

QUARTERLY ECONOMIC COMMENTARY

August 1999

*The forecasts in this Commentary are based on
data available by early-August 1999*

**T.J. Baker
David Duffy
and
Diarmaid Smyth**

*Copies of this paper may be obtained from The Economic and Social Research Institute
(Limited Company No. 18269), (Registered Office) 4 Burlington Road, Dublin 4.*

*Price IR£35.00 (€44.44) per copy or IR£145 (€184.11) per year,
(including Medium-Term Review)*

T.J. Baker is a Senior Research Officer, David Duffy is an Assistant Research Officer and Diarmaid Smyth is a Research Assistant of The Economic and Social Research Institute. The *Commentary* has been accepted for publication by the Institute, which is not responsible for either the content or the views expressed therein.

CONTENTS

	<i>Page</i>
SUMMARY	5
FORECAST NATIONAL ACCOUNTS	6
COMMENTARY	
The International Economy	8
General	8
The US Economy	8
The European Economy	9
The UK Economy	10
The Rest of the World	11
The Context for Ireland	12
The Domestic Economy	13
General	13
Exports	14
Stocks	15
Investment	15
Consumption	17
Final Demand	18
Imports	19
Balance of Payments	20
Gross National Product	22
Agriculture	22
Industry	22
Services	23
Employment	23
Incomes	25
Consumer Prices	26
Public Finances	27
Interest Rates	28
General Assessment	29
STATISTICAL APPENDIX	33

SUMMARY

Revisions to the national accounts show that the level of economic activity in 1998 and preceding years was substantially higher than previously calculated. For 1998 itself, preliminary estimates show that, as expected, economic growth was very rapid, with the increase in real GNP at 8.1 per cent matching the average of the previous three years. Current indications are that the rate of growth will remain high this year and next, although declining gradually towards a sustainable level.

For 1999 our current forecast is for real GDP to rise by 7 per cent and real GNP by 6 per cent. Employment will continue to increase, with the annual average total at work rising by 63,000 or $4\frac{1}{4}$ per cent, while the annual average unemployment rate is forecast at 6.3 per cent. The consumer price index is predicted to rise by an annual average of 1.6 per cent, while a further large improvement in the public finances is taking place. One sign that the growth in effective demand is too high to sustain indefinitely is that the current account of the balance of payments is likely to move into deficit, although within a single currency this has less immediate significance than formerly.

In 2000, the rise in real GDP is projected to be $6\frac{1}{2}$ per cent and the increase in real GNP $5\frac{3}{4}$ per cent. This slight slowdown is expected to be accompanied by a slower increase in average employment, at 46,000, and a further decline in average unemployment to about 5.7 per cent. The consumer price index is forecast to rise more rapidly, because the impact of falling mortgage interest rates will have ended, but at 1.9 per cent the rate of increase will remain moderate. The public finances are expected to strengthen further, while the current account deficit is forecast to widen.

By 2000, public authorities' savings are forecast to be of the same order of magnitude as personal savings and significantly higher than corporate savings. This unusual situation highlights the extent to which a shortage of public funds has ceased to be a specific constraint on policy. The constraint in future is the general scarcity of resources, and the object of policy the classic economic problem of how to allocate scarce resources. In this environment the need discussed in our previous *Commentary* for the evolution of a new socio-economic consensus is becoming more important. Whether or not a new formal national agreement can be negotiated, the greater the degree of common thinking on how the resources of the economy should be allocated the better the chances of continuing the remarkable economic progress of the past decade.

FORECAST NATIONAL ACCOUNTS 1999

A: Expenditure on Gross National Product

	1998		1999		Change in 1999		
	Preliminary £m	Forecast £m	£m		Value	%	Volume
			Value	Volume			
Private Consumer Expenditure	30,689	34,065	3,376	2,332	11	3¼	7½
Public Net Current Expenditure	7,983	8,741	758	342	9½	5	4¼
Gross Fixed Capital Formation	13,398	16,000	2,602	1,548	19½	7	11½
Exports of Goods and Services (X)	50,305	57,269	6,964	6,876	13¾	¼	13¾
Physical Changes in Stocks	788	400	-388	-380			
Final Demand	103,163	116,475	13,312	10,718	13	2¼	10½
less:							
Imports of Goods and Services (M)	43,326	50,192	6,866	6,545	15¾	¾	15
GDP at Market Prices	59,837	66,283	6,446	4,173	10¾	3½	7
less:							
Statistical Discrepancy	201	150	-51	0			
Adjusted GDP	59,637	66,133	6,496	4,173	11	3¼	7
less:							
Net Factor Payments (F)	7,454	8,475	1,021	1,006	13¾	¼	13½
GNP at Market Prices	52,183	57,658	5,475	3,167	10½	4¼	6

