	654	
1984	326	1,223	810	2,359	1,430	368	126	187	773	58	2,942	5,301	1,410		189	1,599	6,900	630	
1985	326	1,223	811	2,360	1,429	376	125	187	774	67	2,958	5,318	1,131		120	1,251	6,569	608	
1986	322	1,215	800	2,337	1,452	387	125	188	770	88	3,010	5,347	1,058		129	1,187	6,534	610	
1987	319	1,212	781	2,312	1,486	398	128	191	763	96	3,062	5,374	864		121	985	6,359	599	
1988	316	1,228	778	2,322	1,504	405	125	194	764	89	3,081	5,403	791		121	912	6,315	593	
1989	308	1,226	781	2,315	1,442	411	119	195	771		2,938	5,253	719		112	831	6,084	586	
1990	303	1,221	776	2,300	1,431	417	114	199	806		2,967	5,267	675		110	785	6,052	579	
1991	297	1,098	783	2,178	1,416	414	106	202	809	**	2,947	5,125	497	124	102	723	5,848	576	
1992	290	917	801	2,008	1,391	410	97	204	797		2,899	4,907	457	314	105	876	5,783	592	
1993	271	543	792	1,606	1,201	398	90	207	783		2,679	4,285	437	662	93	1,192	5,477	579	
1994	250	177	758	1,185	1,176	408	87	206	768		2,645	3,830	382	1,000	80	1,462	5,292	553	
1995	230	97	708	1,035	1,188	412	83	207	749		2,639	3,674	345	1,085	107	1,537	5,211	532	
1996	221	84	612	917	1,191	406	76	207	744		2,624	3,541	287	1,102	139	1,528	5,069	512	
1997	210	78	582	870	1,193	403	65	206	726		2,593	3,463	242	1,121	128	1,491	4,954	493	
1998	210	77	581	868	1,204	395	61	207	712		2,579	3,447	248	1,123	126	1,497	4,944	484	
1999	208	76	585	869	1,322	388	59	207	728		2,704	3,573	247	1,144	130	1,521	5,094	481	
2000	207	79	573	859	1,301	386	59	204	732		2,682	3,541	245	1,168	140	1,553	5,094	498	
2001	204	81	594	879	1,351	377	57	208	742		2,735	3,614	242	1,218	138	1,598	5,212	506	
2002	204		614	818	1,362	367	47	218	747	**	2,741	3,559	242	1,360	137	1,739	5,298	516	

Notes

Table 1

Developments in Public Sector Employment

The data in this article are derived from administrative sources and a survey of local authorities. More detail on the sources is provided in Appendix 1. Appendix 2 gives details of the definitions and coverage of the sectors, including changes since 1998. Table 1 summarises the history of UK public sector employment over the past 40 years and its current composition.

Around 86,000 new jobs were created in the public sector last year, slightly less than the rise in the previous year. Employment in the public sector has now gone up in three of the past four years, by 354,000 in total or around 7 per cent. This represents a clear break from previous trends when jobs in this sector had fallen for over 15 years in a row. This increase in employment in recent years is in line with the faster rate of growth in public spending.

The fastest growing areas of employment are also consistent with those areas of public spending that have gone up most. Health had the most job gains in the year up until June 2002. The NHS added 61,000 jobs over that 12-month period. Another area of rapid growth was education where 11,000 jobs were created, while other central government (which include Civil Service jobs), saw 20,000 job gains. In contrast areas of the public sector which saw jobs disappear last year, included social services and local authority construction.

Despite the fact that the number of public sector jobs has increased in recent years, the current totals are still well down on the levels seen in the 1980s or 1970s. However, care has to be taken in making such long term comparisons as moves are sometimes a result of definitional changes as well as true underlying trends. The biggest single cause of the fall since that period was the reclassification of industries following privatisation. But at the same time employment

For 1991 until 2001 total NHS jobs comprises NHS jobs in central government and jobs in NHS trusts, which are currently classified to public corporations. It has recently been decided to
reclassify the latter as central government. This reclassification will take place in next year's article. For a note explaining the changes see: http://www.statistics.gov.uk/CCI/nugget.asp?ID=398&
Pos=2&ColRank=2&Rank=448

Due to organisational changes and the introduction of Strategic Health Authorities in April 2002 it is not possible to divide NHS staff between central government and public corporations in 2002.

^{3.} Great Britain only.

Figure 1 Annual changes in public sector employment (000's)

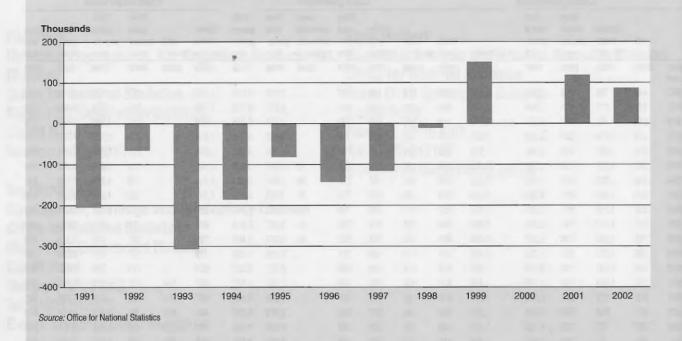
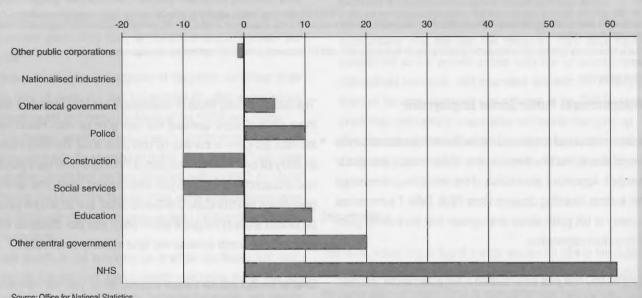


Figure 2 Public sector job changes (year to mid- 2002) (000's)



in the Civil Service has fallen significantly in the past two decades and the number of service personnel jobs has fallen by over 100,000 since the end of the cold war. Some areas, for example – employment in health and education – have been much steadier. Together, these two sectors now account for just over half of total public sector employment compared with two-fifths 20 years ago.

Public and private sector jobs – across the whole economy

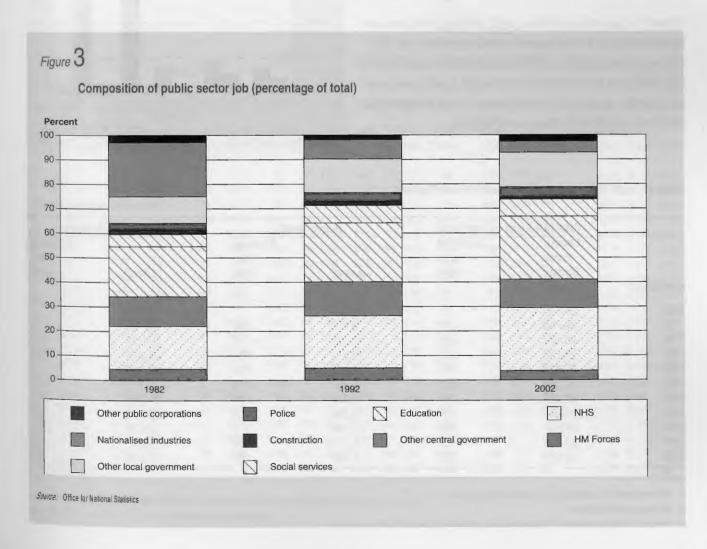
The best measure of the number of jobs in the economy as a whole is that provided by the Labour Force Survey (LFS), which is a survey of households. An alternative measure, known as work force jobs is (WFJ), derived from surveys of businesses, and provides the best estimate of the industrial composition of jobs. Neither the LFS, nor workforce jobs, however, provides a satisfactory estimate of public sector jobs, or therefore of the allocation of total jobs between public and private sectors.

