

# QUARTERLY ECONOMIC COMMENTARY

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ESRI

## SUMMARY

For the fourth successive year, the Irish economy has performed extremely well in 1997. Real GDP is estimated to have increased by about 10½ per cent and real GNP by 9 per cent, above even the average growth rate of the previous three years. The growth has remained well balanced between exports and domestic demand, with the result that the current account of the balance of payments is estimated to have risen to 2¾ per cent of GNP while annual average employment is estimated to have increased by about 57,000 or over 4¼ per cent. Unemployment, including long term unemployment, has declined significantly, and the standardised unemployment rate for 1997 is likely to have been less than 10 per cent when final revisions are made. The public finances have been exceptionally strong, with a general government surplus having been achieved, and consumer price inflation has averaged 1½ per cent.

Economic growth will continue to be rapid by historical or international standards in 1998, but considerable uncertainty surrounds the actual rate of growth that can be expected. The impact of the Asian financial crisis, and of countervailing measures by major western economies, on world output and trade cannot yet be assessed with accuracy. While currency volatility on a world basis appears set to continue, its precise evolution cannot be foreseen, and, more specifically, it is still too early for a final decision to be made on the bilateral exchange rates of the Irish pound within EMU.

Making what we hope are balanced assumptions regarding such uncertainties, we forecast that real GNP will grow by about 6 per cent in 1998, implying a significant slowing of expansion in the course of the year. Total employment is projected to increase by 42,000 on an annual average basis, and the unemployment rate to decline to an average of 9¼ per cent. The public finances should remain strong, with a further general government surplus, but a major improvement over the Budget targets seems unlikely in 1998. With export growth projected to slacken and a deterioration likely in the terms of trade, the current account is forecast to fall quite sharply, although remaining in comfortable surplus. Price inflation will almost certainly accelerate, and on our assumptions the annual increase in the consumer price index seems likely to be in the region of 2¼ per cent. If the depreciation in the trade-weighted value of the Irish pound is larger and comes sooner than we have assumed, the annual average increase in prices will be greater, and could well exceed 3 per cent. This would have relatively little effect on the forecast rate of growth of real GNP in 1998, although it could alter its composition.

Given the unavoidable uncertainties concerning economic prospects in 1998 and beyond, it would be most unfortunate if euphoria generated by the economic performance of the past four years were to undermine the self-discipline which was an essential contributing factor in that success. To realise the potential for sustained high growth in the coming years it is necessary that prudence and realism continue to be exercised by government, interest groups, institutions and individuals. Favourable long-term factors could be negated by short-term impatience and unrealistic expectations.

## FORECAST NATIONAL ACCOUNTS 1997

### A: Expenditure on Gross National Product

	1996		1997		Change in 1997		
	Preliminary £m	Estimate £m	£m		%		Volume
			Value	Volume	Value	Price	
Private Consumer Expenditure	23,318	25,183	1,865	1,586	8	1	6¾
Public Net Current Expenditure	6,244	6,712	468	162	7½	4¾	2½
Gross Fixed Capital Formation	7,524	8,801	1,277	1,055	17	2¾	14
Exports of Goods and Services (X)	33,798	39,526	5,728	5,633	17	¼	16¾
Physical Changes in Stocks	389	430	41	45			
Final Demand	71,273	80,652	9,379	8,481	13¼	1¼	12
less:							
Imports of Goods and Services (M)	29,169	33,631	4,462	4,099	15¼	1	14
GDP at Market Prices	42,104	47,021	4,917	4,382	11¾	1¼	10½
less:							
Net Factor Payments (F)	5,121	6,189	1,068	1,050	20¾	¼	20½
GNP at Market Prices	36,983	40,832	3,849	3,332	10½	1¼	9

### B: Gross National Product by Origin

	1996		1997		Change in 1997	
	Preliminary £m	Estimate £m	£m		%	
			£m	%	£m	%
Agriculture, Forestry, Fishing	2,426	2,341	-85	-3½		
Non-Agricultural: Wages, etc	19,477	21,230	1,753	9		
Other:	13,387	15,711	2,324	17¼		
less:						
Adjustments	1,846	2,103	257	14		
Net Factor Payments	5,121	6,189	1,068	20¾		
National Income	28,323	30,990	2,667	9½		
Depreciation	4,303	4,809	506	11¾		
GNP at Factor Cost	32,626	35,799	3,173	9¾		
Taxes less Subsidies	4,356	5,033	677	15½		
GNP at Market Prices	36,983	40,832	3,849	10½		

### C: Balance of Payments on Current Account

	1996		1997		Change in 1997	
	Preliminary £m	Estimate £m	£m			
			£m	%	£m	%
X - M	4,629	5,895	1,266			
F	-5,121	-6,189	-1,068			
Net Transfers	1,353	1,421	68			
Balance on Current Account	862	1,127	265			
as % of GNP	2¼	2¾	½			

## FORECAST NATIONAL ACCOUNTS 1998

### A: Expenditure on Gross National Product

	1997	1998	Change in 1998				
	Estimate	Forecast	£m		%		
	£m	£m	Value	Volume	Value	Price	Volume
Private Consumer Expenditure	25,183	27,147	1,964	1,335	7¾	2½	5¼
Public Net Current Expenditure	6,712	7,168	456	154	6¾	4¼	2¼
Gross Fixed Capital Formation	8,801	10,044	1,243	970	14	2¾	11
Exports of Goods and Services (X)	39,526	43,859	4,333	4,574	11	-½	11½
Physical Changes in Stocks	430	280	-150	-150			
Final Demand	80,652	88,498	7,846	6,883	9¾	1	8½
less:							
Imports of Goods and Services (M)	33,631	37,967	4,336	3,710	13	1¾	11
GDP at Market Prices	47,021	50,531	3,510	3,173	7¼	¾	6½
less:							
Net Factor Payments (F)	6,189	6,891	702	736	11¼	-½	12
GNP at Market Prices	40,832	43,640	2,808	2,437	7	¾	6

### B: Gross National Product by Origin

	1997	1998	Change in 1998	
	Estimate	Forecast	£m	%
	£m	£m	£m	%
Agriculture, Forestry, Fishing	2,341	2,411	70	3
Non-Agricultural: Wages, etc	21,230	22,769	1,539	7¼
Other:	15,711	16,825	1,114	7
less:				
Adjustments	2,103	2,362	259	11¾
Net Factor Payments	6,189	6,891	702	11¼
National Income	30,990	32,752	1,762	5¾
Depreciation	4,809	5,314	505	10½
GNP at Factor Cost	35,799	38,066	2,267	6¼
Taxes less Subsidies	5,033	5,574	541	10¾
GNP at Market Prices	40,832	43,640	2,808	7

### C: Balance of Payments on Current Account

	1997	1998	Change in 1998
	Estimate	Forecast	£m
	£m	£m	£m
X - M	5,895	5,892	-3
F	-6,189	-6,891	-702
Net Transfers	1,421	1,378	-43
Balance on Current Account	1,127	379	-748
as % of GNP	2¾	¾	-2

## COMMENTARY

### The International Economy

#### *General*

Throughout 1997 each *Commentary* has forecast sustained world economic growth for both 1997 and 1998. The continental economies displayed signs of recovery in the first quarter of the year following a poor performance in 1996. This recovery was sustained during the year, primarily due to strong growth by the external sector as a result of exchange rate weakness against the dollar. The US economy continues to grow at a steady and stable rate. The hope that the Japanese economy would continue to recover during 1997 proved unfounded. While economic growth in Japan was strong during the first quarter this was due mainly to a shift in personal consumption to avoid a well publicised increase in a consumption tax during the second quarter. Statistics for the remainder of the year show that the recovery has faltered and the Japanese economy now appears to be sharing in the wider Asian malaise.

The volatility of world financial markets and their implications for economic growth have dominated much of the final quarter of 1997. Indeed, while the global economic outlook remains positive, growth in 1998 is likely to be somewhat weaker than previously expected due to the prolonged and deepening financial crisis in the Far East

#### *The US Economy*

Figures for the third quarter show that the US economy grew by a seasonally-corrected 0.8 per cent, much the same as in the second quarter. This is slightly lower than the advance estimate and reflects slow export growth in the third quarter. However, personal consumption expenditure recovered from its slowdown in the second quarter and contributed significantly to growth in the third quarter. The growth figures for the first three quarters, together with leading indicators for the fourth quarter suggest that the US economy has grown by an annual rate of 2.7 per cent in 1997. This is slightly lower than previously forecast as fourth quarter export levels are expected to reflect the economic crisis in Asia. Some decline in the rate of growth is anticipated in 1998, reflecting slower export growth during the year, especially to the Far East. However, growth is still expected to average 2 per cent, keeping the US economy on the steady growth path it has enjoyed in recent years.

After some weakening during the summer months the dollar has recently appreciated against both the Yen and European currencies. So long as financial instability persists in Asia, the dollar is likely to remain strong due to its perceived role as a "safe haven" currency. It could thus be well into 1998 before there is significant reduction in the very high trade weighted value of the dollar. While this will adversely affect the trend of net export volumes in 1998, it will also exert some downward pressure on US price levels.

Even before these latest currency developments, US price inflation remained subdued at about 2.2 per cent. On the other hand unemployment continues to decline, to 4.7 per cent in October and there are indications that average earnings are starting to respond to the tight labour market. Until recently it was expected that the strength of the economy and the signs of incipient wage inflation would soon lead the Federal Reserve to raise short term interest rates. In the changed circumstances, this seems less likely, and US interest rates will probably remain unchanged for much of 1998.

### *The European Economy*

European forecasting institutes continue to be optimistic about the outlook for the European economy. Growth is expected to average 2.3 per cent in 1997 and increase to 2.7 per cent in 1998. Inflation is forecast to remain relatively low and employment growth is expected to gather pace. The impact of the Asian crisis is likely to be smaller in Europe than in the US, and could be largely off set by interest rates remaining lower than previously expected.

The main contribution to the recovery of the German economy during 1997 has been the export sector, which benefited from the weakness of the DM and economic expansion in Germany's main markets. Official estimates indicate that seasonally-corrected GDP growth was 1.0 per cent in the third quarter as a result of strong investment growth and a continuing positive contribution from net trade. Personal consumption contracted during the quarter reflecting stagnant incomes. Some recovery in domestic demand during 1998 will mean a reduction in the net contribution of trade to GDP growth as import volume growth increases. Our forecasts for growth remain unchanged since the *October Commentary*.

Despite the turnaround in its economic performance the German economy has not enjoyed a reduction in the level of unemployment. Indeed unemployment continues to reach high post-war highs, with the only positive aspect being that the rate of increase has slowed. An annual average of about 11.3 per cent is expected in 1997. However, the improved performance of the economy should have some impact during 1998 and the unemployment rate is forecast to fall back to 11 per cent.

Bundesbank figures for September show that the external value of the DM against a basket of currencies of 18 industrialised countries was 3.5 per cent lower than at the start of the year. After some appreciation against the dollar and sterling in September and October, there has been renewed depreciation against these currencies following the Asian crisis. The likelihood of significant appreciation in the first half of 1998 has receded, as further increases in short-term interest rates are likely to be postponed.

Price pressure appears to be remaining moderate despite increases in import prices. The absence of inflationary pressures most probably reflects a reluctance to increase prices in the face of subdued consumer spending and low or negative real increases in incomes. Inflation is estimated to have been 1.7 per cent in 1997, increasing to about 2 per cent in 1998 as spending by the consumer sector increases. On this basis we expect further small increases in short-term interest rates in the second half of 1998.

There are strong similarities in the performance of the French and German economies at present. The French economy grew by a seasonally-corrected 0.9 per cent in the third quarter. Recovery in France is as a result of strong external sector performance. Unemployment is high and will average about 12.5 per cent this year. However, the unemployment rate has remained stable at about this rate for some time and as domestic demand picks up during 1998 a small reduction in the average rate of unemployment is expected to 12.0 per cent. The new government is committed to reducing unemployment and has already managed to raise the profile of this issue at an EU level. While the recent truckers strike is not expected to have a significant direct impact on the economy this is the second truckers strike in recent years and may have the indirect impact of reducing business confidence in industrial stability. Inflation is low and real income growth is expected to provide a boost to personal consumption. GDP growth of about 2 per cent is estimated for 1997, increasing to about 2¾ per cent in 1998.

The fiscal measures that have been introduced by the Italian government in order to qualify for EMU have meant some weakening of economic activity which has also been subdued by the 1996 appreciation of the Lira against other continental currencies. However, the Italian economy is currently benefiting from a low and stable inflation rate of approximately 1.6 per cent. This stability should allow a continued easing of short-term interest rates, which assists the government by reducing the debt burden. The Spanish economy is now estimated to have grown by about 3 per cent in 1997. This growth, together with government spending controls, is expected to ensure that the budget deficit is within the Maastricht convergence criteria. Inflation fell to a low of 1.5 per cent in May but has moved back up to 1.8 per cent. However, this is low by historical standards and an annual rate of just over 2 per cent is expected for 1997. In common with the rest of Europe, growth has been led by the export sector. In recent months this has been joined by a recovery in the consumer sector. While this may put some upward pressure on prices in 1998 a major acceleration in inflation is not expected. Based on present trends it seems likely that Spain and Italy will be among the initial entrants to EMU. This is reflected in long-term interest rates in both these countries which are converging on German levels.

### *The UK Economy*

Official figures for the third quarter suggest that the strong pace of growth continues unabated. Seasonally-corrected GDP growth was 0.8 per cent in the third quarter as domestic demand remained strong, and statistics to date indicate that GDP growth of about 3.0 per cent can be expected for 1997. Although the strength of sterling has long been expected to have a negative impact, which has not yet fully materialised, the strong exchange rate is expected to affect net export volumes during 1998. Consumer spending is also expected to slow as the contribution by windfall spending declines during 1998, and as the substantial increases in interest rates during 1997 take effect. Official trade figures indicate that approximately 8 per cent of UK merchandise exports were destined for the Far East in 1996. The slowdown in this region as a result of the economic crisis is expected to have a small negative impact on export levels. On this basis, GDP growth in 1998 is expected to be lower at approximately 2.0 per cent, implying very slow expansion in the course of the year.

In another new initiative, the chancellor presented a "Green Budget", a pre-budget statement designed to be a consultative document. The government appears to be quite optimistic about prospects for the UK economy, forecasting growth of 3.5 per cent in 1997 and 2¼ per cent in 1998. The need for wage restraint was identified as a necessary measure to prevent inflation at a time of emerging skill shortages and a tight labour market. The strong growth in the UK economy has seen the standardised unemployment rate fall to a seasonally adjusted 7 per cent of the work-force. Little change is expected in this level in 1998. Despite the decline in unemployment it appears that, to date, underlying growth in average earnings has remained broadly stable at around 4.5 per cent.