The LFS estimate of public sector jobs is an overestimate because of errors in self-classification by households. Errors occur for example when employees of publicly funded bodes such as universities

incorrectly classify themselves as public sector. Universities are in fact part of the private sector in the National Accounts. Similarly, employees of private sector companies providing contracted out services to the public sector can incorrectly classify themselves as public sector employees. Following a National Statistics Quality Review of the LFS last year ONS is undertaking a pilot project to link LFS responses to the Inter-departmental Business Register (IDBR) which, if successful, should reduce the extent of mis-classification in the LFS.

The workforce jobs series is not disaggregated between public and private sectors. One category covers public administration, defence and compulsory social security, which is wholly in the public sector. Two other categories are health and education, but these include both public and private sector jobs.

In these circumstances the only satisfactory method of estimating the number of private sector jobs is as the difference between the number of jobs in the economy as a whole and the number of public sector jobs estimated independently. In this article, private sector jobs have been calculated as the difference between public sector jobs and the total number of jobs measured by the LFS, ONS's preferred



measure of aggregate employment. This is discussed later in the article in the context of jobs by industry. Earlier articles in this series considered private sector jobs as the difference between directly measured public sector jobs and total workforce jobs.

Table 2 gives the figures for the public and private sectors derived from the LFS and the estimates of public sector jobs reported in this article for the period up until the middle of 2002. Job growth in the economy as a whole continued over this period, despite the fact that output growth was below trend. The total number of jobs in the economy according to the LFS was 28,908,000 as of the mid-point of 2002. This represents an increase of 175,000 over the figures at the same time in 2001. On the estimates in this article the job gains were split fairly evenly between the public and private sectors. However, given that the public sector only constitutes about 19 per cent of total jobs then it becomes clear that the contribution of the public sector to employment growth was unusually large. 2002 was the second year in a row when significant job increases came from the public sector, a noticeable turnaround from the mid and late 1990s when the private sector saw very rapid job growth.

Public and private sector jobs - by industry

In order to assess changes in the industrial composition of public and private sector jobs, it is most useful to use the workforce jobs (WFJ) data source since this provides more reliable industry detail than the LFS. Table 3 sets out such an industrial analysis, based on employee jobs from the workforce jobs source (excluding the self-employed, HM Forces and government supported trainees).

The yearly movements in private sector jobs shown by Table 3 differ from those shown in Table 2, in which the LFS is used as the source of total jobs across the economy. This is because the two data sources do not always move together in the short term. For example workforce jobs source shows slower jobs growth across the whole economy than the LFS in 2002, with private sector jobs falling between 2001 and 2002. On a longer time scale, however, the two series are much more consistent.

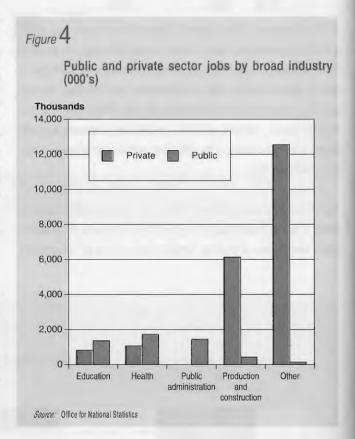


Table 2 LFS Employment: Public and Private Sectors

Thousands, summer quarter

	Total (All Age	ed 16 And Over)	Public 9	Sector	Private Sector				
Headcount	Labour Force Survey Jobs ¹	Increase over year	Level ²	Increase over year	Level ³	Increase over year			
1992	26,555		5,783		20,772				
1993	26,268	-287	5,477	-306	20,791	19			
1994	26,521	253	5,292	-185	21,229	438			
1995	27,206	685	5,211	-81	21,995	766			
1996	27,376	170	5,069	-142	22,307	312			
1997	27,765	389	4,954	-115	22,811	504			
1998	28,027	262	4,944	-10	23,083	272			
1999	28,366	339	5,094	150	23,272	189			
2000	28,631	265	5,094	0	23,537	265			
2001	28,733	102	5,212	118	23,521	-16			
2002	28,908	175	5,298	86	23,610	89			

Notes:

- 1. LFS Jobs equals LFS employment plus workers with second jobs.
- 2. Admin data used in this article.
- 3. Estimated as difference between LFS total employment and the direct estimate of public sector jobs.

Despite the recent job gains in the public sector, the private sector still accounts for over 80 per cent of employee jobs. The private sector is the dominant employer in production and construction and in the other, category, one that contains the bulk of private sector service jobs. In contrast the public sector is the dominant employer in public administration, health and education. Figure 4 illustrates these points. The recent trend in the last two categories has been particularly interesting, as employment has increased in both the public and private sectors. For instance, on top of the gains in the public sector, there also appear to have been increases in private sector education and health jobs over the past four years. However the education estimate is particularly volatile from year to year. Also care has to be used in interpreting the numbers as some of what are characterised here as private sector jobs may be considered by some to be more akin to a part of the public sector. So, for example, agency

nurses would here be characterised as private sector employees even if they are working in NHS hospitals. Also some of the increase in education may have been in publicly funded further education colleges, which have been considered as part of the private sector since 1993. (See Appendix 2 for more detail on definitional changes that has an impact on the numbers.)

Further information

For further information, contact:

Rhys Herbert

Economic Analysis and Satellite Accounts Division

Office for National Statistics

Room D110 Government Buildings

Cardiff Road

Newport, NP10 8XG

Table 3 UK employment by sector and industry group 1982-2002: headcount, midyear

																	Thou	sands
SIC 1	992	92			Employee jobs							Workforce jobs						
						Educ	ation		Health	& socia	al work	Public. administration defence & compulsory social securit	Prod	uction, truction, port & u	tilities	Other		
	***	Self-		Government -								2.0					Total	Total
		employment	- HM	supported								Public				Total	Private	Public
	jobs	jobs	Forces	trainees	jobs	Total	Private	Public	Total I	Private	Public	Total	Towns of the	Private	Public	Public & Private	Sector ¹	Sector
					04.00	00			0.5				10-45			01-05, 50-55		
	001//	00141	00141	001/0	01-99	80	00110	00110	85	00101		75	60-64	00101		65-74, 90-99	0075	
	CGYL	CGYM	CGYN	CGYO	CGYP	CGYQ	CGYR	CGYS	CGYT	CGYU	CGYV	CGYW	CGYX	CGYY	UGYZ	CGZA	CGZD	CGZE
1982	25,610	2,549	324		22,737	1,659	225	1,434	1886	307	1,579	1,540	8,879	6,991	1,888	8,773	18,589	7,021
1983	25,300	2,605	322	16	22,357	1,665	231	1,434	1906	319	1,587	1,537	8,461	6,668	1,793	8,788	18,348	6,952
1984	25,970	2,927	326	175	22,542	1,689	259	1,430	1955	364	1,591	1,519	8,304	6,579	1,725	9,075	19,070	6,900
1985	26,275	3,039	326	176	22,734	1,717	288	1,429	2041	442	1,599	1,489	8,203	6,827	1,376	9,284	19,706	6,569
1986	26,313	3,077	322	226	22.688	1,764	312	1,452	2105	503	1,602	1,483	7,964	6,652	1.312	9,372	19,779	6,534
1987	26,835	3,307	319	311	22,898	1,829	343	1,486	2192	582	1,610	1,503	7,865	6,752	1,113	9,509	20,476	6,359
1988	27,791	3,525	316	343	23,607	1,893	389	1,504	2326	693	1,633	1,486	7,955	6,918	1,037	9,947	21,476	6,315
1989	28,670	3,848	308	462	24,052	1,935	493	1,442	2327	690	1,637	1,407	8,000	7,050	950	10,383	22,586	6,084
1990	28,979	3,894	303	423	24,359	1,961	530	1,431	2363	725	1,638	1,447	7,912	7,013	899	10,676	22,927	6,052
1991	28.066	3,729	297	353	23,687	1,949	533	1,416	2423	787	1,636	1,467	7,349	6,644	705	10,499	22,218	5,848
1992	27,311	3,398	290	325	23,298	1,925	535	1,390	2493	852	1,641	1,469	6,946	6,287	659	10,465	21,528	5,783
1993	26,919	3,394	271	311	22,943	1,907	706	1,201	2503	900	1,603	1,464	6,568	5,948	620	10,501	21,442	5,477
1994	27.074	3,486	250	302	23,036	1,932	756	1,176	2514	929	1,585	1,445	6,551	6,002	549	10,594	21,782	5,292
1995	27,397	3,537	230	225	23,405	1,943	755	1,188	2550	952	1,598	1,408	6,601	6,066	535	10,903	22,186	5,211
1996	27,659	3,531	221	181	23,726	1,968	777	1,191	2551	959	1,592	1,414	6,626	6,124	502	11,167	22,590	5,069
1997	28,161	3,516	210	159	24,276	1,973	780	1,193	2580	978	1,602	1,366	6,759	6,324	435	11,598	23,207	4,954
1998	28,386	3,387	210	121	24,668	1,952	748	1,204	2582	987	1,595	1,399	6,920	6,485	435	11,815	23,442	4,944
1999	28,841	3,410	208	123	25,100	2,098	776	1,322	2600	1,005	1,595	1,400	6,825	6,388	437	12,177	23,747	5,094
2000	29,229	3,327	207	112	25,583	2,137	836	1,301	2694	1,061	1,633	1,408	6,859	6,415	444	12,485	24,135	5,094
2001	29,488	3,327	204	96	25,861	2,155	804	1,351	2744	1,068	1,676	1,408	6,769	6,349	420	12,785	24,276	5,212
2002	29,499	3,387	204	92	25,816	2,198	836	1,362	2783	1,056	1,727	1,443	6,529	6,103	426	12,863	24,201	5,298

Notes

^{1.} Total Private Sector equals Private Sector Employee Jobs plus Self-employed and Government Supported trainees.

^{2.} Total Public Sector equals Public Sector Employee Jobs plus HM Forces.

References

Civil Service Statistics 2001 published on the Internet at www.civil-service.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 2002 published by The Stationery Office, 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/agencies – public bodies.

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/SectorClassification.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

For more information about National Statistics call the National Statistics Customer Enquiry Centre: Local Rate 0845 601 3034 or e-mail: info@statistics.gov.uk

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

Appendix 1

How do we measure public sector employment?

The public sector numbers that are reported in this article are derived from the relevant administrative departments plus a comprehensive inquiry of all 443 local authorities in England and Wales. This is consequently the most comprehensive source available, although unfortunately some of the data, notably that for the NHS is only available with a considerable lag. ONS is currently estimating how more timely estimates of public sector employment could best be obtained. Subtracting the public sector figures from the employment totals obtained from the Labour Force Survey (LFS) and workforce jobs derives the estimates for private sector employment that are used here.

There are several sources of total UK employment data – the concept can be measured in more than one way. This can lead to problems as sometimes the measures send conflicting signals and care needs to be taken in interpreting them. Conceptually, this article looks at the number of jobs rather than the number of employed people as only jobs can be allocated to a sector. The two main jobs data are workforce jobs and the series derived from the LFS. The former estimate combines the public sector jobs with quarterly and monthly short-term employment surveys of businesses. The results for businesses are updated in December as a result of the much more comprehensive Annual Business Inquiry (ABI). In contrast the LFS is a monthly household survey. This survey does ask respondents to classify the sector of their employers, but in the past such self-classification has proven to be unreliable because respondents often do not know the correct classification of their employer.

By collecting jobs data from both employees and employers a much more rounded picture of economic developments can be obtained but there is also a disadvantage at least in the short term in that the process throws up two different measures of the level of employment. Indeed sometimes, the two surveys can even send out different messages about the direction of recent employment moves. ONS is currently carrying out an investigation of the possible reasons why the employment data from the two surveys differs. In the meantime, ONS's preferred estimate of total employment is the one derived from the LFS, while workforce jobs is most useful as a measure of industrial detail. A detailed breakdown of the various data categories can be obtained at the National Statistics website www.statistics.gov.uk/statbase/Product.asp?vlnk=7163.

The estimate of public sector jobs reported in this article is over a million below LFS levels. This supports the assumption that because of self-classifications LFS includes estimates in the public sector for employees in publicly funded organisations which lie outside the public sector and for those providing contracted out services. However, although the LFS level is well above the direct estimate, comparison of movements between the two over the five year period between 1997 and 2002 is within one per cent. This coherence supports the approach taken in the article on comparing public and private sector jobs across the whole economy.

Table 4 Sources of Public Sector Data

	Area	Main Source	Latest Data	Estimate at June 2002 (thousands)
Central Government:	*			
HM Forces	UK	Ministry of Defence	March 2003	204
National Health Service		See NHS trusts		
Other Central Government	UK	Cabinet Office	October 2002	614
Local Government:				
Education	England and Wales	Quarterly Local Authority Inquiry	March 2003	1,260
	Scotland	Joint Staffing Watch	December 2001	
Social Services	England and Wales	Quarterly Local Authority Inquiry	March 2003	317
	Scotland	Joint Staffing Watch	December 2001	50
Construction	England and Wales	Quarterly Local Authority Inquiry	March 2003	40
	Scotland	Joint Staffing Watch	December 2001	
Police	England and Wales	Home Office	March 2002	198
	Scotland	Joint Staffing Watch	December 200	
Other Local Government	England and Wales	Quarterly Local Authority Inquiry	March 2003	614
	Scotland	Joint Staffing Watch	December 200	1 106
	Northern Ireland	District and Parish Councils employment	March 2003	26
Public Corporations:				
Nationalised Industries	UK	Returns from the 'Public Bodies' publication (Annual)	March 2002	242
NHS (inc. NHS Trusts)	England	Department of Health	September 200	2 1,091
V	Wales	Welsh Assembly Government	September 200	
	Scotland	NHS in Scotland Common Services Agency	September 200	
	Northern Ireland	Northern Ireland Office (DETI)	March 2003	62
Other Public Corporations	UK	Returns from the 'Public Bodies' publication (Annual)	March 2002	137

Appendix 2: Definition of the sectors

General Government

This sector includes all institutional units, that are non-market producers whose output is intended for individual and collective consumption, and that 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. Export Credit Guarantee Department (ECGD) 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 have power to raise funds by means of rates, levies, 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 grant – maintained 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, that 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

This comprises general government, public non-financial corporations and the Bank of England.

Private sector

This comprises private non-financial corporations, financial corporations other than the Bank of England (and Girobank when it was publicly owned), households and the NPISH (non-profit institutions serving households) sector.

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 (EEPD), and Labour Market Division of the Office for National Statistics; the Department of Enterprise, Trade and Investment, Northern Ireland and the Department of Further Education and Science.

Estimates of employment in central government are obtained from a number of sources. HM Forces and NHS figures are obtained from the Ministry of Defence (MoD) and Department of Health respectively. 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 corporations data are derived from ONS's inter departmental business register (IDBR) other regular surveys carried out by the EEPD (responsible for ABI and Short-term Employment Surveys), and the Cabinet Office *Public Bodies* publication.

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 EEPD. The source for Scotland is the Joint Staffing Watch survey by the Scottish Executive and the Convention of Scottish Local Authorities (COSLA).

Major sector changes; 1998 to 2002

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 & 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);
- MoD (1,500 down); and
- 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 (NDPBs operate under statutory provisions, employ their own staff and have responsibility for their own budgets) 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); and
- 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.