For much of 1997 the strength of sterling has had only a slight impact on export volumes, which remained high. This was in contrast to anecdotal information, and was due largely to a pick-up in demand from continental Europe as these economies recovered. However, the September/October trade figures brought the first official indication that the exchange rate is having a negative impact. The visible trade balance worsened significantly to £1.3 billion, double the August figure.

The Monetary Policy Committee of the Bank of England raised interest rates by another  $\frac{1}{4}$  per cent in early November to  $7\frac{1}{4}$  per cent, on the grounds that the strength of sterling was not slowing inflation sufficiently on its own, and that a further increase was needed to meet the government's inflation target of 2.5 per cent. Inflation is expected to be 2.5 per cent in 1997, but to decline during 1998 to a rate of  $2\frac{1}{4}$  per cent as the economy slows. Until recently it was generally expected that the persistent strength of consumer spending would lead to some further increase in official interest rates. As in the case of Germany, this now seems less probable, following Asian financial instability and increased downward pressure on international trade prices. Nevertheless, sterling is likely to remain strong in the short-term, and the anticipated depreciation could be delayed well into 1998.

### *The Rest of the World*

The major focus of attention throughout the end of 1997 has been the economic crisis in the Far East. The recovery in Japan, which had shown signs of slowing, now appears to have faltered. Having contracted by 2.8 per cent in the second quarter the economy recovered slightly to grow by 0.8 per cent in the third quarter. Growth has been adversely affected by a downturn in the consumer spending and will be further affected by the economic crisis in other Asian countries. Japan relies heavily on these economies for external trade and exports fell by 1.3 per cent in the third quarter. External demand is expected to decline further, damaging export prospects for 1998. GDP growth of just 0.75 per cent is now expected for 1997, and 0.5 per cent in 1998, a further downward revision from our October *Commentary*. Despite the weakness that has emerged, unemployment has so far remained stable and will average 3.5 per cent in 1997, a high rate by Japanese standards. A small increase is expected in 1998. Inflation is expected to average approximately 1.75 per cent in 1997 and fall to about 1 per cent in 1998.

Japan's troubles have been added to by the collapse of a number of financial institutions. In recent years there has been concern about the fragility of the financial system in Japan. While in the long run the failures may prove of benefit to the economy if the result is a more soundly based banking system, in the shorter term pressures on public debt and on economic confidence are likely to have negative effects in 1998. However, with the Yen likely to remain weak in relation to the dollar and European currencies, export growth to non-Asian markets should prove to be the main focus of expansion in 1998.

South Korea is the latest Asian country to be affected by the financial crisis that has gripped the region. As in earlier cases, a massive depreciation of the currency has been accompanied by widespread bankruptcies, especially in the financial sector. The Korean economy is the largest Asian economy to be affected so far and represents a serious escalation of the crisis. It is too early to tell how effective the Korean agreement with the IMF will prove, either in stabilising the economy or in bringing about an effective restructuring of the financial system. However, it now seems that earlier estimates that financial problems would merely slow the rate of economic growth in East Asia in 1998 could have been unduly sanguine. Despite the stimulus that large currency depreciations will give to exports from several countries, the impact of the crisis on domestic demand seems likely to induce a period of stagnation or recession in much of the region.



**TABLE 1: Short-term International Outlook**

Country	GNP		Consumer Prices		Hourly Earnings		Unemployment Rate		Current Account Balance	
	Percentage Change						%		% of GNP	
	1997	1998	1997	1998	1997	1998	1997	1998	1997	1998
<b>UK</b>	3	2	2½	2¼	4	4½	7	7	-¾	-1¼
<b>Germany</b>	2¼	2¾	1¾	2	<b>2</b>	2¼	11¾	11	0	½
<b>France</b>	2	2¾	1¼	1½	2½	2¾	12½	12	1	1
<b>Italy</b>	1¼	2	2	2½	3½	3½	12	12¼	3	3
<b>Total EC</b>	2¼	2¾	1¾	2¼	3	3¼	12	12	1½	1½
<b>USA</b>	2¾	2	2¼	2½	2¾	3¼	5	5	-2	-2
<b>Japan</b>	¾	½	1¾	1½	1¾	2	3½	3¾	1¾	2¼
<b>Total (OECD)</b>	2¼	2	2½	2½	3	3	7¾	7¾	0	0
<b>Ireland</b>	<b>9</b>	6	1½	2¼	3½	3½	10	9¼	2¾	¾

### *The Context for Ireland*

For much of 1997 the international economic environment for Ireland was positive. The recovery of markets such as Germany and France, as well as continued strong growth in the UK economy ensured strong export growth, and inflation in the main economies remained subdued. However, the end of the year sees increasing uncertainty, arising mainly from the financial crisis in East Asia.

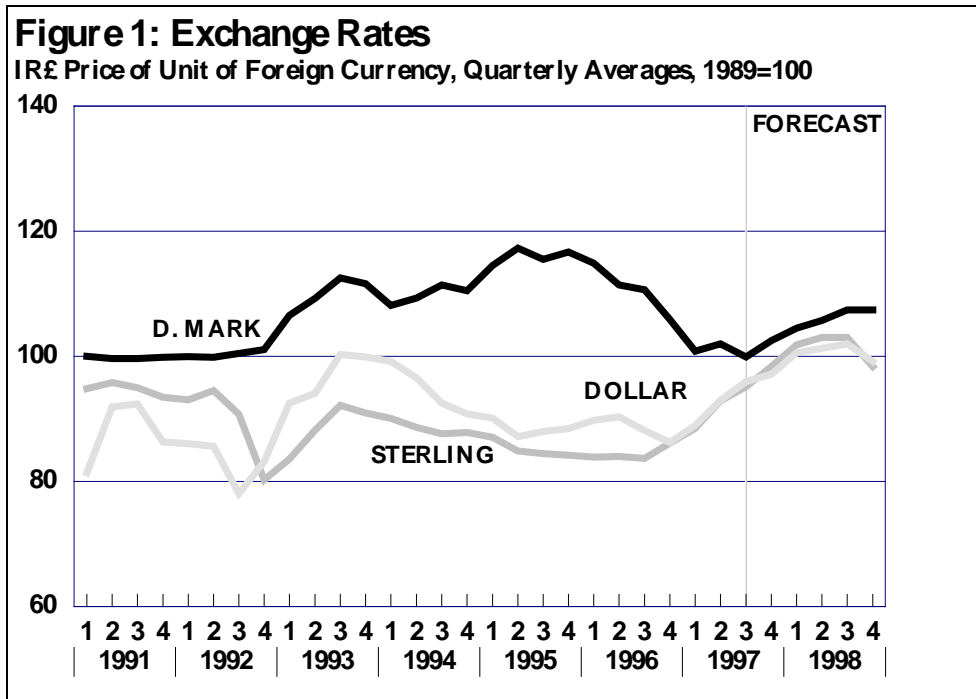
The global impact of this crisis has yet to be determined. The probable stagnation in demand in this important region will reduce the rate of export growth from developed countries, with Japan the most severely affected, but virtually all, including Ireland, are likely to be affected to some degree. At the same time, competition from the countries which have devalued sharply is likely to intensify, increasing market share in developed markets and forcing down international prices for many products, including several sectors of the electronic industry.

The probable impact on global investment flows is less clear cut. There are already indications that the flow of outward direct investment from the region, especially from Korea, is likely to be sharply curtailed. Whether the level of overseas direct investment from the developed countries, in particular the USA, will be reduced remains uncertain. Similarly the effect on the direction of investment flows is unclear. While the reduction of relative costs in the Asian countries could make them more attractive locations, the prospect of continued financial and possibly even social instability could deter foreign investors. On balance it seems reasonable to expect that the probability of sustained European growth and the imminent arrival of EMU will ensure a continued flow of US direct investment into Europe, of which Ireland will receive its share in its targeted sectors.

The prediction that both the USA and Europe will enjoy economic growth in 1998 at almost the rate previously forecast is based on the assumption that the anticipated tightening of monetary policy will be both milder and slower than assumed likely before the Asian crisis intensified. Long-term interest rates are now projected to remain low

throughout the year, and although short term rates in both the US and Germany are likely to rise in 1998, the increases are now forecast to occur in the second half of the year, rather than the early months as previously expected.

If these new assumptions on interest rate trends are correct, they have obvious implications for the course of exchange rates. The appreciation of the DM and related currencies against the US dollar and sterling which had seemed probable in the first half of 1998 now appears more likely to be delayed until the second half of the year, and may well be less substantial than had been expected.



The new projection adds to the difficulty of establishing the appropriate bilateral exchange rates for the Irish pound in May, and increases the likelihood that the average trade weighted value of the Irish pound in 1998 will be significantly lower than in 1997.

## The Domestic Economy

### *General*

Some important economic data relating to the second half of 1997 are still unavailable, while the possibility exists of significant revisions to figures which are available. Thus estimates of the precise rate and pattern of growth in 1997 are still subject to a considerable margin of error. Nevertheless it is already clear that 1997 has been another year of exceptional expansion in the Irish economy, and it seems likely that the rate of growth in real GNP has exceeded even the 7½ per cent average of the three preceding years.

The rate of increase in economic activity in the course of 1997 implies that, even in the absence of any further rise, the carryover would ensure a substantial growth rate for 1998 on an annual basis. Of course, further growth in the course of 1998 can be expected, but there are grounds for believing that the rate of increase will decline. As already discussed, the international background will be adversely affected by the Asian economic crisis. Domestically, some slowing in the volume of demand would be normal at this phase of the economic cycle, although this tendency could be largely offset by the rather expansionary nature of the Budget and by the anticipated fall in interest rates. More fundamentally, supply constraints, including labour constraints, are likely to restrict the supply potential of the economy in the coming years.

### *Exports*

It has been explained in previous *Commentaries* that the apparent sluggishness in visible exports in the early months of 1997 was misleading, and that when both methodological changes and timing factors were taken into account there would be a substantial annual increase in both visible and merchandise exports. However, the rate of growth in visible exports in the middle months of the year was considerably greater than we had forecast, with chemicals and electronic products in particular showing massive rises. At the same time the impact of transferring licence sales to the balance of payments adjustment was also much greater than had been assumed.

Thus, unless there are major revisions to the data, it now seems probable that merchandise exports have increased in 1997 by about 17½ per cent in volume and 17¾ per cent in value. This is a major upward revision to our earlier forecasts, and is well above the average rate of growth in merchandise exports in recent years. On the basis of available data, it seems probable that there were substantial increases in earnings from tourism and from other service exports. Thus, as shown in Table 2, total exports of goods and services are estimated to have risen in 1997 by 16¾ per cent in volume and 17 per cent in value.

**TABLE 2: Exports of Goods and Services**

	1996		% Change		1997		% Change		1998
	£m	Volume	Value	£m	Volume	Value	£m		
Agricultural	2,500	0	-4	2,400	2	3½	2,484		
Manufactured	23,140	17	17¼	27,132	14	12½	30,523		
Other Industrial	3,798	4¼	5¼	4,000	7	8	4,320		
Other	891	0	0	891	0	0	891		
Total Visible	30,329	13½	13½	34,423	12	11	38,218		
Adjustments	-29			1,250			1,406		
Merchandise	30,300	17½	17¾	35,673	12	11	39,624		
Tourism	1,888	7½	9	2,058	6½	9	2,243		
Other Services	1,610	9¼	11½	1,795	8½	11	1,992		
Exports of Goods and services	33,798	16¼	17	39,526	11½	11	43,859		

Looking forward into 1998, it seems reasonable to expect a minor recovery in the volume and price of agricultural exports, as some markets reopen and product development enhances prospects in the UK and continental Europe. Of far more importance to the economy as a whole is the outlook for high-technology exports. It is too early to assess fully the probable impact of the Asian crisis, but it seems prudent to assume that a combination of reduced global demand and intensified international competition will have adverse effects on the volume, and particularly the prices, of some sectors of the electronics industry. However, with a substantial carry over from 1997, steady economic growth in Europe and additional capacity becoming available, the annual increase in export volume and value from the electronics sector should still be considerable. With more traditional manufactured exports likely to benefit from a competitive exchange rate in both the UK and continental Europe for much of the year, an annual increase of 14 per cent in volume and 12½ per cent in value, appears a reasonable projection for manufactured exports as a whole.

With only a few quarters' data available, it is not possible to forecast trends in the balance of payment adjustment, including licence sales, with any confidence. However, it appears reasonable to make the technical assumption that the adjustment will move in line with visible exports in 1998, so that the forecast increase in merchandise exports is 12 per cent in volume terms and 11 per cent in value. Although well below the estimated rate of growth in 1997, a 12 per cent volume increase in merchandise exports would still be close to the medium-term annual average.

The value of tourist earnings is forecast to increase at about the same rate as in 1997, implying a slightly slower volume growth as the price deflator is likely to be higher. A small reduction in the rate of growth of other service exports is projected, in keeping with the general trend of export demand. Thus total exports of goods and services in 1998 are forecast to increase by 11½ per cent in volume and 11 per cent in value. In the current state of international uncertainty, this projection is inevitably tentative, and the actual outcome could diverge significantly from the forecast in either direction.

### *Stocks*

Both farm and intervention stocks are believed to have risen in 1997. In the absence of short-term indicators it is assumed that production and distribution stocks, including work in progress, have increased rather faster than in 1996. Thus the value of physical changes in stocks is estimated to have risen by about £430 million in 1997, a small increase on the previous year.

**TABLE 3: Stock Changes**

	1996	Change in Rate	1997	Change in Rate	1998
	£m	£m	£m	£m	£m
Livestock on Farms	91	-60	31	-3140	0
Irish Intervention Stocks	169	60	229	-149	80
Other Stocks	129	41	170	30	200
Total	389	41	430	-150	280

Given current trends in agriculture, it is likely that there will be little or no increase in farm stocks in 1998, and that the increase in intervention stocks will be much smaller than in 1997, as agricultural exports begin to recover. A further moderate increase in non-agricultural stocks, some of it perhaps involuntary, is assumed, so that total stockbuilding in 1998 is forecast at £280 million, a significant reduction on the 1997 estimate.