- 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 Department. 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 HM Customs and Excise (200 down).

The largest increases in numbers of permanent staff in the three months to 1 October 1998 were in HM 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; and
- · Ministry of Agriculture, Fisheries and Food increased 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 NDPB 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 the Army Training and Recruitment Agency.
- Maintenance Group Defence Agency subsumed within the 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; and
- Staff numbers continued to rise slightly in the Scottish Office and Welsh Office dealing with devolution.

In May 1999:

- The National Assembly for Wales was established a small number of staff transferred from Welsh Office to the new Assembly to run the Office of the Presiding Officer; and
- · Scottish Executive formed with no staff.

On 1 July 1999:

- Office of Gas Supply and the 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 the Office of Advocate General; the Scottish Office Pension Agency was renamed the Scottish Public Pensions Agency; and
- 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.

- On 19 July 1999 Office of Passenger Rail Franchise was renamed Shadow Strategic Rail Authority.
- On 30 September 1999 Government Property Lawyers ceased to exist; remaining staff were absorbed into Treasury Solicitors.

On 1 October 1999:

- the Rent Service, an Executive Agency of DETR was formed with 80 staff from DETR; and
- around 4,200 staff (some 3,500 full-time equivalents) from the Family Credit Unit in the Benefits Agency transferred to the Tax Credit Office within the Inland Revenue.

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.
- HM 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's 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 (reporting to the Department of Health) was set up.

- 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; the 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; and
- the MoD, Army Technical Support Agency ceased to be an agency, now subsumed within MoD.

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

- the Home Office up 1,950 because staff were recruited to speed up consideration of immigration and asylum cases;
- the Child Support Agency up 540 due to extra workload on the Child Support Reform project; and
- 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:

- theSmall Business Service launched as an Executive Agency of the DTI.
- the Information Technology Services Agency (ITSA) was reabsorbed by its' parent Department (DSS). 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.

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

- the Home Office (up 1,800) due to the recruitment of staff in the Immigration and Nationality Department mainly to deal with the volume of work related to asylum cases.
- Inland Revenue (up 500) due to workload changes and specific projects, included in the departments 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 was related to the foot and mouth crisis with additional veterinary staff having to be recruited.
- HM Customs and Excise (up 220) as staff were recruited following reorganisations which have included setting up call centres and centralised units; and
- the Cabinet Office (up 130) mainly to enable it to meet its objective of putting all public services on-line 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;

 the Shadow Strategic Rail Authority became an NDPB – 220 staff dropped from the count.

In the six months to April 2002 the following increases in permanent staff occurred:

- Department for Work and Pensions (DWP) up 7,000; staff recruited in Jobcentre Plus to backfill for training and the testing of the new initiatives arising from the welfare modernisation programme;
- Inland Revenue (up 1,200). due to increased workloads and the preparation for the new Tax Credits;
- Land Registry (up 280) to replace resources lost through natural wastage;
- FCO Foreign and and Commonwealth Office (up 100) to meet the departments objectives and fill vacancies; and
- OFT (Office of Fair Trading) (up 80) to cover the additional work following new EU legislation and UK laws.

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 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 2002 are listed below (new additions italicised).

Name of corporation	Commencing or vesting date
Audit Commission	April 1983
Audit Scotland *	April 2000
Bio Products Laboratory	April 1993
British Broadcasting Corporation (BBC)	1927
British Coal Corporation ^a	January 1947
British Hallmarking Council®	April 1998
British Nuclear Fuels plc (BNFL)°	April 1992
2.1.5.	(Apr.) 1-2-2
United Kingdom Nirex Ltd – (subsidiary of BNFL)	July 1982
British Waterways Board	January 1963
Buying Agency, The ^d	January 1995
Caledonian MacBrayne Ltde	April 1990
Central Office of Informationf	April 1995
Channel Four Television Company Ltde	December 1980
Civil Aviation Authority (CAA)	April 1972
CLIK (Central Laboratory Innovation and Knowledge Transfer Co.Ltd)	March 2002
Commonwealth Development Corporation	February 1948
Companies House ^r	April 1995
Consignia plc	March 2001
Covent Garden Market Authority	October 1961
Crown Agents Holding and Realisation Board	January 1980
Crown Estate Commissioners [†]	April 1995
Defence Aviation Repair Agency	April 2001
Defence Evaluation and Research Agency ^g (DERA)	April 1996
Driving Standards Agency ^h	April 1997
Eastern Shires Purchasing Organisation	January 1981
Financial Services Authority	April 2000
Fire Service College ^f	April 1995
Fleet Air Arm Museum	April 2001
Food from Britain ^b	April 1998
Forensic Science Service ^t	April 1999
Forest Enterprise ^{a,t}	April 1995
General Lighthouse Fund ^b	April 1998
General Teaching Council (GTC)	April 2002
General Teaching Council for Wales	September 2000
Highlands and Islands Airports ^e	April 1965
Historic Royal Palaces Trust ^b	April 1998
Historic Royal Palaces Enterprises Ltd	April 1998
Horserace Totalisator Board	April 1995
Hydrographic Office [†]	April 1995
Laganside Corporation	April 1989
	7.0

Land Registry, Her Majesty'sf April 1995 Learning and Skills Development Agency November 2000 From April 1987 Local Authority Airports Local Authority Bus and Tram Companies October 1986 April 1995 Medicines Control Agency April 1996 Meteorological Officef April 1993 National Blood Authority Navy, Army & Air Force Institute April 1996 New Millenium Experience Company Ltda,h February 1997 April 1999 NHS Estates **NHS Logistics Authority** April 2000 April 1991 **NHS Trusts** Northern Ireland Housing Executive May 1971 April 1996 Northern Ireland Driver Vehicle Testing Agency⁹ Northern Ireland Transport Holding Company April 1968 Northern Ireland Central Services Agency From inception April 1998 Northern Lighthouse Boardb Oil and Pipelines Agency December 1985 April 1999 Ordnance Survey October 1969 and various later dates Passenger Transport Executives Patent Office[†] **April 1995** Port of London Authority April 1998 Qinetia^k July 2001 Queen Elizabeth II Conference Centre® April 1997 April 1995 Registers of Scotland^f Remploy Ltdf April 1995 Royal Mint April 1975 Scotland Water April 2002 Sianel Pedwar Cymru (Welsh fourth channel authority) January 1981 Sypta Ltd June 1986 The Learning Trust August 2001 Trinity House Lighthouse Service^b April 1998 Trust Ports Northern Ireland April 1974 Vehicle Inspectorate^f April 1995

Welsh Venture Capital - (subsidiary WDA)

WJEC CBAC Ltd (Welsh Joint Education Committee)

Yorkshire Purchasing Organisation

^a 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 Millenium Experience Company Ltd. taken into public ownership on 12/7/97 previously named Millennium Central Ltd.

January 2001

1974

b As described for d but for 1998 quarter 2

Began in April 1971; reclassified from a private NFC to a public NFC from April 1992

^e 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.

- d Non ESA95 change: reclassified from central government in 1995q1.
- As described for d but for 1995q2.
- 9 As described for d but for 1996q2
- h As described for d but for 1997g2
- As described for d but for 2000g2
- ¹ As described for 3a but for 1999q2
- ^k Qinetiq was in the Civil Service numbers for 2001 but not for 2002, which accounts for a difference in the numbers of around 20,000. For the purposes of these numbers, however, Qinetiq is always included in other public corporations and so has never constituted part of central government.