### *Investment*

Investment in building and consumption has grown strongly in 1997. With almost all sectors except agriculture recording substantial increases, total investment in building and construction is estimated to have risen by 13½ per cent in volume and 17½ per cent in value. Imports of capital goods, according to the new, more restricted, CSO definition, increased very rapidly in the first half of the year. Accordingly, we have revised upwards our forecast of investment in machinery and equipment in 1997. As shown in Table 4, total gross fixed capital formation in the year as a whole is now estimated to have risen by about 14 per cent in volume and 17 per cent in value.

**TABLE 4: Gross Fixed Capital Formation**

	1996	% Change		1997	% Change		1998
	£m	Volume	Value	£m	Volume	Value	£m
Building and Construction	4,877	13½	17½	5,730	11	15	6,590
Machinery and Equipment	2,647	15	16	3,071	11	12½	3,454
Total	7,524	14	17	8,801	11	14	10,044

New residential investment is expected to increase still further in 1998, with the number of new dwellings completed exceeding 41,000. Unless immigration is higher than anticipated, such a level of completions could meet the demand for new dwellings at close to current price levels, in spite of the stimulus of lower interest rates in the course of the year. Most other forms of investment in building and construction seem set to continue their rapid increase in 1998, with any dampening effect of global share-price uncertainties

likely to be offset by the expansionary effects of lower interest rates and a more rapid rise in public sector construction.

Investment in building and construction in 1998 is thus forecast to increase by 11 per cent in volume and 14 per cent in value. A similar rate of increase in the volume of investment in machinery and equipment is projected, as many existing projects reach the final stage where buildings need equipping, while low interest rates and continued economic expansion encourage a further flow of re-equipment. Thus total gross fixed capital formation in 1998 is projected to rise by 11 per cent in volume and 14 per cent in value.

### *Consumption*

The retail sales index has been very strong throughout 1997, reaching record levels in both volume and value terms in October. Unofficial indicators and impressionistic evidence suggests that the high level of retail sales has continued until the end of the year. It thus seems likely that for 1997 as a whole the retail sales index will have increased by about 7.8 per cent in value and 6.8 per cent in volume. With tourist spending abroad increasing only slightly faster than retail sales, it seems probable that the difference between the growth of retail sales and total personal consumption might be rather less than the medium-term average. Thus personal consumption is estimated to have risen by 9.0 per cent in value and 6.8 per cent in volume, as shown in Table 5. This represents a minor upward revision to our previous forecasts, and appears to be in keeping with the buoyancy of indirect tax receipts in 1997.

**Table 5: Consumption Indicators**

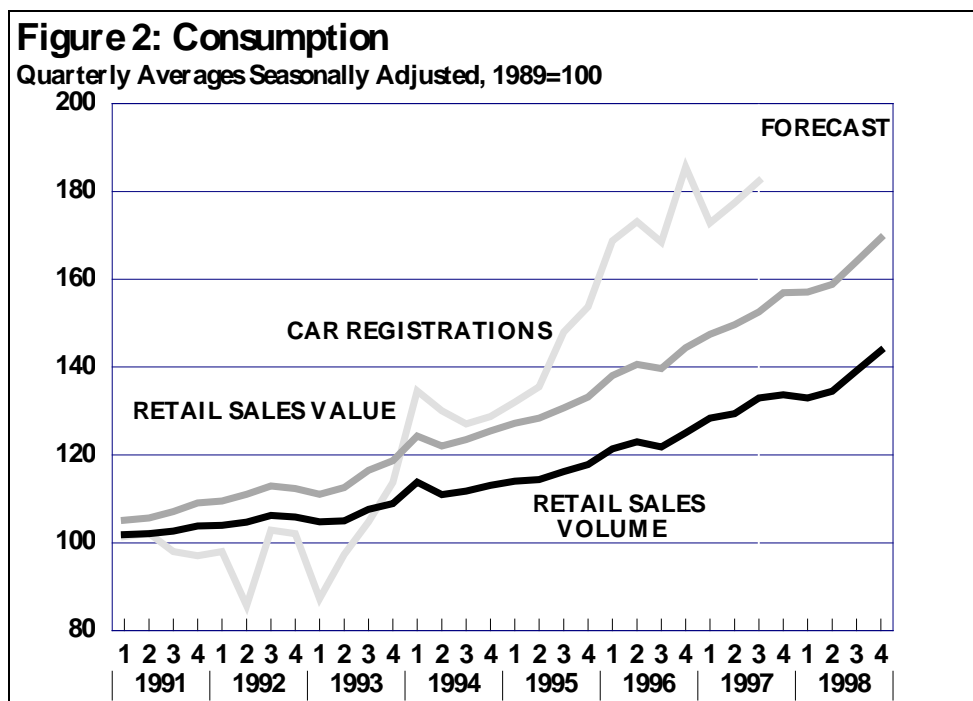
	Annual Percentage Change						
	1993	1994	1995	1996	1997 To Date	1997 Forecast	1998 Forecast
<b><i>Consumption Value</i></b>							
NIE 1996, Personal Consumption	4.2	9.0	6.3	7.5		8.0	7.8
Retail Sales Index, Value	3.0	7.9	4.8	8.3	7.6	7.8	7.3
Divergence	1.2	1.1	1.5	-0.8		0.2	0.5
<b><i>Consumption Volume</i></b>							
NIE 1996, Personal Consumption	2.2	6.1	4.2	6.3		6.8	5.3
Retail Sales Index, Volume	1.4	5.5	2.8	6.2	6.8	6.8	5.0
Divergence	0.8	0.6	1.4	0.1		0	0.3
<b><i>Consumer Prices</i></b>							
NIE 1996, Personal Consumption Deflator	1.9	2.8	2.0	1.1		1.1	2.4
Retail Sales Index Deflator	1.6	2.3	1.9	2.0	0.7	0.9	2.2
Consumer Price Index	1.5	2.4	2.5	1.6	1.4	1.5	2.3

Personal consumption in 1998 will be subject to several conflicting influences. On normal cyclical patterns, some slowing of the rate of growth of consumer spending might be expected after four years of high annual increases. On the other hand the stimulus provided by tax cuts which come into force in April, and by lower domestic interest rates in the course of the year, could well outweigh any such cyclical tendency. One important component of both retail sales and personal consumption, private sales of motor cars, is

likely to see an actual decline in 1998, following the ending of the scrappage scheme which has been associated with the sale of over 40,000 new cars during the past two years.

On balance it seems most likely that, after a probable dip in the first quarter, retail sales will remain quite buoyant over the course of 1998 as a whole. Nevertheless, the annual value of retail sales is forecast to increase slightly less rapidly than in 1997, while due to higher price rises, the decline in the rate of growth of retail sales volumes will be more pronounced.

With tourist spending abroad expected to resume its rapid increase of earlier years, the rise in total personal consumption is projected to be rather faster than in retail sales. The increases forecast for 1998, of 7.8 per cent in value and 5.3 per cent in volume, imply some further reduction in the personal savings ratio, which would be in keeping with interest rate expectations.



*Final Demand*

Final demand is estimated to have risen by an exceptional 12 per cent in volume and 13¼ per cent in value in 1997. Both exports and domestic demand have contributed to this very rapid increase, with the volume of exports rising by 16¼ per cent and the volume of domestic demand, excluding stock changes, by about 7 per cent. Although manufactured exports are nowadays less import intensive than they were in the eighties, the major contribution of investment in machinery and equipment to its increase suggests that the import-intensity of final demand in 1997 will have been high.

Final demand is forecast to grow less rapidly, although still substantially, in 1998, rising by 8½ per cent in volume and 9¼ per cent in value. Again the balance between exports and domestic demand is expected to be maintained, with the volume of the former

increasing by 11½ per cent and the latter by about 5½ per cent. The import intensity of final demand is likely to remain high.

### Imports

The value of visible imports was 11.0 per cent higher in the first eight months of 1997 than in the corresponding period of 1996. Imports of capital goods were particularly buoyant, while imports of intermediate goods rose rather less than might have been expected in relation to industrial production. After starting the year below the 1996 average, import prices rose fairly steadily in ensuing months, and by August were significantly above their 1996 level.

Allowing for some upturn in materials imports in the closing months of the year and for a further slight increase in average import prices, it is estimated that visible imports in 1997 as a whole have risen by 11½ per cent in volume and 12½ per cent in value. On the evidence of the first half balance of payments estimates, it appears that the negative balance of payments adjustment may have been smaller than in the previous year. Thus merchandise imports are estimated to have increased by 12¼ per cent in volume and 13½ per cent in value.

Tourist spending overseas increased somewhat less rapidly than in most recent years. Other service imports, which now include royalty payments, grew very rapidly in the first half of the year, and are estimated to have risen by 23 per cent in value in the year as a whole. Thus total imports of goods and services are estimated to have increased by 14 per cent in volume and 15¼ per cent in value in 1997, as shown in Table 6.

**TABLE 6: Imports of Goods and Services**

	1996		% Change		1997		% Change		1998
	£m	Volume	Value	£m	Volume	Value	£m		
<b>Capital Goods</b>	2,382	20	21	2,882	12	14	3,285		
<b>Consumer Goods</b>	4,774	11	13	5,395	9	11¼	6,002		
<b>Intermediate Goods:</b>									
<b>Agriculture</b>	580	0	0	580	0	2	592		
<b>Other</b>	13,370	12	12¾	15,075	9½	11	16,733		
<b>Other Goods</b>	1,367	0	0	1,367	0	0	1,367		
<b>Total Visible</b>	22,473	11½	12½	25,299	9	10½	27,979		
<b>Adjustments</b>	-589			-480			-500		
<b>Merchandise Imports</b>	21,884	12¼	13½	24,819	9¼	10¼	27,479		
<b>Tourism</b>	1,355	10¼	12	1,518	14	16½	1,770		
<b>Other Services</b>	5,930	21¼	23	7,294	17	19½	8,718		
<b>Imports of Goods and Services</b>	29,169	14	15¼	33,631	11	13	37,967		

Taking both timing factors and a probable slowdown in rate of growth of investment into account, the volume of imports of capital goods is projected to increase by about 12 per cent in 1998. Volume increases in imports of both consumer goods and industrial materials are similarly projected to be substantial, but below the 1997 rate. With annual average prices of most types of imports likely to be higher than in 1997, total visible imports in 1998 are forecast to rise by 9 per cent in volume and 10½ per cent in value. Tourist spending is expected to rise more rapidly than in 1997, but the increase in other



service imports, while still very large, seems likely to be lower than in 1997, in keeping with the slower projected rise in final demand. Imports of goods and services in 1998 are thus forecast to rise by 11 per cent in volume and 13 per cent in value.

### *Balance of Payments*

Our estimated values of exports and imports in 1997 show that the visible trade balance is likely to have risen by over 16 per cent, well above earlier expectations. With the change in the treatment of licence sales, there has been a massive increase in the positive balance of payments adjustment, so that the merchandise trade balance is estimated to have risen by 29 per cent. Despite a very large increase in the negative balance on service trade, the total surplus on trade in goods and services is estimated to have risen by over £1,250 million or more than 27 per cent in 1997.

The very rapid increase in exports has resulted in a large rise in the profits of overseas multi-national companies. Based on half year figures, it is estimated that distributed profits could have increased by about 18 per cent and re-invested earnings by about 50 per cent in the year as a whole. Total net factor outflows are thus estimated to have increased by almost 21 per cent in 1997, although given the usual volatility of many of the items and the possibility of significant revisions to initial official estimates, this figure should be regarded as tentative.

**TABLE 7: Balance of Payments**

	1996 £m	Change %	1997 £m	Change %	1998 £m
Visible Trade Balance	7,856	16¼	9,124	12¼	10,239
Adjustments	560		1,730		1,906
Merchandise Trade Balance	8,416	29	10,854	12	12,145
Service Trade Balance	-3,787	31	-4,959	28	-6,253
Trade Balance in Goods and Services	4,629	27¼	5,895	0	5,892
Factor Flows:					
Debit Flows:					
Remuneration of Employees	-51	2	-52	3	-54
Distributed Profits, etc.	-4,521	18	-5,335	15	-6,135
Reinvested Earnings	-1,276	50	-1,914	18	-2,259
National Debt Interest	-915	-12	-805	-8	-741
Other Debit Flows	-1,899	32	-2,507	13	-2,833
Total Debit Flows	-8,662	22½	-10,613	13¼	-12,022
Credit Flows:					
Remuneration of Employees	241	0	241	3	248
Direct Investment Income	478	8	516	15	593
Other Credit Flows	2,821	30	3,667	17	4,290
Total Credit Flows	3,540	25	4,424	16	5,131
Net Factor Flows	-5,121	20¾	-6,189	11¼	-6,891
Net Current Transfers	1,353	5	1,421	-3	1,378
Balance on Current Account	862	30¾	1,127	-77¾	379
Capital Transfers	489	10½	540	5	567
Effective Current Balance	1,351	23½	1,667	-51	946

With a small increase believed to have taken place in net transfers, the total surplus of the current account of the balance of payments in 1997 is estimated at £1,127 million, a substantial and unexpected increase on the 1996 level. With unrequited capital transfers also believed to have risen, the effective current surplus is estimated to have increased by 23½ per cent, as shown in Table 7, representing over 4 per cent of GNP.

Further increases in the surpluses on visible and merchandise trade are projected for 1998, although at about 12 per cent the rate of growth of the merchandise surplus is likely to be much slower than in 1997, partly due to a deterioration in the terms of trade. With the deficit on service trade again likely to widen sharply, a marginal decline in the overall surplus on trade in goods and services is projected for 1998.

The anticipated slowing in export growth and narrowing of margins should be reflected in a considerably smaller rise in gross factor outflows. Gross inflows might benefit, in Irish pound terms, from the expected effective depreciation of the currency. Thus net factor outflows are forecast to increase by 11¼ per cent, only marginally over half of the estimated 1997 rise. Allowing for a slight reduction in net current transfers, the current account surplus is forecast to fall very sharply, to under £400 million, reflecting both the slowing of export growth and the deterioration in the terms of trade. When capital transfers are included, the effective balance in 1998 is forecast at almost £950 million, somewhat over 2 per cent of GNP.

#### *Gross National Product*

If the expenditure estimates already discussed are broadly correct, and there is still a considerable margin of error, real GDP in 1997 has risen by about 10½ per cent and real GNP by about 9 per cent. These exceptionally high estimates represent a substantial upward revision to our previous forecasts as more information has become available. Despite some deterioration in the terms of trade, adjusted gross national disposable income (GNDI) is estimated to have risen by about 7 per cent.

The growth rate is forecast to decline significantly in 1998, with real GDP increasing by 6½ per cent and real GNP by 6 per cent. While these projected increases remain very high by both historical and international standards, the large initial carryover from growth in 1997 means that they imply a considerable slowing of growth in the course of 1998. Allowing for a substantial deterioration in the terms of trade, adjusted GNDI is forecast to rise by about 4 per cent in 1998.

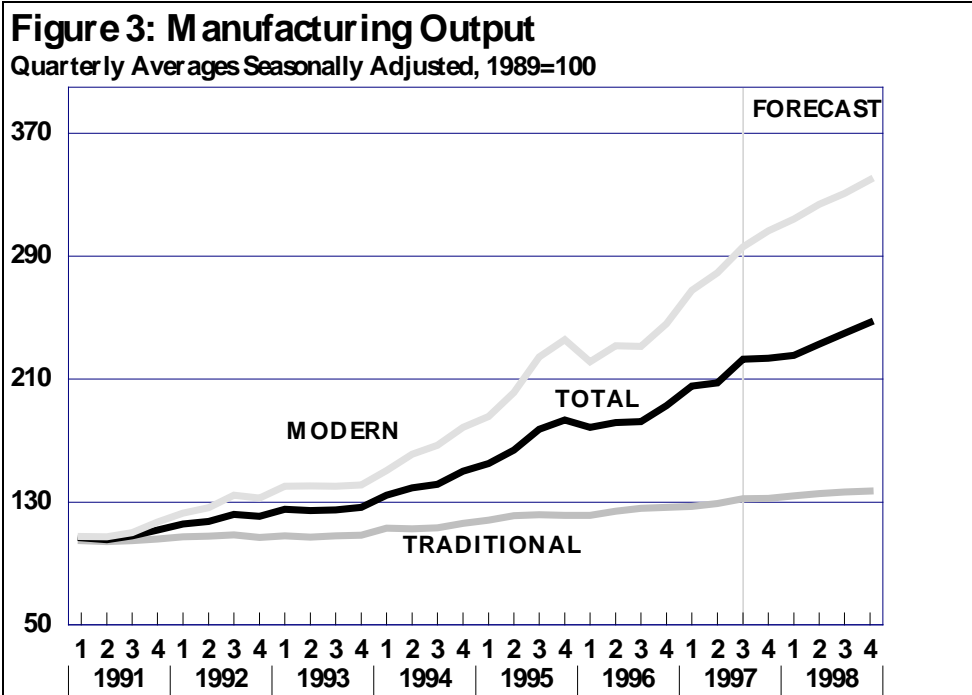
#### *Agriculture*

Advance estimates from the CSO indicate that the volume of gross agricultural output in 1997 remained virtually static, with increased output of pigs and, in spite of the weather, cereals offsetting declines in most other products. The volume of farm inputs fell by 4 per cent, so that the volume of gross agricultural product at market prices rose by 3.6 per cent, contrary to our earlier expectation of a moderate reduction. When an increase in forestry output is taken into account, the volume of gross domestic product in the broad agriculture sector is estimated to have risen by almost 4 per cent.

A broadly similar pattern is projected for 1998, with more or less static gross output being accompanied by a small reduction in inputs. Gross agricultural product is forecast to rise by about 2½ per cent in volume and gross domestic product in agriculture, forestry and fishing by about 3 per cent.

### Industry

The volume of production in manufacturing industry was 16.9 per cent higher in the first three quarters of 1997 than in the same period of 1996. With the trend rising in the course of the year, and with the IBEC/ESRI Business Survey indicating output remaining at a high level in subsequent months, it seems likely that the annual rise in the index in 1997 has been in the region of 17 per cent. With production in the extractive industries and the utilities rising less rapidly, building output buoyant, and a substantial rise in industrial depreciation, the volume of gross domestic product in the broad industry sector is estimated to have risen by about 12½ per cent in 1997.



In line with the expectation that manufactured exports will grow more slowly in 1998, the annual increase in the volume of production index for manufacturing industry is projected at about 13 per cent. Building output is expected to remain high, but with a slightly slower rate of growth than in 1997. The volume of gross domestic product in the broad industry sector is thus forecast to increase by about 8½ per cent in 1998.

### Services

After allowing for some distortion due to changes in the level of intervention stocks, gross domestic product in the services sector is estimated to have risen by about 6 per cent in volume terms in 1997. Most of the increase has been in private market services, as the rise in the volume of public services has been quite subdued.

With the economy as a whole growing less rapidly, some reduction in the rate of growth of service output seems probable in 1998. A rise of almost 4 per cent in the volume of gross domestic product in the service sector is projected, with the bulk of the increase again coming from the private sector.

## Employment

Short-term series indicate that employment in manufacturing and building has continued to grow strongly since the Labour Force Survey was taken in April. Short-term indicators for the service sector cover only a small part of total service employment, but taken in conjunction with revenue returns and other

**TABLE 8: Employment and Unemployment**

A: Mid-April Estimates '000					
	1995	1996	1997	1998	1999
Agriculture	143	138	134	132	130
Industry	349	355	386	409	423
Services	756	804	818	851	875
Total at Work	1,248	1,297	1,338	1,392	1,428
Unemployed	192	191	179	164	158
Labour Force	1,439	1,488	1,517	1,556	1,586
Unemployment Rate % <sup>1</sup>	12.2	11.9	10.3	9.5	8.8
Live Register	276	281	256	244	237
B: Annual Averages '000					
	1995	1996	1997	1998	
Agriculture	140	136	133	131	
Industry	354	374	402	417	
Services	782	806	838	867	
Total at Work	1,276	1,316	1,373	1,415	
Unemployed	189	185	170	161	
Labour Force	1,465	1,501	1,543	1,576	
Unemployed Rate % <sup>1</sup>	12.2	11.2	9.9	9.2	
Live Register	278	279	255	242	

<sup>1</sup> Official Standardised Unemployment Rate, based on ILO definitions. This cannot be derived directly from the figures in Table 8.

Projected unemployment rates, including 1997, incorporate a further expected divergence between Live Register and ILO measures of unemployment.

indications of service sector activity, they suggest that total service employment has also increased rapidly in the course of 1997. It thus seems likely that the annual average of total employment in 1997 has risen by about 57,000, as set out in Table 8. When allowance is made for self employment and for part-time working, it is estimated that the annual average number of full-time equivalent non-agricultural employees has increased by almost 5 per cent.

In spite of the predicted slowing of the economy in 1998, employment should continue to increase quite rapidly. The annual average total at work is forecast to rise by about 42,000, with full-time equivalent non-agricultural employees increasing by over 3 per cent.

When the new quarterly labour force survey has been running for a year or so it should become possible to track the trend of unemployment with some confidence. At present it remains difficult to interpret changes in the two annual totals in the labour force

survey and in the monthly administrative live register figures. The total on the live register fell by 23,300 in the twelve months to November 1997, but an unknown proportion of this reduction could have been due to tighter administrative procedures. However, most of the fall in the past year has probably been genuine, as has the significant reduction in the number of long-term unemployed. When it is revised in the light of future labour force surveys, the annual average standardised unemployment rate in 1997 will probably emerge at just under 10 per cent. On the reasonable assumption that a considerable proportion of net new jobs will continue to be filled by the unemployed, although net immigration and higher female participation are also expected to continue, the standardised unemployment rate in 1998 is projected at an annual average of about 9.2 per cent.

### *Incomes*

The advance estimates for 1997 show income arising in agriculture fell by 4.4 per cent, with the large fall in most output prices outweighing both the rise in the volume of gross agricultural product and a moderate increase in net subsidies. When income arising in related sectors is included, incomes in the broad agriculture sector are estimated to have fallen by about 3½ per cent in 1997. The more favourable price trends which seem likely in 1998 are forecast to result in a recovery of 3 per cent in incomes in the broad agriculture sector in 1998.

Although available data show that average earnings in both industry and the financial services rose only moderately up to the middle of 1997, both anecdotal evidence and tax receipts suggest that the overall rise in average non-agricultural earnings was rather higher. On balance, and taking into account large rises in a few sectors of the public service, an estimate that average non-agricultural earnings have risen by about 4 per cent in 1997 seems reasonable. With effective employee numbers increasing by almost 5 per cent, aggregate non-agricultural wages salaries and pensions are thus estimated to have risen by 9 per cent in 1997. On the assumptions that the pay provisions of *Partnership 2000* continue to hold, but that the relatively tight labour market will lead to some wage drift and to higher settlements in a few specific sectors, annual average earnings are projected to again increase by about 4 per cent in 1998. With the rise in full-time equivalent employment projected at just over 3 per cent, aggregate non-agricultural earnings are forecast to increase by 7¼ per cent in 1998.

Income from self employment and from interest dividends and rent is tentatively estimated to have increased by 7¼ per cent in 1997, and is projected to rise by 9 per cent in 1998. Thus total income received from economic activity is estimated to have increased by 7¼ per cent in 1997 and is forecast to rise by 7¼ per cent in 1998, as shown in Table 9.

Current transfers are believed to have increased by a massive 10½ per cent in 1997, heavily influenced by a large rise in compensation payments. Although such payments will continue in 1998, there should not be so large an increase. With numbers on the live register likely to fall further, the annual increase in transfer payments is thus forecast to decline to 5 per cent in 1998. If this proves correct, then gross personal incomes will increase significantly less rapidly than in 1997.

**TABLE 9: Personal Disposable Income**

	1996		Change		1997		Change		1998
	£m	%	£m	£m	%	£m	%	£m	£m
Agriculture, etc	2,426	-3½	-85	2,341	3	70			2,411
Non-Agricultural Wages, etc.	19,477	9	1,753	21,230	7¼	1,539			22,769
Other Non-Agricultural Income	4,273	7¼	333	4,606	9	415			5,021
Total Income Received	26,176	7¼	2,001	28,177	7¼	2,024			30,201
Current Transfers	6,260	10½	660	6,920	5	348			7,268
Gross Personal Income	32,436	8¼	2,661	35,097	6¾	2,372			37,469
Direct Personal Taxes	6,883	11¼	781	7,664	6¼	487			8,151
Personal Disposable Income	25,553	7¼	1,880	27,433	6¾	1,885			29,318
Consumption	23,318	8	1,865	25,183	7¼	1,964			27,147
Personal Savings	2,235	¾	15	2,250	-3½	-79			2,171
Savings Ratio	8.7			8.2			7.4		

On the basis of preliminary revenue returns, it appears that direct personal taxes increased by about 11¼ per cent in 1997, in spite of reductions in effective average tax rates. Following the Budget, it appears likely that direct personal taxes will rise by about 6¼ per cent in 1998, slightly slower than gross personal income.

Thus personal disposable income is estimated to have risen by about 7¼ per cent in 1997 and is forecast to increase by 6¾ per cent in 1998. The value of personal consumption in 1997 is estimated to have increased by about 8 per cent, leaving personal savings virtually unchanged in absolute terms and the savings ratio falling by about ½ per cent. The fall in the savings ratio is forecast to be slightly greater in 1998, both because of the anticipated reduction in interest rates and because the expected small increase in inflation could result in some consumers raising their borrowing rather than cutting back on their volume of consumption.

### *Consumer Prices*

The annual average increase in the consumer prices index in 1997 has been 1.5 per cent, a surprisingly low rate of inflation considering the pace of economic expansion and some depreciation in the effective exchange rate. Indeed, if housing is excluded, the annual average increase has been only 1.3 per cent, as shown in Table 10.

The fact that prices rose quite sharply in the three months from August to November 1997 suggests that the annual rate of consumer price inflation in 1998 is likely to accelerate. However, there is considerable uncertainty as to the extent of the rise. In particular, the evolution of exchange rates over the course of 1998 remains unknown, while the intensity of competition within the retail sector, which is one of the explanations of the low rate of inflation in 1997, could be subject to change.

**TABLE 10: Consumer Price Index - Recent Trend and Forecast**

	Quarterly Trend								Annual		
	1996				1997				1996	1997	1998
	Feb.	May	Aug.	Nov.	Feb.	May.	Aug.	Nov.			
Index Nov. 1989 = 100											
Housing	116.7	117.1	117.6	120.0	119.8	123.0	121.0	122.4	117.9	121.6	123.0
Other	116.3	116.8	117.4	117.9	118.0	118.3	118.4	119.8	117.1	118.6	121.4
Total CPI	116.3	116.8	117.4	118.0	118.1	118.6	118.6	119.9	117.1	118.8	121.5
Annual % Change											
Housing	3.2	-1.8	-2.5	1.0	2.7	5.0	2.9	2.0	-0.1	3.2	1.3
Other	1.9	1.7	1.8	2.0	1.5	1.3	0.9	1.6	1.8	1.3	2.4
Total CPI	2.0	1.4	1.5	1.9	1.5	1.5	1.0	1.6	1.6	1.5	2.3
Quarterly % Change											
Housing	-1.8	0.3	0.4	2.0	-0.2	2.7	-1.7	1.2			
Other	0.6	0.4	0.5	0.4	0.1	0.2	0.1	1.2			
Total CPI	0.4	0.4	0.5	0.5	0.1	0.2	0	1.1			

On the general currency assumptions underlying the forecasts in this *Commentary*, and on the assumption that there will be little change in the degree of retail competition, an annual average increase of 2.4 per cent in non-housing prices is projected for 1998. With some fall in mortgage interest rates likely, and the abolition of water charges having a downward impact for the first half of the year, the housing element of the consumer price index is projected to rise by 1.3 per cent on an annual average basis. Thus the total consumer price index is forecast to increase by an average of 2.3 per cent in 1998. Of course, if currency depreciation proves to be steeper than assumed, the annual rise in the consumer price index could be significantly higher.

### *Public Finances*

The Budget tables confirmed that 1997 has been an exceptionally good year for the public finances. Tax revenue rose by 13 per cent to £14,158 million, despite the transfer of most receipts from motor vehicle duties to the local authorities. In spite of the bringing forward of some expenditure, and genuine over-runs on a few items, total current expenditure rose by the much smaller rate of 9½ per cent. Thus the current budget surplus was presented as £619 million, compared with an initial target of a deficit of £193 million. If the various timing factors are taken into account, the underlying current budget surplus in 1997 has probably been nearer to £900 million.

With borrowing for capital purposes declared as £897 million, the exchequer borrowing requirement for 1997 was shown as £278 million, or 0.7 per cent of GNP, compared with a target of £637 million. The estimated general government surplus, calculated on a basis which precludes timing shifts, was provisionally shown as 0.4 per cent of GDP compared with the EBR deficit of 0.7 per cent of GNP.