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

Institution Classified to

Bank of England Banking Department

British Nuclear Fuels Ltda

Financial institutions Industrial and commercial

companies

Girobank^b International Military Services^c Financial institutions Industrial and

commercial companies

a Until April 1992 b Until 1990

c Ceased Trading July 1991

Corporations reclassified to the private sector since 1998

 Magnox Electric 1998 quarter 1 (now a wholly owned subsidiary of BNFL)

- English Partnerships replaced by Regional Development Bodies on 21 April 1999
- 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 privatistion by Crown Agents Ltd. on 21 March 1997; and
- 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 & Wear were wound up from March 1998.

The following were reclassified to Central Government:

Deeds of Assumption: March 1996;

UKAEA: 1996q3; 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 & Islands Enterprise: April 2001: and

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 applies to Girobank, until its privatisation in July 1990.

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

Globalisation: new needs for statistical measurement

Robin Lynch Director, National Accounts Office for National Statistics

Room D4/17 1 Drummond Gate London SW1V 2QQ Tel: 020 7533 5094

E-mail: robin.lynch@ons.gov.uk

Introduction

Globalisation - a set of related effects

The term 'globalisation' is used to describe a range of changes in the way the international economy works. There is no single phenomenon. Instead a range of structural changes in markets and societies are under way which affect, and reflect:

- the behaviour and performance of firms which operate across several countries:
- · relationships between firms across national boundaries;
- the increasing ability of consumers to access international suppliers;
- the international exploitation of intangible assets within firms, also accessible to consumers;
- the decreasing importance of geography in the choices firms make about where to carry out specific parts of their operations, how much of their operations they choose to do themselves, and how they finance them.

All these effects have as a common cause the growing tendency by companies and consumers to ignore barriers once imposed by national, or supranational, boundaries. More of them now behave as if the world (or at least large parts of it) consists of a single market for goods and services, for ideas and for capital. Firms are able to do this because the world trade system is increasingly designed to facilitate it. Lower barriers to trade – abolition of tariffs, common frameworks for regulation, diminishing transport costs, simpler distribution systems, convergent customer requirements and powerful scale economies (among the key factors) – are the fundamental drivers of the changes in firm behaviour. Their effect on firm behaviour and strategy is well documented (Yip 1992).

Tony Clayton
New Economy Measurement
Economic Analysis and Satellite Accounts Division
Office for National Statistics

Room D4/19 1 Drummond Gate London SW1V 2QQ Tel: 020 7533 5193

E-mail: tony.clayton@ons.gov.uk

Economic studies of foreign direct investment (FDI) over the last ten years have distinguished:

- "horizontal" investment by firms, reproducing their home business model in foreign markets to overcome tariff or transport costs, from:
- 'vertical' investment, creating parts of a production chain run as linked elements in an integrated international system.

Hanson, Mataloni and Slaughter (2001) working on data from US firms find strong evidence that the pattern of investment by multinational enterprises has moved in the direction of 'vertical' chains during the 1990s, and also that the pattern of behaviour is more complex than simple economic models represent.

As economic incentives change, companies are driven to adopt international approaches to procurement, operations, marketing and innovation. The development of international operations has been under way by multinationals for over a century. Once it was a relatively straightforward process, with firms cloning operations and marketing from one national market to another, but retaining administration and development in their 'home' country. Now perhaps the majority of large international firms are 'truly international' in that they have operations located where they make the most effective contribution to the whole enterprise, with relationships between units driven from a global – or global region – HQ. Such firms may not have a 'home country' except in a legal sense.

Measures to describe these changes in firm behaviour are already in use by individual countries or are compiled internationally, and include:

- the role of foreign affiliates in employment, value added, exports, investment by country (included in the OECD compilation of data 'Measuring Globalisation' 2001);
- investment overseas by national firms, and turnover of overseas subsidiaries, which put the overseas operations in the context of the overall enterprise (measured by US and a few other countries, and also shown in the OECD review).

While OECD data shows that in some developed economies the proportion of output and employment accounted for by multinational owned activities peaked during the early 1990s, later data for the UK indicates that it is continuing to rise, albeit unsteadily.

Table 1 Importance of multinationals in UK manufacturing

	1996	1997	1998	1999	2000
Manufacturing Value	-				
Added (per cent)					
UK Domestic	50	52	50	47	47
Foreign multinational	29	27	27	28	30
UK multinational	21	21	23	25	23
	100	100	100	100	100
Manufacturing					
Employment (per cent)					
UK Domestic	61	62	62	59	57
Foreign multinational	20	19	20	20	23
UK multinational	18	18	18	21	20
	100	100	100	100	100

Source: Criscuolo and Martin, weighted calculations based on ONS ARD.

Globalisation means much more than the activity of multinationals. In the first flowering of a global economy, in the late 19th century, a huge increase in the flow of goods, capital and ideas between regions of the world enabled a period of rapid economic growth and cultural interchange. It was characterised by very large increases in international trade, and levels of migration which were unprecedented. (Legrain 2002).

But the benefits of investment and technology flow which underpinned the first global trade revolution then were due less to multinationals than to the activities of large numbers of independent firms. These traded under conditions supported by newly developed communications and financial infrastructure, to build global supply chains in which each specialised in their areas of comparative advantage.

Firms like this are also present in the globalised markets of the second half of the 20th century, for example in the contract manufacturers of the Far East which produce goods for Western brands. The rapid

growth of outsourcing, its impact on industry structures, and on wages and income distribution have been explored by economists (Feenstra 1998).

The added twist for the 21st century that it is much easier now for individual consumers to access international market information, and to buy internationally. Once convergence of consumer demands was something which could be influenced by major firms through one-way media communication. Now the ability of consumers to access international suppliers electronically, with instant price comparisons for goods and services, increases the scope for international trade.

Indicators which reflect the impact of 'globalisation' by describing increasingly international, borderless, markets, but which are independent of the role of multinationals can be found among the measures used by the EU to track the increasing integration of the single market:

- trade integration, reflecting the increasing level of cross-border transactions:
- price and interest rate convergence between markets, measuring the effect of lower inter-country barriers in creating competitive arenas which are genuinely international.

Through such increasing integration of markets, the effects of globalisation can be spread without the need for direct ownership through multinational affiliates. Competition itself can do some of the job. At least that is the theory. In practice, the activity of multinationals, as shown by the OECD review of multinational statistics, grew in almost every year during the 1990s, reaching almost 25 per cent of manufacturing output in the EU and 20 per cent in the US (OECD 2001).

Why do we need to measure globalisation?

Economic and social analysis of the effects of globalisation generates demands for more than simple measures of 'how big it is'. As trade to GDP ratios, and the proportion of output accounted for by multinationals continue to grow, policy makers raise questions both at international and national levels.

At the international level, key concerns are related to:

- identifying the competition impact of multinational activity, with implications for welfare understanding the changed behaviour of markets, due to closer international linkages;
- the recognition that large firms no longer think in terms of national boundaries.

The switch from 'horizontal' to 'vertical' structures for globalisation by multinationals also has welfare implications which policymakers need to understand. If investment is primarily 'vertical' then firms are likely, by shopping around for specific process investment locations, to affect relative wage levels, and other input costs, between countries. With 'horizontal' investment this is much less likely.

At national level, where most statistics are generated, major concerns for government raised by globalising firms and markets are related to the impacts they have on the effectiveness of local (i.e. national) policy. Attention has focused strongly over the last two decades on inward investment by multinationals and the encouragement of inward foreign direct investment. As we shall see later, this may be too limited a focus, but it is ever more important for national policymakers to understand competitiveness in a global context.

Does globalisation change what we need to measure, and the way we measure it?

The range of structural economic changes under the heading 'globalisation' require Statistical Offices to re-examine their approach to enterprise measurement, not just to tackle the policy issues above, but to ensure that their measures of economic activity capture the changing pattern of inputs and outputs.

This article covers four measurement areas, and gives a brief UK perspective on statistical needs and how they could be met. They are:

- the effects of vertical disintegration in value chains, the increasing specialisation by firms in specific processes and some examples of what it means for measurement;
- measurement issues associated with national units in multinationals;
- the role of intangibles, especially those which can be transferred within and between firms, or sold to consumers electronically without requiring any physical transfer;
- financial flows of capital, or payments for goods and services by multinationals.

The second and fourth of these issues are specific to multinationals, the first two apply more generally as measurement needs of the globalised economy. However, they raise related measurement needs and problems.

The 'vertical disintegration' of value chains.

Evidence that change is underway

The substantial body of case and statistical evidence assembled for the EU single market review in the mid-1990s showed the extent to which larger firms were achieving scale economies by focusing investment in areas of activity where they could command competitive advantage within an EU wide market. The increasing use of outsourcing by firms, often within national boundaries to obtain 'non core' local services, accompanied by offshore purchasing for important intermediate inputs, has changed some of the structural ratios of business – not just in the EU but internationally.

For example, analysis of private sector data for the single market review showed that value added /sales ratios for international firms, defined by their own management accounts, had fallen by around 6 per cent between the early 1980s and the early 1990s, from around 56 per cent on average to close to 50 per cent. Analysis of the strategies and behaviour of the most successful among them showed that they benefit from scale within their target markets, and that they are most likely to exploit it in areas where 'dynamic scale economies' apply, such as R&D and marketing communication (Clayton 1999) The picture suggests a process in which, for successful globalising businesses, value chains become 'wider', as they acquire strong competitive positions in specific processes across international markets, but 'shorter' as they carry out fewer processes themselves. The ultimate examples of this type of transformation are the design and marketing companies, for example in consumer markets such as fashion and footwear, which outsource all production and logistics, and undertake only development, international brand advertising and selling.

More recent evidence comes from work on multinational firms in the UK, compared against firms operating only within the national market. Based on UK Annual Business Inquiry data for the manufacturing sector, this finds that UK operations of multinational enterprises (MNEs) have a consistently lower value added / sales ratio than purely domestic firms, although there is some variation depending on firm origin (Criscuolo and Martin 2003). This may be taken to support the conclusions above, that as firms become more global in their scope, they tend to focus locally on economic processes which are more essential to their competitive advantage, and to outsource other activities.

Table 2 Value added ratios for UK manufacturing

Firm type in UK	UK Domestic	UK multinational	US multinational	Other multinational
Value added/ Sales (per cent)	43	40	38	33
(standard deviation)	(17)	(15)	(15)	(15)

Source; Criscuolo and Martin 2003, UK ARD data for manufacturing 1996-2000.

Implications for measurement

Significant shifts towards greater outsourcing will change the valueadded structure of sectors of the economy whether organised across
international boundaries or not. However, the measurement effects
are more difficult to tackle if changes take place across international
boundaries. For example, construction of input / output statistics is
much more difficult if there are changes in sector value added ratios
due to switches in sourcing by multinationals. At present, UK national
input—output statistics are built on the assumption that sector value
added ratios are relatively stable. If sustained changes are under
way affecting globalising sectors, the methodology of measurement
may need to change.

Measurement problems are compounded if multinationals outsource to operations offshore which they own or control. The scope for transfer pricing in such arrangements, or the use of management service fees, to distribute profits in the most tax efficient ways will distort not only business output data but also values for imports and exports. Since multinational activity, measured by sales or output of affiliates under foreign control now accounts for over 25 per cent of major country EU manufacturing output, the scope for distortion of official statistics is clear.

A specific, and growing, measurement problem is the treatment of 'toll processing' in a number of industries. There has been increasing use of outsourced manufacturing processes by firms in commercial arrangements where one firm contracts another to perform a specific operation, but retains ownership of the material through the process. This type of operation is not new (it was traditional in a number of multi-process craft industries long ago) but is now found in large scale chemicals, engineering and other industries where products move not just between plants but across national boundaries for processing – and back – without changing ownership. Depending on how output of such transactions are recorded, in output reports and in customs returns, the statistical record can be biased. Recording at less than full value means that the effective trade integration of markets is understated.

ONS has identified a significant number of firms where discontinuities in reported data on manufacturing have followed changes in ownership, or in commercial relationships with non-UK affiliates towards a toll processing approach. These arise in:

- value of gross output, which in the firm's turnover now excludes value of materials:
- purchases, which also excludes materials owned by the manufacturing client;
- value of stocks, which may not be recorded because the firm does not take ownership (and may not even know the value);
- profits, which are determined by tolling fees and may reflect most beneficial tax regimes;
- · trade with other countries.

Motives for the move towards toll processing in genuine arms length relationships are based on cost reduction due to specialisation. There is a clear economic logic for this, as specialists in particular processes, like coating, rolling, simple assembly, may be able to offer more efficient operations, better quality and use of capacity, than units within integrated firms. However, where toll processing takes place between related enterprises, there are also tax implications. Rules on transfer of goods from one part of a group to another require transactions to be valued and treated as arms length sales. Enforcing such requirements for services is much more problematic, so toll processing may well be used by some firms to move profits to low tax rate jurisdictions.

However, most official guidance is that toll processing should be classified as manufacturing (ISIC and NACE), and that transfers across borders of goods for processing should be treated as transfers of ownership (Balance of Payment Manual and ESA95). Tax guidance is less clear cut. If companies structure their transactions, and information flows, to make the most effective use of tax rules, it is more than likely that some find it difficult to deliver the information required for accurate output and import / export statistics.

Work is underway in ONS to improve compliance with the official guidance. However, it may be worth considering how much might be gained by a US-style approach to measuring foreign affiliates, with details on relationships, outsourcing or marketing type operations, scale, as well as country coverage and assets. Such an overall picture, firm by firm would help statisticians and economists understand:

- the types of FDI / overseas operations owned by UK firms, including vertical / horizontal relationships, and hence economic effect;
- relationships between UK elements of foreign owned firms and their parents;

 the types of trading arrangement between units within multinationals, and the degree to which they are becoming more integrated.

If policymakers are also concerned to gauge the penetration of globalisation across the whole economy, they may also be interested in the number of exporters/importers in key sectors. This would tell them more than data on the total flow of goods/services – as measure of real interdependence of economies. At present, structures for assembling National Accounts do not require information on imports or exports of goods at firm level, depending instead on import/export information from customs. However, data is collected in the UK structural business survey on imports and exports of services; perhaps it would be worth completing the picture.

National units in multinational enterprises

Looking at the elephant

The basic building block for national accounts is the 'unit of homogeneous production' (UHP) which is realised in the business statistics 'kind of activity unit' (KAU). The KAU is essentially the organisational unit within the enterprise with a relative degree of homogeneity. In the UK, and other countries, the KAU corresponds to the enterprise in all but the most complex instances. The enterprise is the smallest grouping of legal units within a national enterprise group that has a relative degree of autonomy. The use of the organisational unit allows some flexibility in the way that the KAU are created, with the main criterion being data availability. The resulting unit, called the 'reporting unit' in the UK, is used as the unit for sampling, collection of data, and for analysis. The structural data is then used for:

- benchmarking output by sector and region, as an essential input to National Accounts;
- · providing key data for sector input / output relationships;
- micro-data for detailed policy analysis.

While this framework delivers its primary objective – the capture by sector of data on gross and net output, employment and other inputs within a national economy, there are problems in interpreting results at both macro and micro level. Especially for firms which organise activities on an international basis – the national reporting approach means that a series of countries' statistical systems will see different 'parts of the elephant' which do not necessarily make sense in isolation. For the statistical returns from a multinational to add to understanding of issues such as productivity, the parts need to be viewed in relation to each other in order to present a picture of how business inputs relate to outputs.