The experience of most recent years, in which Budget-time fiscal targets have tended to be bettered by hundreds of millions of pounds, in spite of bringing some expenditure forward from the following year, may not be repeated in 1998. The forecasts of economic

growth underlying the budgetary projects are much less conservative than usual, and may in practice exceed the actual performance of the economy. Secondly, unpublicised aids to tax buoyancy, such as the reductions towards the standard rate for mortgage and other tax relief, have almost come to an end.

Thus, at present, it seems reasonable to expect that the actual fiscal outcome will be quite close to the Budget targets in 1998, with total revenue rising by about 7 per cent and the general government surplus remaining little changed at just over ½ per cent of GDP. Given the uncertainties facing the economy, a wider margin of error for maintaining a surplus might have been desirable, although it needs to be pointed out that the absolute margin before the constraints of the Stability and Growth Pact begin to apply remains very large, at over £1,500 million.

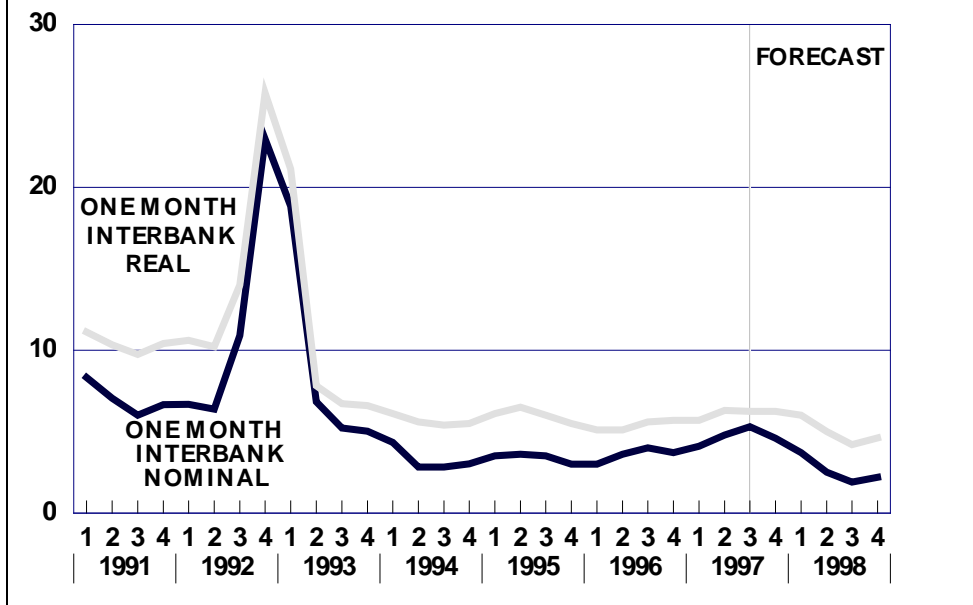
### *Interest Rates*

Irish long-term interest rates have fallen by about 1 per cent in the course of 1997, as differentials over German rates have been reduced at the same time as international rates were themselves declining. As discussed in the international section, little change is expected in international interest rates in 1998, while the Irish differential has little further to fall. Thus Irish long-term interest rates seem likely to decline only marginally in the course of 1998, but annual average rates will be substantially lower than the 1997 average.

In contrast to long-term rates, the differential over German short-term rates has tended to widen during 1997, mainly due to developments in the currency markets. With the announcement of the bilateral exchange rates between countries participating in EMU due in May, it seems inevitable that there will be a major reduction of Irish short-term rates during 1998 as the differential over Germany is virtually eliminated. Although German rates themselves no longer seem likely to rise in the early part of 1998, as had been expected, it still seems probable that they will increase later in the year. In these circumstances it remains far from clear whether Irish mortgage and other retail interest rates will continue to move in strict concert with the one month interbank rate. In this *Commentary* it is assumed that there will be some de-coupling of retail rates from the interbank rate, and that the reduction in mortgage and other consumer interest rates will be less acute than the fall in short-term money market rates.



**Figure 4: Interest Rates**  
Per Cent Per Annum, Quarterly Averages



*General Assessment*

It is clear that 1997 has been the fourth successive year of very high growth in the Irish economy. Barring major statistical revisions or some very unexpected results concerning such items as stockbuilding or invisible trade in the second half of the year, the rate of growth will prove to have been even higher than the average of the three previous years. Our current estimates are that real GDP has grown by about 10½ per cent and real GNP by about 9 per cent. This growth has been balanced, with both export volumes and domestic demand rising strongly, and has been reflected in a further large increase in employment. Unemployment, especially long-term joblessness, has fallen significantly, price inflation, apart from fixed asset values, has remained low, the current account surplus on the balance of payments is likely to have strengthened, and the public finances have improved dramatically.

Not surprisingly, economic self-confidence is very high, and herein lies potential danger for 1998 and beyond. Uninterrupted rapid growth in output and employment has come to be accepted as the norm, and although the long-term demographic and policy factors underlying this performance remain firmly in place, there appears to be an increasing risk of widespread amnesia concerning the essential role of economic self-discipline in releasing the beneficial effects of these long-term factors.

If there is, indeed, such a tendency, its timing is unfortunate. Considerable uncertainty attaches to economic prospects for 1998, while successful adaptation to the imminent single currency will call for greater economic discipline rather than less.

It is possible that growth will continue unabated in 1998, but it seems increasingly unlikely. The economic crisis in Asia has proved much deeper and more widespread than was initially thought probable. It is still too early to assess with confidence its full impact on the rest of the world economy, and on Europe in particular. It could perhaps remain

essentially localised and of relatively short duration. However, it is prudent to assume that it will prove more deep-seated, and will both reduce world demand and intensify international trade competition in several product markets, some of which are of importance to Ireland. At the same time, it could have a significant depressing effect on world share prices, which in turn could affect the volume of global productive investment and possibly inhibit consumer demand in industrial countries with widespread personal holdings of shares.

Many of these deflationary pressures seem likely to be eased by interest rates remaining lower than had been expected in the major world economies. Given the cyclical upturn which is under way in continental Europe, this should ensure that the European economy will continue to expand, although slightly more slowly than had previously been expected. However, currency volatility seems likely to continue, and the anticipated appreciation of the DM against sterling and the US dollar will probably be delayed.

On the basis of these assumptions, our forecast is that the pace of growth in the Irish economy will slacken perceptibly in the course of 1998. Aided by a substantial carryover from growth during 1997, the annual increase in real GNP is forecast at 6 per cent, still very high by international standards or by Irish standards excluding the past four years. Such a rate of growth would be sufficient to induce a further substantial rise, projected at 42,000, in average employment, although clearly there will continue to be some job losses as well as new jobs.

With domestic demand likely to remain quite strong, stimulated by both tax cuts and lower interest rates, a sharp reduction in the current account surplus is forecast. The public finances should remain strong, with a small general government surplus, but it seems unlikely that the now customary exceeding of budget targets by a wide margin will be repeated in 1998.

Perhaps the greatest uncertainty surrounds the prospects for inflation. Specific aspects of inflationary pressure have already been causing concern during 1997. The most obvious example has been the very rapid increase in house prices, which, as discussed in a previous *Commentary* could be creating the conditions for significant financial and social problems in the future. This rapid price increase could continue unabated in 1998, especially with interest rates due to fall, but it seems more likely that the growth in new house completions will lead to some diminution in the rate of increase in house prices in the course of the year.

With regard to general price inflation, the outlook for 1998 is also unclear. On our assumptions that competition will remain intense in the retail sector, and that the long awaited depreciation of sterling against continental currencies, to which the Irish pound will then be linked, will commence in the second half of the year, the annual increase in the consumer price index is forecast at 2.3 per cent. However, if these assumptions were to prove unfounded, there could be a significantly higher rate of price inflation in 1998. In particular, were the Irish pound to depreciate much faster than assumed against all major currencies in the early months of the year, the annual average of import prices would rise considerably more than forecast. In consequence there would be a larger increase in consumer prices in both 1998 and 1999, with the annual average rise in both years likely to exceed 3 per cent.

However, even a substantial acceleration in price inflation would have relatively little effect on the forecast rate of growth of real GNP in 1998. The volume of personal consumption would rise more slowly than forecast, but this would be offset by a faster increase in the volume of exports. Minor adjustments would need to be made to several

other items in the forecast, but these would tend to cancel out. The principal danger inherent in an acceleration in price inflation is that it could undermine existing pay agreements, jeopardising output and employment growth prospects in future years.

The current uncertainty concerning general inflation prospects is largely related to the advent of EMU under conditions of global currency volatility. There has, correctly, been no clarification concerning the bilateral exchange rates at which the Irish pound will be locked against other participating currencies in May. Beyond that date there is unavoidable ignorance about the future course of sterling, although it seems increasingly unlikely that it will depreciate to the levels reached in early 1996 over the next few years.

Despite these potential problems, the Irish economy remains fundamentally strong. However, the combination of multiple uncertainties and the loss of such policy variables as exchange rate and interest rate variations makes it essential that the Irish economy retains both flexibility and competitiveness. To these ends, the easing of constraints in labour supply through the encouragement of a permanent shift from dole to work could make a significant contribution. Although the recent Budget missed the opportunity to bring about a major reduction in the basic tax/benefit-loss wedge at low pay levels, through a large increase in personal allowances, several other measures to ameliorate effective marginal rates in this area, together with improved education and training schemes, could go some of the way to addressing this issue. For the majority of the labour force which is already at work, the need for the economy to maintain competitiveness and flexibility has clear implications. The pay terms of *Partnership 2000* should not be exceeded, while in the longer term pay settlements will probably need to contain a greater degree of flexibility, perhaps through profit sharing or the inclusion of a significant bonus element which would only be paid in periods of favourable market conditions, such as have been seen in 1997.

It is against this medium-term background that it is essential to puncture any mood of complacency engendered by the past four years of extraordinary economic achievement. Discipline has been a vital part of the combination of factors which brought about the success and it will remain so for the future. This implies continuing fiscal responsibility on the part of the government, continued realism from the social partners, and a considerable degree of prudence, particularly with regard to personal borrowing, on the part of the financial institutions and, crucially, of individual borrowers.

Given such a prudent and realistic approach, the prospects for continued output and employment growth, with a steady rise in living standards and an erosion of the problems of unemployment and poverty, remain excellent. If, on the other hand, the impatience inherent in the unfortunate catch phrase "it's pay-back time" were to become the dominant spirit of pressure groups and sectoral interests, society as a whole could be paying for it for years to come by way of higher unemployment and lower real incomes.

## STATISTICAL APPENDIX

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You may notice a new look to the Statistical Appendix this quarter. In addition to expanding some of the existing categories, we have revamped it to include National Accounts series, international indicators and some indicators of business confidence from the IBEC-ESRI Monthly Industrial Survey. We also intend to include some additional demographic and employment variables from the new, quarterly Labour Force Survey once they become available. Any comments or suggestions on the new Appendix will be gratefully accepted by the authors.

**Table A1: National Accounts**

	GNP by Source of Income at Current Market Prices								
	1	2	3	4	5	6	7	8	9
	Agri. Income (£m)	Non- Agri. Wages (£m)	Non- Agri. Other (£m)	Adjust- ments (£m)	Net Factor Income (£m)	Natio- nal Income (£m)	Depre- ciation (£m)	Taxes less Subs. (£m)	GNP (market prices) (£m)
	<i>Annual Series</i>								
1990	1,966	12,801	7,965	-993	-2,921	18,818	2,615	2,836	24,269
1991	1,826	13,647	8,127	-1,095	-2,796	19,708	2,846	2,873	25,427
1992	2,110	14,588	8,231	-1,235	-3,210	20,484	2,979	3,308	26,771
1993	2,155	15,803	9,299	-1,419	-3,521	22,317	3,157	3,223	28,698
1994	2,281	16,871	9,734	-1,493	-3,575	23,818	3,488	3,964	31,269
1995	2,436	18,115	11,631	-1,770	-4,508	25,904	3,848	4,377	34,129
1996	2,426	19,477	13,460	-1,919	-5,121	28,323	4,303	4,356	36,983
1997									
	GDP by Sector of Origin and GNP at Current Market Prices								
	10	11	12	13	14	15	16	17	18
	Agri- culture (£m)	Indus- try (£m)	Distri- bution (£m)	Public Admin- istration (£m)	Other Dome- stic (£m)	Adjust- ments (£m)	Taxes less Subs. (£m)	GDP (output) (£m)	GNP (output) (£m)
	<i>Annual Series</i>								
1990	2,340	8,749	4,816	1,362	8,079	-993	2,836	27,190	24,269
1991	2,210	9,041	5,002	1,463	8,729	-1,095	2,873	28,224	25,427
1992	2,495	9,769	4,563	1,545	9,536	-1,235	3,308	29,980	26,771
1993	2,541	10,379	5,189	1,667	10,638	-1,419	3,223	32,218	28,698
1994	2,669	11,407	5,147	1,714	11,437	-1,493	3,964	34,844	31,269
1995	2,845	13,304	5,721	1,752	12,409	-1,770	4,377	38,638	34,129
1996	2,858	14,480	6,749	1,931	13,648	-1,919	4,356	42,104	36,983
1997									
	Expenditure on GNP at Current Market Prices								
	19	20	21	22	23	24	25	26	27
	Private Consum- ption (£m)	Public Consum- ption (£m)	Invest- ment (£m)	Stock changes (£m)	Exports (£m)	Imports (£m)	GDP (exp.) (£m)	Net Factor Income (£m)	GNP (exp.) (£m)
	<i>Annual Series</i>								
1990	15,992	4,067	5,128	719	16,175	-14,891	27,190	-2,921	24,269
1991	16,826	4,481	4,897	623	16,984	-15,587	28,224	-2,796	25,427
1992	17,966	4,842	4,982	-94	18,881	-16,597	29,980	-3,210	26,771
1993	18,714	5,219	4,964	-138	22,033	-18,573	32,218	-3,521	28,698
1994	20,400	5,579	5,575	-128	25,308	-21,891	34,844	-3,575	31,269
1995	21,695	5,949	6,349	177	30,837	-26,369	38,638	-4,508	34,129
1996	23,318	6,244	7,524	389	33,798	-29,169	42,104	-5,121	36,983
1997									