For example, Shell undertakes its R&D as a corporate entity, co-ordinating activity based in at least two EU member states. In making R&D returns it is required to indicate what is done in each country, but not to relate them to each other. Nor is it possible under existing statistical systems to relate inputs in one country to outputs in another. Instead detailed analysis for policy tends to assume that inputs to a reporting unit within a country are related to outputs from the same unit. In vertically organised, or integrated, multinationals this is unlikely to be the case; in real life outputs in one country unit are critically dependent on inputs from another.

The treatment of local entities in countries as individual enterprises can hide the real relationships which exist between units in multinationals. Within countries there is concern to identify the 'real' dimensions of enterprises, for competition regulation, to check on intra-firm transactions and transfer pricing and to understand structural market effects. This has driven the statistical definition of enterprise groups, as 'associations of enterprises' bound together by legal and/or financial links which imply control. As the latest draft of the Eurostat manual makes clear, while most national business registers identify membership of foreign controlled enterprise groups, and country of control, few capture economic data on activities outside the country in which the enterprise is registered (Business Register recommendations manual March 2003). The US model for data collection, which permits a view of the whole enterprise, has a number of attractions to meet policy needs in this area.

Understanding the parts of the elephant

R&D is just one example of similar effects related to the shared use of intellectual capital across multinationals. An even more difficult problem is posed by the use of shared software across global firms. For example Sun Microsystems writes much of its own system software, so a significant part of software professional time expensed in its accounts will really be attributable to investment in software capital. But attempts to assign software investment activity to reporting units by country will be defeated by the facts that:

- the software developed in Sun UK is used worldwide within the company;
- much of the internal systems software used in Sun UK is written in North America and Asia.

In effect the firm behaves as if it has a stock of intellectual capital – in software and other aspects of management systems – which is freely shared across its enterprise activities. Is there any evidence that this type of intellectual capital affects firm performance?

Analysis of productivity performance across US firms (Doms and Jensen 1998) comparing productivity for purely domestic firms with productivity for multinationals shows that there is 'multinational effect'. Similar work for the UK shows a consistent, positive, relationship between multinational activity and productivity, even after taking account of a large number of other related factors.

Table 3 Value added per employee for UK manufacturing

Firm type in UK	UK Domestic	UK multinational	US multinational	Other multinational	
Value added/ employee (£000)	27.96	36.87	46.57	43.10	
(standard deviation)	(183.47)	(39.30)	(80.79)	(51.43)	

Source: Criscuolo and Martin 2003. UK ARD productivity data for manufacturing 1996-2000.

Regression analysis, allowing for all inputs including the relatively lower level of capital per employee in UK multinational firms, shows the 'multinational effect' on productivity to be consistent across multinationals firms irrespective of their origins. There is a modest additional advantage for US owned multinationals. In any event, there is a clear productivity advantage which almost certainly reflects the availability of intellectual capital to these multinationals. Inputs of such intellectual capital are not captured in the data gathering systems for National Accounts, or other statistical sources.

This type of analysis is one of the few ways available to measure the value of intellectual capital shared across international businesses, and which cannot be tied to geography. It shows, however imperfectly, the additional value added which firms having access to shared technical, organisational, human and market capital are able to generate. These results also suggest that the effects are scale dependent. The 'US advantage' they show may reflect the fact that US-based global firms tend to be more global than those from other countries, and that the productivity advantage conferred by intellectual capital is greater the wider the range of markets over which it is spread. This interpretation would certainly be consistent with the European single market studies quoted earlier.

The implications for measurement of capital services of this effect are significant, and pose severe problems for statisticians. The intellectual capital in multinationals does not reside in a country, but in the enterprise systems which make the firm function, and give it competitive advantage. This extends beyond the software example quoted earlier. Any attempt to measure software capital formation accurately in a firm like this – except at the level of the whole enterprise group on an international basis – is likely to fail.

Electronic trade in intangibles in a borderless world

International trade statistics are affected by growing cross-border electronic commerce (international e-commerce). There are changes in the way goods and services are delivered to customers, and here we consider the implications for international trade statistics, both in terms of how such transactions might be presented in the statistics, but also how the data might be collected. This section is based on an article by David Ruffles of the ONS, which in turn draws on a paper by the United Nations Conference on Trade and Development (UNCTAD) (Teltscher 2000) and a draft discussion paper by the Inter-agency Task Force on Statistics of Trade in Services. Both of the latter were presented at the Organisation for Economic Cooperation and Development (OECD) Trade Statistics Meetings in December 2000.

Classification issues

The issue of classification; namely whether electronic transmissions or products shipped electronically (instead of physically) should be classified as goods, services, intellectual property or something else (perhaps intangible goods); is more than a statistical issue and has been the subject of discussion amongst taxation and trade policy experts. For example, if they are regarded as goods, they would be subject to General Agreement on Tariffs and Trade (GATT) rules, which would make electronically shipped products dutiable. If, on the other hand, they were classified as services they would be subject to General Agreement on Trade in Services (GATS) rules and probably not dutiable. Thus the issue of classification has implications for government revenues from Customs tariffs.

Other important differences between GATT and GATS are as follows. While GATT's general obligations include most-favoured nation treatment (MFN) and national treatment, GATS includes the national treatment principle only in negotiated specific commitments and specific services. For example World Trade Organisation (WTO) member countries have defined within their schedules whether, for a certain service trade, foreign suppliers will be given national treatment (i.e. they are subject to same rules as domestic suppliers of the same service). Thus, if electronic transmissions fall under GATS rules and if no national treatment is specified, imports could be subject to higher taxes than domestically supplied services.

GATT in general prohibits the use of quantitative restrictions or quotas while they are allowed under GATS. Therefore, theoretically, a country could put (in principle) a limit on, for example, the number of books transmitted electronically via the Internet. There are also domestic taxation issues in that most imported goods are subjected to domestic taxation while in the case of services the level of domestic taxation is usually lower or non-existent. For certain electronic transactions

agreement on how they should be classified is fairly straightforward. For example, goods that have been ordered, paid for or marketed electronically but shipped physically are clearly defined as goods in the traditional sense. Similarly the supply of traditional services such as financial services accountancy, tourism, computer-related and other office services, educational and telecommunications services via electronic means are clearly defined as services.

The most controversial classification issue concerns electronic transmission of products, which have physical counterparts (e.g. books, music, film and video material and software). In the past these products were shipped physically across borders via a carrier media such as CDs, diskettes and tapes. Hence they were classified as goods. Increasingly these products are being sent via data files through virtual networks, thereby crossing borders. The data are then downloaded onto a carrier medium, printed or stored in a computer. They could be sent to individuals for direct consumption or to retailers for distribution.

Put simply, the debate is:

- whether, because they are equivalent to a hard copy of a book,
 CD or videotape for example, they should be classified as a good or:
- whether the transmission of the data itself is a service and thus the 'data' should fall under services or;
- whether there should be a specific category for electronic transmissions containing a mixture of goods and services.

Discussions are under way on the treatment of intangible assets generally in the national accounts, being carried forward under the aegis of the Canberra City Group. The UK has proposed that payment for off-the shelf software be split into two components. The first is a one-off payment for purchase of the access device (the physical compact disc, manuals and packaging). The second is an up-front payment for rentals to access and use the original intangible asset. It is not the original software that is sold, but the user simply obtains access to the original under strict licence agreements. If this treatment were to be adopted as part of the System of National Accounts, it would allow consistency of treatment between international trade in hard copies of software, and the transfer over the Internet. In both cases the payments would be treated as a payment for a service, but with a small payment for the good – the access device – where the hard copy is actually shipped.

Current international position

Although there is, as yet, no international agreement on how electronic supply of products across international borders should be classified, it seems more likely that such trade will be regarded as trade in

services rather than goods. In fact a number of countries such as US, Canada and the Irish Republic at present include such transactions in trade in services because Customs systems cannot detect them. The OECD taxation experts have agreed (OECD 1998) that for the purpose of consumption taxes, such electronically delivered digitised products should not be treated as goods. In trade policy it is still an unresolved issue globally.