**Table A1 (cont'd): National Accounts**

	GDP by Sector of Origin and GNP at Constant (1990) Market Prices								
	28	29	30	31	32	33	34	35	36
	Agri- culture  (1990= 100)	Indus- try  (1990= 100)	Distri- bution  (1990= 100)	Public Admin- istration  (1990= 100)	Other Dome- stic  (1990= 100)	Adjust- ments  (1990= 100)	Taxes less Subs.  (1990= 100)	GDP (output)  (1990= 100)	GNP (output)  (1990= 100)
<i>Annual Series</i>									
1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991	97.9	102.6	101.2	99.4	101.8	107.2	96.1	100.7	101.3
1992	106.1	109.6	92.9	100.8	106.4	118.4	104.8	104.1	103.1
1993	97.9	112.4	100.5	101.5	111.1	128.6	107.7	107.0	105.9
1994	96.7	123.5	102.1	100.9	117.6	134.2	123.0	114.1	113.7
1995	99.1	141.8	109.6	101.8	123.9	155.9	139.9	124.4	121.9
1996	105.0	152.3	125.2	107.5	131.1	165.8	150.6	134.2	130.5
1997									
	Expenditure on GNP at Constant (1990) Market Prices								
	37	38	39	40	41	42	43	44	45
	Private Consumption  (1990= 100)	Public Consumption  (1990= 100)	Invest- ment  (1990= 100)	Stock changes  (1990= 100)	Exports  (1990= 100)	Imports  (1990= 100)	GDP (exp.)  (1990= 100)	Net Factor Income  (1990= 100)	GNP (exp.)  (1990= 100)
<i>Annual Series</i>									
1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991	102.2	102.9	92.6	89.3	105.3	102.3	101.9	96.0	102.6
1992	106.4	105.4	91.4	-10.8	119.5	110.4	105.9	112.5	105.2
1993	108.7	106.0	88.3	-18.3	131.1	118.3	109.2	116.0	108.4
1994	115.4	111.1	97.2	-27.7	149.8	135.8	116.8	117.2	116.8
1995	120.3	115.5	106.5	17.9	179.1	157.2	129.0	145.0	127.1
1996	127.8	118.8	123.5	57.1	196.9	175.2	139.0	165.2	135.8
1997									
	Memorandum Items (Current Prices)								
	46	47	48	49	50	51	52	53	54
	GNDI (£m)	GNP Deflator (1990= 100)	GNP per capita (£)	Relative GDP (EU15= 100)	Gross Govt. Deficit (%)	Debt- GDP ratio (%)	Gov. Exp./ GNP (%)	Pers. Savings Ratio (%)	Invest- ment/ GNP (%)
<i>Annual Series</i>									
1990	25,682	100.0	6,922	72.0	2.3	95.8	42.8	12.7	21.1
1991	27,036	102.8	7,211	76.0	2.3	95.0	44.2	13.2	19.3
1992	28,016	106.0	7,535	79.4	2.5	92.0	45.2	12.4	18.6
1993	30,006	110.4	8,034	82.6	2.4	96.3	45.2	13.8	17.3
1994	32,425	111.9	8,727	87.8	1.7	89.1	43.9	10.5	17.8
1995	35,239	113.0	9,486	92.2	2.1	82.2	43.3	9.8	18.6
1996	38,337	114.5	10,214	98.1	0.4	72.7		8.7	20.3
1997									

**Table A2: Output Indicators**

	Volume Indices			Output per Head			Price Indices		
	55 Total Manuf- acturing (1985= 100)	56 Modern Manuf- acturing (1985= 100)	57 Trad. Manuf- acturing (1985= 100)	58 Total Manuf- acturing (1985= 100)	59 Modern Manuf- acturing (1985= 100)	60 Trad. Manuf- acturing (1985= 100)	61 Manuf- acturing Output (1985= 100)	62 Whole- sale Prices (1985= 100)	63 Agricul- tural Output (1985= 100)
	<i>Annual Averages</i>								
1990	149.2	197.9	117.6	145.3	160.9	121.0	107.8	105.1	100.0
1991	153.9	208.6	118.0	148.3	162.1	121.6	108.7	106.4	96.4
1992	169.6	243.6	121.0	163.5	184.2	125.8	110.5	107.3	97.8
1993	178.8	265.7	121.3	172.3	192.0	128.3	115.6	112.4	104.2
1994	201.6	309.9	127.7	189.1	209.8	133.5	116.9	113.5	105.8
1995	242.1	398.9	135.5	214.0	236.2	137.9	119.8	115.9	108.2
1996	261.9	439.2	139.9	221.3	234.6	140.0	120.6	116.4	102.9
1997									
	<i>Quarterly Averages</i>								
1994I	195.2	299.8	118.8	187.5	211.2	126.4	117.0	113.5	108.5
II	206.1	312.2	128.6	194.9	216.0	134.7	117.1	113.9	111.2
III	186.2	282.5	118.9	173.4	189.8	123.4	116.6	113.2	104.6
IV	219.5	337.7	132.1	200.9	217.3	136.3	116.8	113.4	103.1
1995I	224.7	368.7	124.1	205.0	234.2	128.2	118.3	115.4	107.8
II	242.4	390.6	138.6	215.2	237.7	140.2	119.5	116.6	110.5
III	233.3	379.5	127.9	204.0	219.1	129.6	120.2	115.3	106.6
IV	268.7	446.7	138.0	231.8	247.4	139.9	121.3	116.3	108.1
1996I	257.4	438.8	127.2	222.9	238.6	130.8	121.3	117.5	109.5
II	268.8	449.2	142.3	227.7	242.3	142.1	121.2	116.9	107.0
III	239.9	390.9	132.2	200.6	208.0	130.5	120.3	116.1	100.4
IV	282.3	467.4	143.9	234.9	244.1	142.3	119.6	115.0	98.9
1997I	295.9	516.4	133.3	244.8	264.4	132.0	118.8	114.9	96.9
II	305.5	527.6	148.3				119.6	115.7	98.8
III	294.0	501.7	139.4				120.1		96.6
IV									
	<i>Quarterly Averages (Seasonally Adjusted)</i>								
1994I	191.8	282.8	123.9	182.0	197.7	130.2	117.0	113.5	107.6
II	198.6	302.8	123.3	188.5	206.9	129.5	116.7	113.3	108.2
III	201.9	313.3	123.9	189.6	211.3	129.5	116.6	113.2	106.2
IV	213.9	334.2	127.2	196.5	218.7	131.7	117.1	114.0	105.2
1995I	221.3	349.1	129.7	199.2	220.2	132.2	118.3	115.3	106.9
II	233.6	379.0	132.6	208.2	227.7	134.5	119.2	115.9	107.6
III	252.9	420.9	133.2	223.3	243.8	136.0	120.2	115.4	108.3
IV	261.5	440.4	133.0	226.2	248.1	135.0	121.5	117.0	110.3
1996I	254.9	416.4	133.2	216.7	225.1	135.2	121.4	117.3	108.5
II	259.3	436.6	135.9	220.3	232.3	136.3	120.9	116.3	104.3
III	260.2	433.2	137.6	219.8	231.3	136.8	120.3	116.2	102.0
IV	274.8	459.6	138.6	229.0	244.4	137.3	119.7	115.6	100.8
1997I	293.1	490.9	139.8	238.3	249.8	136.5	118.9	114.7	96.1
II	294.8	513.1	141.6				119.4	115.1	96.3
III	318.1	555.6	144.9				120.2		98.2
IV									

**Table A3: Employment, Earnings and Unemployment Indicators**

	Employment			Hourly Earnings		Live Register			72 Unemp- loyment Rate (%)
	64 Total Manuf- acturing ( '000s)	65 Modern Manuf- acturing ( '000s)	66 Trad. Manuf- acturing ( '000s)	67 Real Terms Manuf. (1985= 100)	68 Money Terms Manuf. (1985= 100)	69 Male ( '000s)	70 Female ( '000s)	71 Total ( '000s)	
<i>Annual Averages</i>									
1990	191.9	48.4	143.5	102.4	105.8	152,081	72,630	224,711	13.3
1991	193.9	50.7	143.3	105.4	111.8	170,456	83,491	253,947	14.7
1992	194.0	52.1	141.9	105.7	116.0	187,168	95,974	283,142	15.5
1993	194.0	54.5	139.5	109.0	121.3	193,750	100,529	294,279	15.5
1994	199.3	58.2	141.2	109.4	124.6	184,393	98,020	282,413	14.1
1995	211.5	66.5	145.0	110.5	129.0	178,494	99,273	277,767	12.2
1996	221.2	73.7	147.5	112.8	133.8	175,642	103,593	279,235	11.5
1997									
<i>Quarterly Averages</i>									
1994I	194.6	55.9	138.7	109.3	123.5	194,114	99,568	293,681	
II	197.7	56.9	140.8	109.1	124.2	183,679	96,311	279,990	
III	200.7	58.6	142.1	108.5	124.6	181,569	99,494	281,063	
IV	204.2	61.2	143.0	109.8	126.1	178,210	96,708	274,918	
1995I	204.9	62.0	142.9	109.4	126.7	181,760	97,836	279,595	
II	210.6	64.7	145.9	109.3	127.9	176,873	96,833	273,707	
III	213.8	68.2	145.6	109.8	129.0	177,670	101,493	279,164	
IV	216.7	71.1	145.6	112.5	132.3	177,673	100,929	278,602	
1996I	215.9	72.4	143.5	111.8	132.0	182,002	103,340	285,342	
II	220.7	73.0	147.7	113.0	134.1	176,857	102,819	279,677	
III	223.5	74.0	149.5	111.8	133.3	177,022	107,882	284,905	
IV	224.6	75.4	149.2	113.7	136.2	166,687	100,328	267,016	
1997I	225.9	76.9	149.0			164,688	100,516	265,205	
II						155,693	97,120	252,813	
III						154,256	101,358	255,614	
IV									
<i>Quarterly Averages (Seasonally Adjusted)</i>									
1994I	196.5	56.3	140.3	110.9	125.2	189,967	99,333	289,333	15.0
II	197.9	57.4	140.4	110.3	125.8	185,200	97,833	283,067	14.4
III	199.6	58.5	141.1	110.3	126.3	182,067	97,100	279,167	13.7
IV	203.2	60.5	142.8	110.3	126.8	180,167	97,733	277,867	13.1
1995I	206.9	62.4	144.6	110.5	127.9	177,867	97,633	275,500	12.4
II	210.6	65.2	145.4	109.5	128.3	178,433	98,400	276,867	12.1
III	212.8	68.1	144.6	111.1	130.3	177,967	99,133	277,067	12.0
IV	215.7	70.3	145.5	111.9	131.8	179,600	101,867	281,467	12.0
1996I	217.9	72.7	145.1	111.9	132.1	178,300	103,133	281,433	11.9
II	220.7	73.6	147.1	112.7	133.9	178,367	104,433	282,800	11.8
III	222.5	73.9	148.5	112.6	134.0	177,233	105,500	282,733	11.4
IV	223.6	74.6	149.1	112.7	135.2	168,567	101,233	269,800	11.0
1997I	228.0	77.2	150.7			161,067	100,367	261,400	10.6
II						157,200	98,733	255,967	10.3
III						154,433	99,000	253,433	10.2
IV									



**Table A4: IBEC-ESRI Monthly Industrial Survey**

	73	74	75	76	77	78	79	80
	Expectations for Production (balance of %)	Expectations for Employment (balance of %)	Adequacy of Present Capacity (balance of %)	Trend in Selling Prices (balance of %)	Expectations for Home Sales (balance of %)	Expectations for Exports (balance of %)	Capacity Utilisation (%)	Months of Production Ensured
	<i>Annual Averages</i>							
1990	11.3	-6.8	11.9	2.1	5.5	8.3	75.5	2.1
1991	4.6	-17.7	15.3	-0.3	-1.8	5.1	75.6	2.0
1992	-1.8	-12.8	15.7	-8.4	-4.4	5.3	76.0	2.1
1993	-0.3	-23.1	22.0	-2.3	-0.3	-0.8	74.0	2.1
1994	16.0	-3.9	16.8	-0.5	6.5	18.7	75.0	2.2
1995	16.1	-3.1	6.6	2.3	5.5	22.8	77.4	2.3
1996	6.7	-7.4	7.5	-6.6	4.4	1.6	74.4	2.3
1997								
	<i>Quarterly Averages</i>							
1994I	14.3	-4.7	20.7	-2.7	9.0	16.7	74.6	2.2
II	8.3	-3.0	21.0	-3.7	3.3	17.3	75.3	2.3
III	21.3	-4.3	14.3	-2.0	6.0	17.7	74.1	2.2
IV	20.0	-3.7	11.3	6.3	7.7	23.0	76.0	2.3
1995I	21.7	4.0	3.7	11.0	7.0	26.0	77.2	2.5
II	21.0	1.3	10.3	-2.0	7.3	31.3	77.8	2.2
III	16.3	-2.7	5.0	1.3	5.3	17.3	77.7	2.3
IV	5.3	-15.0	7.3	-1.0	2.3	16.3	77.0	2.1
1996I	12.7	-5.0	11.3	-0.3	8.0	4.0	73.0	2.1
II	-1.7	-7.0	7.3	-11.7	-0.3	0.0	73.4	2.3
III	14.0	-5.0	6.0	-9.0	3.3	7.0	73.8	2.4
IV	1.7	-12.7	5.3	-5.3	6.7	-4.7	77.2	2.3
1997I	12.0	-3.7	5.0	-5.0	7.3	22.3	77.0	2.6
II	11.7	-1.7	0.7	-0.7	1.7	18.7	74.9	2.5
III	15.0	1.0	2.0	-6.0	4.0	8.0	72.7	2.4
IV								
	<i>Quarterly Averages (Seasonally Adjusted)</i>							
1994I	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
II	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
III	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
IV	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
1995I	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
II	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
III	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
IV	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
1996I	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
II	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
III	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
IV	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
1997I	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
II	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
III	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
IV	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	

**Table A5: Demand Indicators**

	Consumption				Government				
	81 CPI (Nov. 1989 =100)	82 Cars Regis- tered N&S/H (Total)	83 Retail Sales Value (1990= 100)	84 Retail Sales Volume (1990= 100)	85 Elec- tricity Output (GWh)	86 New Houses Comp- leted (Total)	87 Current Reve- nue (£m)	88 Current Expen- diture (£m)	89 Current Deficit (£m)
	<i>Annual Series</i>								
1990	101.7	105,849	99.6	99.6	14,325	19,087	8,269	9,144	152
1991	104.5	89,589	101.5	99.5	14,990	19,364	8,776	9,827	300
1992	108.0	85,492	105.9	102.0	15,682	22,051	9,360	10,584	446
1993	109.5	87,352	109.0	103.4	16,161	20,707	10,140	11,493	379
1994	112.1	116,636	117.7	109.0	16,844	24,952	11,203	12,229	-15
1995	115.0	124,595	123.5	112.2	17,598	29,619	11,667	13,190	362
1996	116.8	153,833	133.7	119.1	18,935	32,989	14,018	12,954	437
1997									
	<i>Quarterly Series</i>								
1994I	111.2	39,741	113.1	105.8	4,484	4,692	2,709	3,145	253
II	112.1	36,317	115.0	106.5	4,016	5,889	3,041	2,851	-390
III	113.0	25,637	117.2	108.2	3,874	7,799	2,642	2,902	4
IV	113.1	14,941	125.3	115.4	4,470	8,483	2,811	3,330	118
1995I	114.0	39,283	116.0	106.3	4,674	6,296	2,537	2,973	234
II	115.2	37,934	121.0	109.9	4,151	7,156	3,156	3,205	-200
III	115.7	29,536	123.9	112.4	4,080	7,684	2,914	3,129	-87
IV	115.8	17,842	132.9	120.1	4,693	9,439	3,060	3,883	415
1996I	116.3	50,295	126.1	113.3	5,084	7,216	2,678	3,389	440
II	116.8	48,571	132.6	118.2	4,455	7,931	3,298	3,322	-235
III	117.4	33,460	132.2	117.7	4,316	8,403	3,607	3,178	-715
IV	118.0	21,507	143.9	127.4	5,080	10,175	3,372	4,130	218
1997I	117.9	51,641	134.8	120.0	5,116	8,081	3,101	3,381	99
II	118.6	49,546	141.2	125.0	4,627	9,600	4,151	3,406	-1,068
III	118.9	36,008	144.3	128.1	4,584		3,523	3,934	40
IV									
	<i>Quarterly Series (Seasonally Adjusted)</i>								
1994I	111.3	30,043	118.0	110.3	4,174	5,650	3,002	3,067	64
II	112.1	29,353	116.1	107.7	4,230	6,105	2,924	2,984	60
III	112.8	28,454	117.4	108.4	4,224	7,372	2,631	3,075	444
IV	113.2	28,899	119.3	109.8	4,229	7,369	2,687	3,059	372
1995I	114.1	29,534	120.6	110.3	4,345	7,567	2,820	2,946	126
II	115.1	30,445	122.0	110.9	4,366	7,460	2,973	3,361	387
III	115.5	32,833	124.4	112.9	4,442	7,323	2,926	3,315	389
IV	116.0	34,448	126.8	114.5	4,452	8,148	2,948	3,512	565
1996I	116.4	37,840	130.7	117.3	4,730	8,604	2,985	3,412	427
II	116.7	38,629	133.5	119.3	4,678	8,316	3,062	3,479	417
III	117.2	37,190	132.9	118.3	4,697	8,037	3,647	3,364	-283
IV	118.2	41,583	137.4	121.6	4,829	8,765	3,258	3,708	451
1997I	118.0	38,831	139.7	124.1	4,748	9,593	3,464	3,436	-28
II	118.5	39,493	142.3	126.1	4,864	10,094	3,830	3,553	-277
III	118.7	40,485	145.2	128.8	4,990		3,572	4,174	602
IV									

**Table A6: Monetary and Financial Indicators**

	Interest Rates		Monetary Developments				Asset Prices		
	90 One Month Inter- Bank (% p.a.)	91 Long- Term Gilt Rate (% p.a.)	92 M3 Money Supply (£m)	93 Dom. Credit (Gov.) (£m)	94 Dom. Credit (Non- Gov.) (£m)	95 New Mort- gages (No.)	95 External Res- erves (£m)	97 ISEQ Share Prices (1/1988 =1000)	98 Second Hand Houses (£)
	<i>Annual Series</i>								
1990	11.1	10.1	12,636	2,733	13,856	34,812	2,892	1,562.2	49,134
1991	10.4	9.3	13,025	2,715	13,553	37,058	3,256	1,382.4	50,500
1992	15.2	9.1	14,119	3,180	14,411	44,433	2,113	1,311.1	51,452
1993	10.6	7.8	17,268	3,168	14,911	45,390	4,278	1,576.0	52,559
1994	5.7	8.2	19,209	3,518	16,655	50,204	4,041	1,853.4	55,033
1995	6.1	8.3	21,910	3,559	19,917	49,288	5,473	1,992.9	58,526
1996	5.8	8.1	27,038	2,976	23,548	61,006	4,960	2,494.3	67,438
1997									
	<i>Quarterly Series</i>								
1994I	6.1	6.9	17,313	3,146	15,249	13,297	4,422	1,966.3	55,371
II	5.6	8.4	17,553	3,130	15,760	13,104	4,477	1,806.3	55,137
III	5.4	8.7	18,471	3,472	16,068	12,194	4,392	1,817.7	55,814
IV	5.5	8.7	19,209	3,518	16,655	11,609	4,041	1,823.1	53,710
1995I	6.1	8.7	18,897	3,209	17,454	11,573	4,031	1,863.6	55,671
II	6.5	8.4	19,252	3,146	18,384	12,787	4,547	1,893.2	58,603
III	6.0	8.3	20,421	3,505	19,037	12,394	5,504	2,055.7	58,458
IV	5.5	7.8	21,910	3,559	19,917	12,534	5,473	2,159.2	60,910
1996I	5.1	7.8	22,213	4,031	20,585	14,084	5,213	2,304.7	61,248
II	5.1	7.7	22,881	3,801	21,595	16,142	5,048	2,496.1	67,292
III	5.6	7.5	24,096	3,241	22,218	16,363	5,722	2,511.0	69,599
IV	5.7	6.9	27,038	2,976	23,548	14,417	4,960	2,665.6	70,858
1997I	5.7	6.8	27,843	3,149	25,647	14,773	5,876	2,891.3	72,197
II	6.3	6.8	37,931	3,401	19,156	18,199	5,092	3,127.4	77,324
III	6.3	6.1		2,312	18,085		5,984	3,543.3	80,774
IV									
	<i>Quarterly Series (Seasonally Adjusted)</i>								
1994I						14,005			56,203
II	No Seasonal Pattern			No Seasonal Pattern		12,215	No Seasonal Pattern		54,343
III						11,801			55,160
IV						12,346			54,324
1995I						12,071			56,529
II						11,961			57,807
III						12,039			57,702
IV						13,309			61,621
1996I						14,675			62,202
II						15,057			66,378
III						15,966			68,685
IV						15,299			71,671
1997I						15,365			73,428
II						16,971			76,141
III									79,825
IV									

**Table A7: Trade Prices, Exchange Rates and Competitiveness**

	Trade Prices				Exchange Rates			
	99 Import Unit Value (1990= 100)	100 Export Unit Value (1990= 100)	101 Terms of Trade (1990= 100)	102 Effective Index (12/1971= 100)	103 Sterling (per IR£)	104 Dollar (per IR£)	105 Deutsch- mark (per IR£)	106 Real Effective Index (1990= 100)
	<i>Annual Averages</i>							
1990	100.0	100.0	100.1	68.3	0.9305	1.6588	2.6729	100.0
1991	102.3	99.3	97.0	67.3	0.9133	1.6162	2.6708	96.6
1992	100.2	96.6	96.4	69.5	0.9695	1.7062	2.6561	99.9
1993	105.4	103.9	98.6	66.0	0.9771	1.4682	2.4241	93.2
1994	108.1	103.8	96.0	66.2	0.9777	1.4984	2.4263	92.9
1995	112.7	105.6	93.7	67.1	1.0168	1.6038	2.2971	93.4
1996	111.4	105.1	94.3	68.5	1.0255	1.6008	2.4092	95.2
1997								
	<i>Quarterly Averages</i>							
1994I	107.3	102.4	95.5	65.5	0.9607	1.4300	2.4640	92.1
II	108.7	104.5	96.1	65.9	0.9763	1.4687	2.4380	92.5
III	108.1	105.6	97.7	66.4	0.9880	1.5327	2.3920	93.3
IV	108.3	102.7	94.8	66.8	0.9857	1.5623	2.4113	94.1
1995I	111.7	104.0	93.1	66.6	0.9943	1.5733	2.3263	93.6
II	113.7	107.4	94.4	67.1	1.0197	1.6270	2.2717	93.6
III	112.2	105.6	94.1	67.4	1.0247	1.6117	2.3067	94.5
IV	113.2	105.5	93.2	67.4	1.0283	1.6033	2.2837	93.9
1996I	113.4	108.1	95.3	67.6	1.0317	1.5797	2.3193	93.8
II	112.1	106.6	95.1	68.1	1.0307	1.5703	2.3913	94.2
III	111.1	103.8	93.5	68.8	1.0347	1.6090	2.4090	95.5
IV	109.1	101.9	93.4	69.5	1.0050	1.6443	2.5170	97.3
1997I	110.9	104.3	94.1	69.7	0.9780	1.5943	2.6433	98.1
II	112.2	104.3	93.0	67.4	0.9317	1.5250	2.6127	94.9
III				66.8	0.9097	1.4780	2.6680	93.9
IV								
	<i>Quarterly Averages (Seasonally Adjusted)</i>							
1994I								
II	No	No	No	No	No	No	No	No
III	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal
IV	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern
1995I								
II								
III								
IV								
1996I								
II								
III								
IV								
1997I								
II								
III								
IV								

**Table A8: External Trade and Balance of Payments Indicators**

	Visible Trade Indicators					Balance of Payments			
	107	108	109	110	111	112	113	114	115
	Imports (Value) (£m)	Exports (Value) (£m)	Trade Balance (£m)	Imports (Volume) (1990= 100)	Exports (Volume) (1990= 100)	Merch- andise Balance (£m)	Services Balance (£m)	Net Factor Flows (£m)	Current Account (£m)
	<i>Annual Series</i>								
1990	12,476	14,342	1,867	100.1	100.1	1,797	513	-2,921	-224
1991	12,851	15,019	2,168	100.8	105.4	2,066	-668	-2,796	209
1992	13,195	16,744	3,549	105.7	121.2	3,501	-1,217	-3,209	320
1993	14,885	19,830	4,945	112.9	133.3	4,826	-1,366	-3,521	1,248
1994	17,251	22,754	5,503	127.6	153.2	5,396	-1,978	-3,575	998
1995	20,619	27,825	7,206	146.3	184.1	7,459	-2,991	-4,508	1,070
1996	22,470	30,316	7,846	161.3	201.6	8,416	-3,787	-5,121	862
1997									
	<i>Quarterly Series</i>								
1994I	4,258	5,322	1,063	127.0	145.1	1,036	-428	-1,192	-369
II	4,245	5,605	1,360	124.9	149.9	1,334	-393	-994	149
III	4,035	5,482	1,447	119.4	145.0	1,429	-447	-687	557
IV	4,713	6,346	1,632	139.2	172.8	1,597	-710	-702	662
1995I	4,970	6,464	1,494	142.3	173.6	1,558	-693	-1,163	-19
II	4,950	6,843	1,893	139.2	178.2	1,957	-603	-1,192	360
III	4,875	6,766	1,891	139.0	179.0	1,953	-696	-1,084	377
IV	5,824	7,752	1,928	164.6	205.5	1,991	-1,000	-1,070	352
1996I	5,867	7,792	1,925	165.5	201.7	2,006	-940	-1,460	-199
II	5,624	7,656	2,032	160.4	200.7	2,035	-813	-1,305	28
III	5,096	7,077	1,981	146.8	190.5	2,165	-894	-1,177	578
IV	5,883	7,792	1,908	172.4	213.7	2,211	-1,139	-1,179	454
1997I	5,969	7,801	1,832	172.1	209.0	2,209	-1,178	-1,749	-391
II	6,460	8,702	2,242	184.3	233.2	2,704	-1,092	-1,762	154
III									
IV									
	<i>Quarterly Series (Seasonally Adjusted)</i>								
1994I	4,116	5,321	1,205	122.9	145.1				
II	4,254	5,492	1,238	126.2	149.0		No Seasonal Pattern		No Seasonal Pattern
III	4,263	5,766	1,504	126.2	152.9				
IV	4,618	6,151	1,533	135.0	165.0				
1995I	4,798	6,463	1,665	137.6	173.3				
II	4,953	6,704	1,751	140.7	177.3				
III	5,181	7,128	1,947	147.5	188.8				
IV	5,682	7,506	1,823	159.0	195.9				
1996I	5,679	7,829	2,151	160.4	202.1				
II	5,613	7,484	1,871	161.9	199.8				
III	5,430	7,449	2,019	155.9	200.4				
IV	5,734	7,541	1,807	166.6	203.6				
1997I	5,774	7,813	2,040	166.8	208.9				
II	6,441	8,502	2,062	186.0	232.4				
III									
IV									

**Table A9 : International Indicators**

	GDP (Volume)								
	116	117	118	119	120	121	122	123	124
	UK	Ger- many	France	Italy	EU15	USA	Japan	OECD	Ireland
	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)
	<i>Annual Averages</i>								
1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991	98.0	112.4	100.8	101.2	101.5	99.4	104.3	101.0	101.3
1992	97.5	114.0	102.1	101.9	104.0	101.7	105.4	103.1	105.0
1993	99.5	113.1	100.6	100.5	103.4	104.1	105.2	104.3	108.1
1994	103.8	116.3	103.4	102.7	106.5	107.7	105.9	107.2	115.4
1995	106.7	118.4	105.6	105.7	109.1	109.9	107.3	109.3	126.7
1996	109.2	120.1	107.2	106.5	111.1	112.9	111.1	112.1	136.6
1997									
	<i>Quarterly Averages</i>								
1994I									
II									
III									
IV									
1995I									
II									
III									
IV									
1996I									
II									
III									
IV									
1997I									
II									
III									
IV									
	<i>Quarterly Averages (Seasonally Adjusted)</i>								
1994I	101.9	114.8	101.6	101.3	104.8	106.0	105.3	105.5	
II	103.2	116.2	103.2	102.4	106.1	107.2	105.8	106.7	
III	104.0	116.7	104.0	103.3	106.9	108.2	106.3	107.5	
IV	104.8	117.9	105.1	103.7	107.8	109.0	106.0	108.2	
1995I	105.3	118.3	105.6	105.3	108.6	109.2	105.9	108.5	
II	106.4	118.8	105.6	105.4	109.1	109.3	107.0	108.9	
III	107.0	118.6	105.8	106.0	109.4	110.2	107.3	109.5	
IV	107.5	118.5	105.5	106.2	109.5	110.8	108.8	110.1	
1996I	108.1	118.3	106.9	106.8	110.2	111.2	111.0	111.0	
II	108.7	120.2	106.6	105.9	110.7	112.9	110.7	111.8	
III	109.3	120.8	107.5	106.7	111.5	113.2	111.0	112.4	
IV	110.5	121.0	107.8	106.5	111.9	114.4	112.0	113.3	
1997I	111.5	121.4	108.2	106.2	112.3	115.7	113.6	114.3	
II	112.6	122.6	109.2	107.9	113.6	116.7	110.3	114.9	
III	113.7					117.6			
IV									