The next section illustrates how international e-commerce and related services might be classified within trade in services and identifies unresolved issues.

Coverage issues

Aside from the classification issue, and because the internet creates opportunities for small firms and individuals to trade internationally, there is a question of whether e-commerce is creating significant international trade that will not be picked up and identified by existing data collection systems.

For example:

- The value of the transaction may be below the threshold values set by a country's Customs Authority and therefore not identified as trade in goods. Under the European-wide INTRASTAT system for recording movements of goods between EU Member States, data on purchases by private individuals of goods from an EU member state will not be collected.
- With many new and small companies involved in international e-commerce there may be problems identifying them on business registers.
- The location of a website will often be different from that of the supplier so the purchaser will not necessarily know the residency of the supplier.
- Traditional business surveys for collecting data on trade in services will not pick up purchases of services from overseas by private individuals.

The first ONS e-commerce inquiry asked UK businesses for the percentage of their sales and purchases carried out using e-commerce (Williams 2001). It also asked them for the percentage of e-commerce sales to overseas but not purchases from overseas. Overall the inquiry showed greater levels of e-commerce purchases than sales, implying net purchases from overseas.

Implications for UK data collections

In most cases, the existing International Trade in Services (ITIS) surveys run by ONS will already pick up these types of transactions. However, the notes accompanying the questionnaires will be reviewed to make specific mention of electronic transmission if necessary.

ONS is currently improving the coverage of its ITIS inquiries in order to capture sectors of industry and sizes of business, which might not historically have traded in services internationally. These improvements should ensure that new electronic trade is picked up in future from smaller businesses and sectors traditionally associated with goods – such as the manufacturing, retailing and wholesaling sectors.

ONS household surveys now pick up consumers' electronic purchases but do not currently distinguish purchases from overseas. There are no plans to ask them to do so on the grounds that they are unlikely to know the true origin of their purchases. Nevertheless it may be possible to use data from these surveys, in conjunction with data from the other surveys mentioned above, to make estimates of goods and services transmitted direct from overseas to consumers in the UK. This would require e-commerce surveys of business sales and purchases to be compared with household e-purchase data on a consistent basis.

Balance of payments and international investment issues

International movement of capital to support investment is an essential part of the globalising economy. An accurate account of the role of multinational firms in directing investment to markets which they wish to establish or expand in is therefore important. Distinguishing investment from other payment streams is a helpful step

International work

The UK is a member of a European Steering Group on multinationals, commissioned by the European Central Bank and Eurostat to carry out a feasibility study on the reporting of balance of payments and the international investment position of multinational companies. The Balance of Payments (BoP) records statistics on transactions of an economy with the rest of the world and is part of the framework of national accounts. The International Investment Position (IIP) is a statistical statement on the level of an economy's financial assets and liabilities with regard to the rest of the world. Thus IIP is information on stock levels, whereas the BoP statement presents measures of flows.

The Steering Group will be producing an official report in the second half of 2003. This part of the article simply notes some tentative emerging findings, and is not a precursor of the report, or even necessarily in line with the final findings of the group. This account largely reflects the progress report of the group given to the 25th Meeting of the Committee on Monetary, Financial and Balance of Payments Statistics held in Luxembourg in January 2003.

The aim of the project was to carry out a test exercise for harmonised BoP/IIP reporting rules for European multinationals. The project would test how practical it was to ask multinational companies to provide a coherent story of their balance of payments and international investment so that national and European statistics could be drawn up in an integrated and coherent manner. At the moment, Europe is marked by a diversity of national BoP/IIP reporting formats. For enterprises with affiliates in other European countries, this is not optimal from an enterprise point of view, as each separate unit requires a different data processing and response for each EU member state. Standardisation of BoP/IIP reporting rules would improve the quality of the information as a result of the streamlining of the reporting process at the enterprise.

The harmonised BoP/IIP reporting model for multinationals focuses on a close link-up with any enterprises' accounting system. The proposed system which makes due allowance for reporting requirements of international institutions such as the ECB, the European Commission and the IMF is based on monthly reporting of information directly to the BoP/IIP compiler. The model covers the collection of data on foreign financial assets and liabilities, including related investment income. For the reporting of these foreign financial assets and liabilities of multinational enterprises, a fully reconciled model for reporting both stocks and flows has been designed. Furthermore, the common reporting system also provides for the collection of data on international trade in services. In general, the underlying accounting standards would be either the US generally accepted accounting principles (GAAP) already in use in some EUbased multinationals or the International Accounting Standards as laid out in the EU legislation that would be in force from 2005.

On the basis of the results to hand at the time of the CMFB meeting, the following comments could be made:

- Not all the information required by the proposed uniform reporting model is directly available – some investment in appropriate software for the accounting systems used by the firms is necessary.
- 2. Nearly all the multinationals used the proprietary brand SAP accounting software as either a sole platform, or as an important tool for company administration. Pilot studies are underway in the Netherlands, to consider how SAP software can be adapted and extended to allow automatic reporting of BoP and IIP statistics. If concrete results with SAP can be obtained for the Netherlands, then this suggests that a platform can be created for application in other European multinationals. This may in turn stimulate other accounting software providers to also develop these facilities as an important marketing strategy.

- Enterprise Resource Planning (ERP) embedded solutions were acknowledged to be an important feature of any solution, as they facilitate BoP/IIP reporting in a structured manner.
- 4. The multinationals initiated this exercise in order to reduce the amount of ad hoc work in regard of statistical reporting. But a major barrier was the initial investment in software to allow the returns to be generated as a by-product of existing accounting software.
- For reporting on services, the degree of detail asked under the EBOPS (Extended Balance of Payments Services) classification was reported as unduly burdensome and not consistent with the level of detail held by the companies.
- For some of the non-financial companies, early responses suggest that portfolio investment is of little significance and so this part of the feasibility study remains untested at the time of writing.
- 7. The proposed treatment of foreign direct investment consistent with national accounts and balance of payments concepts, appears to tie in well with company recording practice – this is a positive finding for an important BoP component. A similar positive message is emerging for foreign assets and liabilities.

Some provisional comments

The key to making this work seems to lie in the creation of appropriate extensions of accounting software. The fact that for European companies the reporting will be administered under regulation gives an added incentive for the multinationals and therefore the software accounting firms to tackle this issue and allocate resources to it.

This preliminary feasibility study suggests that there are benefits for the companies as well as the national statistical institutes in developing software which is an extension of commonly used accounting systems, but the key question remains - will the companies see the need to provide this data under regulation a sufficient incentive to fund software development. And given that SAP is applied to meet companies' individual requirements, can the software development be sponsored and carried out to common standards which can be implemented easily in each company implementation of SAP? Although there is enthusiasm for tackling this issue at the top of the multinationals, there is understandably more reluctance to devote scarce resources within the firms to tackle the issues. This is exemplified by twelve of thirteen multinationals approached giving qualitative replies to the feasibility questionnaire. However, draft report forms including a full response of real data have been supplied by only two multinationals as reported in January 2003 to the CMFB.

Concluding Remarks

The range of statistical needs relating to globalisation extends beyond the topics examined in this article. However, the key issues of:

- understanding the 'disintegration' of business operations, including splitting of value chains across borders;
- limitations in data derived from single country snapshots of larger, multinational, operations;
- international movement of intangibles, and of investment by households and firms:

all illustrate the need for statistical collection - for part of the economy at least — at an international level. First steps in this process are under way, but most National Statistics Offices still have a long way to go.

It is important in the development of the process that the objectives of NSOs – the accurate accounting of activity within national borders – are met alongside the objectives for overview of multinational firms.

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