**Table A9 (cont'd): International Indicators**

	Consumer Prices								
	125	126	127	128	129	130	131	132	133
	UK	Ger- many	France	Italy	EU15	USA	Japan	OECD	Ireland
	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)
	<i>Annual Averages</i>								
1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991	105.9	103.5	103.2	106.5	105.1	104.2	103.3	105.2	103.2
1992	109.8	107.6	105.7	112.1	109.5	107.4	105.0	111.3	106.4
1993	111.5	112.0	107.9	116.8	113.8	110.6	106.4	116.1	107.9
1994	114.3	116.8	109.7	121.4	117.3	113.4	107.1	121.3	110.5
1995	118.2	119.0	111.6	127.9	120.9	116.6	107.0	128.1	113.2
1996	121.1	120.8	113.8	132.8	123.9	120.0	107.1	134.5	115.2
1997									
	<i>Quarterly Averages</i>								
1994I	112.6	114.5	109.0	119.8	115.4	112.3	106.8	115.8	109.3
II	114.6	115.3	109.6	120.8	116.6	113.0	107.2	117.7	110.2
III	114.6	115.7	109.8	121.7	117.0	114.0	106.9	121.5	111.1
IV	115.4	116.1	110.3	123.1	117.6	114.5	107.5	123.1	111.2
1995I	116.4	117.2	110.9	125.1	118.8	115.5	106.9	125.3	112.1
II	118.5	118.9	111.4	127.5	119.5	116.5	107.3	128.0	113.3
III	118.8	119.4	111.8	128.7	120.8	117.0	107.0	127.5	113.8
IV	119.0	119.4	112.4	130.4	121.3	117.6	106.9	128.7	113.9
1996I	119.6	120.1	113.2	131.3	122.8	118.6	106.6	130.2	114.4
II	121.2	120.7	114.1	132.9	123.9	119.8	107.3	133.6	114.8
III	121.4	121.2	113.8	133.2	124.2	120.4	107.2	134.6	115.4
IV	122.1	121.1	114.3	133.9	124.7	121.3	107.5	136.6	116.0
1997I	122.8	122.2	114.9	134.5	125.4	122.1	107.2	138.1	116.0
II	124.4	122.6	115.1	135.0	126.1	122.6	109.5	139.7	116.6
III	125.6	123.5	115.3	135.2	126.7	123.1	109.5	140.9	116.9
IV									
	<i>Quarterly Averages (Seasonally Adjusted)</i>								
1994I	113.0	114.6	108.9	119.8	115.4	112.3	107.1	116.1	109.4
II	113.9	115.0	109.4	120.8	116.5	112.8	107.0	117.1	110.2
III	114.6	115.5	109.9	121.7	117.0	114.0	106.9	121.5	110.9
IV	115.7	116.5	110.4	123.1	117.8	114.7	107.4	123.5	111.3
1995I	116.8	117.3	110.8	125.1	118.8	115.5	107.2	125.6	112.2
II	117.8	118.6	111.2	127.5	119.4	116.4	107.1	127.4	113.2
III	118.8	119.2	111.9	128.7	120.7	116.9	107.0	127.4	113.5
IV	119.3	119.8	112.5	130.4	121.6	117.8	106.8	129.1	114.0
1996I	120.1	120.2	113.1	131.3	122.8	118.6	106.9	130.5	114.5
II	120.5	120.4	113.9	132.9	123.8	119.6	107.1	132.9	114.7
III	121.4	121.0	113.9	133.2	124.1	120.3	107.2	134.5	115.2
IV	122.4	121.5	114.4	133.9	125.0	121.5	107.4	137.1	116.2
1997I	123.2	122.3	114.8	134.5	125.3	122.1	107.5	138.4	116.0
II	123.7	122.3	114.9	135.0	126.0	122.4	109.3	139.0	116.5
III	125.5	123.3	115.4	135.2	126.6	123.1	109.5	140.9	116.7
IV									

**Table A9 (cont'd): International Indicators**

	Hourly Earnings (Manufacturing)								
	134	135	136	137	138	139	140	141	142
	UK	Ger- many	France	Italy	EU15	USA	Japan	OECD	Ireland
	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)
	<i>Annual Averages</i>								
1990	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1991	108.0	106.0	104.0	110.0	107.0	103.0	103.0	105.0	105.7
1992	115.0	112.0	108.0	116.0	113.0	106.0	105.0	109.0	109.7
1993	121.0	118.0	111.0	120.0	118.0	108.0	105.0	112.0	114.7
1994	126.0	122.0	113.0	124.0	123.0	111.0	109.0	116.0	117.8
1995	132.0	126.0	116.0	128.0	127.0	114.0	112.0	120.0	121.9
1996	138.0	130.0	119.0	130.0	132.0	118.0	115.0	124.0	126.5
1997									
	<i>Quarterly Averages</i>								
1994I	125.0	121.0	112.0	123.0	121.0	111.0	81.0	109.0	116.7
II	125.0	121.0	113.0	124.0	122.0	111.0	106.0	115.0	117.4
III	126.0	123.0	114.0	124.0	123.0	111.0	107.0	116.0	117.8
IV	129.0	123.0	114.0	125.0	125.0	112.0	133.0	122.0	119.2
1995I	131.0	123.0	115.0	126.0	125.0	113.0	77.0	110.0	119.8
II	131.0	126.0	114.0	127.0	131.0	114.0	98.0	118.0	120.9
III	131.0	127.0	115.0	129.0	128.0	115.0	101.0	117.0	122.0
IV	134.0	128.0	116.0	129.0	129.0	115.0	125.0	123.0	125.1
1996I	137.0	129.0	117.0	129.0	130.7	116.0	113.0	122.0	124.8
II	137.0	130.0	118.0	129.0	131.4	118.0	115.0	123.0	126.8
III	137.0	130.0	119.0	131.0	133.7	118.0	116.0	124.0	126.0
IV	140.0	131.0	120.0	132.0	135.0	120.0	117.0	126.0	128.8
1997I	143.0	132.0	120.0	134.0	135.0	120.0	116.0	126.0	
II	143.0	132.0	121.0	134.0	135.0	121.0	119.0	127.0	
III	143.0		122.0	135.0		122.0	118.0	127.0	
IV									
	<i>Quarterly Averages (Seasonally Adjusted)</i>								
1994I	123.8	121.2	112.2	123.0	120.8	111.1	89.4	110.5	118.4
II	125.1	120.9	113.1	124.4	121.9	110.9	105.7	114.6	118.9
III	127.3	122.7	113.9	123.6	123.3	110.9	108.2	116.7	119.4
IV	128.9	123.2	113.8	124.9	125.0	112.0	121.3	120.1	119.9
1995I	129.8	123.2	115.2	126.0	124.8	113.2	84.2	111.4	120.9
II	131.1	125.9	114.1	127.5	130.9	113.9	98.1	117.7	121.3
III	132.3	126.7	114.9	128.6	128.3	114.8	102.2	117.7	123.1
IV	133.9	128.2	115.8	128.9	129.0	115.1	113.9	121.1	124.6
1996I	135.7	129.2	117.2	129.0	130.5	116.2	123.5	123.5	124.9
II	137.1	129.9	118.1	129.5	131.3	117.9	115.1	122.7	126.6
III	138.4	129.7	118.9	130.6	134.0	117.8	117.5	124.8	126.7
IV	139.9	131.2	119.8	131.9	135.0	120.1	106.8	124.0	127.8
1997I	141.6	132.2	120.2	134.0	134.8	120.2	125.8	127.4	
II	143.1	131.8	121.2	134.5	134.9	120.9	119.7	126.8	
III	144.4		121.9	134.6		121.8	119.3	127.8	
IV									



**Table A9 (cont'd): International Indicators**

	Unemployment Rate								
	143	144	145	146	147	148	149	150	151
	UK	Ger- many	France	Italy	EU15	USA	Japan	OECD	Ireland
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
	<i>Annual Averages</i>								
1990	6.8	4.9	8.9	10.3	8.4	5.4	2.1	6.1	13.3
1991	8.7	4.4	9.4	9.9	8.7	6.6	2.2	6.8	14.7
1992	10.1	4.6	10.4	10.5	9.4	7.3	2.2	7.4	15.5
1993	10.5	6.1	11.6	10.2	10.9	6.8	2.5	8.0	15.5
1994	9.6	8.4	12.3	11.4	11.1	6.1	2.9	7.9	14.1
1995	8.8	8.2	11.7	11.9	10.8	5.6	3.1	7.5	12.2
1996	8.2	8.9	12.4	12.0	10.9	5.4	3.4	7.6	11.5
1997									
	<i>Quarterly Averages</i>								
1994I									
II									
III									
IV									
1995I									
II									
III									
IV									
1996I									
II									
III									
IV									
1997I									
II									
III									
IV									
	<i>Quarterly Averages (Seasonally Adjusted)</i>								
1994I	9.9	6.8	12.5	10.7	11.0	6.5	2.8	8.0	15.0
II	9.8	6.9	12.5	11.5	11.2	6.1	2.8	8.0	14.4
III	9.6	6.9	12.5	10.9	11.2	5.9	3.0	7.7	13.7
IV	9.0	6.8	12.4	11.1	11.0	5.5	2.9	7.4	13.1
1995I	8.7	8.1	12.3	12.2	11.1	5.5	2.9	7.5	12.4
II	8.8	8.1	11.6	12.2	11.0	5.6	3.1	7.5	12.1
III	8.7	8.2	11.5	12.1	11.0	5.7	3.2	7.5	12.0
IV	8.6	8.5	11.6	12.1	11.0	5.6	3.3	7.6	12.0
1996I	8.4	8.9	12.1	12.0	10.9	5.6	3.3	7.6	11.9
II	8.3	8.9	12.2	12.0	10.9	5.4	3.5	7.6	11.8
III	8.3	9.0	12.4	12.0	10.9	5.3	3.3	7.5	11.4
IV	7.8	9.2	12.6	12.0	10.8	5.3	3.3	7.5	11.0
1997I	7.5	9.5	12.5	12.2	10.8	5.3	3.3	7.5	10.6
II	7.2	9.6	12.6	12.1	10.7	4.9	3.4	7.3	10.3
III	7.1	9.9	12.6		10.6	4.9	3.4	7.2	10.2
IV									

**Table A9 (cont'd): International Indicators**

	Short-Term Interest Rate							
	152 UK (% p. a.)	153 Germany (% p. a.)	154 France (% p. a.)	155 Italy (% p. a.)	156 EU15 (% p. a.)	157 USA (% p. a.)	158 Japan (% p. a.)	159 Ireland (% p. a.)
	<i>Annual Averages</i>							
1990	14.8	8.5	10.3	12.1	8.2	8.2	7.7	11.1
1991	11.5	9.3	9.6	12.0	5.9	5.8	7.4	10.4
1992	9.6	9.5	10.3	14.0	3.8	3.7	4.5	15.2
1993	5.9	7.3	8.6	10.2	3.3	3.2	3.0	10.6
1994	5.5	5.4	5.9	8.5	4.7	4.6	2.2	5.7
1995	6.7	4.5	6.6	10.5	6.0	5.9	1.2	6.1
1996	6.0	3.3	3.9	8.8	5.4	5.4	0.6	5.8
1997								
	<i>Quarterly Averages</i>							
1994I	5.3	5.9	6.3	8.8	3.5	3.5	2.2	6.1
II	5.2	5.3	5.7	8.2	4.4	4.4	2.2	5.6
III	5.5	5.0	5.6	8.4	4.9	4.9	2.3	5.4
IV	6.1	5.3	5.7	8.9	5.9	5.9	2.3	5.5
1995I	6.7	5.1	6.6	9.7	6.2	6.2	2.3	6.1
II	6.7	4.6	7.5	10.8	6.1	6.0	1.4	6.5
III	6.8	4.6	6.1	10.6	5.8	5.8	0.8	6.0
IV	6.6	4.0	6.1	10.7	5.8	5.7	0.5	5.5
1996I	6.2	3.4	4.5	10.0	5.3	5.3	0.6	5.1
II	6.0	3.3	4.0	9.1	5.4	5.4	0.6	5.1
III	5.8	3.3	3.9	8.7	5.5	5.5	0.6	5.6
IV	6.2	3.2	3.5	7.6	5.5	5.4	0.5	5.7
1997I	6.2	3.2	3.4	7.3	5.5	5.4	0.6	5.7
II	6.5	3.2	3.4	7.0	5.7	5.7	0.6	6.3
III	7.1	3.2	3.4	6.8	5.6	5.6	0.6	6.3
IV								
	<i>Quarterly Averages (Seasonally Adjusted)</i>							
1994I								
II	No							
III	Seasonal							
IV	Pattern							
1995I								
II								
III								
IV								
1996I								
II								
III								
IV								
1997I								
II								
III								
IV								

## Notes

- 1-48. Calculated on an ESA95 basis. *Source:* CSO.
49. GDP at current market prices per head of population calculated at PPS on an ESA79 basis. *Source:* European Commission.
- 50-51. General government deficit and debt calculated on an ESA79 basis. *Source:* Department of Finance.
52. *Source:* Department of Finance.
53. Calculated as a percentage of personal disposable income. *Source:* Based on CSO Data.
- 54-55. *Source:* Based on CSO Data.
- 56-60. *Source:* ESRI.
- 61-71. *Source:* CSO.
72. Official standardised unemployment rate, based on ILO definitions. *Source:* CSO.
- 73-78. Percentage reporting improvement or increase minus percentage reporting deterioration or decrease. *Source:* IBEC-ESRI Monthly Industrial Survey.
- 79-80. *Source:* IBEC-ESRI Monthly Industrial Survey.
- 81-89. *Source:* CSO.
- 90-91. *Source:* Central Bank of Ireland.
92. *Source:* CSO.
- 93-94. *Source:* Central Bank of Ireland.
- 95-97. *Source:* CSO.
98. *Source:* Department of the Environment and Local Government.
- 99-105. *Source:* CSO.
106. *Source:* OECD.
- 107-115. Calculated on an ESA95 basis. *Source:* CSO.
- 116-123. *Source:* OECD.
124. Average of output and expenditure methods. *Source:* OECD.
- 125-159. *Source:* OECD.