B: Gross National Product by Origin

	1998		1999		Change in 1999	
	Preliminary £m	Forecast £m	£m		%	
			£m	%		
Agriculture, Forestry, Fishing	2,301	2,370	71	3		
Non-Agricultural: Wages, etc.	24,542	27,119	2,577	10½		
Other:	22,006	24,382	2,376	10¾		
Adjustments: Stock Appreciation	76	0	-76			
Financial Services	-2,051	-2,323	-272	13¼		
Statistical Discrepancy	201	150	-51			
Net Domestic Product	47,074	51,698	4,624	9%		
less:						
Net Factor Payments	7,454	8,475	1,021	13¾		
National Income	39,620	43,223	3,603	9		
Depreciation	6,074	6,924	850	14		
GNP at Factor Cost	45,694	50,147	4,453	9%		
Taxes less Subsidies	6,489	7,511	1,022	15¾		
GNP at Market Prices	52,183	57,658	5,475	10½		

C: Balance of Payments on Current Account

	1998		1999		Change in 1999	
	Preliminary £m	Forecast £m	£m			
			£m	%		
X – M	6,979	7,077	98			
F	-7,454	-8,475	-1,021			
Net Transfers	1,038	1,017	-21			
Balance on Current Account	563	-381	-944			
as % of GNP	1	-¾	-1¾			

FORECAST NATIONAL ACCOUNTS 2000

A: Expenditure on Gross National Product

	1999	2000	Change in 2000				
	Forecast £m	Forecast £m	£m		%		
			Value	Volume	Value	Price	Volume
Private Consumer Expenditure	34,065	37,131	3,066	1,976	9	3	5¼
Public Net Current Expenditure	8,741	9,571	830	376	9½	5	4¼
Gross Fixed Capital Formation	16,000	18,019	2,019	1,114	12½	5¼	7
Exports of Goods and Services (X)	57,269	63,571	6,302	6,220	11	¼	10¼
Physical Changes in Stocks	400	400	0	0			
Final Demand	116,475	128,692	12,217	9,686	10½	2	8¼
less:							
Imports of Goods and Services (M)	50,192	56,227	6,035	5,382	12	1¼	10¼
GDP at Market Prices	66,283	72,465	6,182	4,304	9¼	2¼	6½
less: Statistical Discrepancy	150	150	0	0			
Adjusted GDP	66,133	72,315	6,182	4,304	9¼	2¼	6½
Net Factor Payments (F)	8,475	9,409	934	920	11	¼	10¼
GNP at Market Prices	57,658	62,906	5,248	3,384	9	3	5¼

B: Gross National Product by Origin

	1999	2000	Change in 2000	
	Forecast £m	Forecast £m	£m	%
Agriculture, Forestry, Fishing	2,370	2,441	71	3
Non-Agricultural: Wages, etc.	27,119	29,627	2,508	9¼
Other:	24,382	26,610	2,228	9¼
Adjustments: Stock Appreciation	0	0	0	0
Financial Services	-2,323	-2,555	-232	10
Statistical Discrepancy	150	150	0	0
Net Domestic Product	51,698	56,273	4,575	8¼
Net Factor Payments	8,475	9,409	934	11
National Income	43,223	46,864	3,641	8½
Depreciation	6,924	7,616	692	10
GNP at Factor Cost	50,147	54,480	4,333	8¼
Taxes less Subsidies	7,511	8,426	915	12¼
GNP at Market Prices	57,658	62,906	5,248	9

C: Balance of Payments on Current Account

	1999	2000	Change in 2000
	Forecast £m	Forecast £m	£m
X – M	7,077	7,344	267
F	-8,475	-9,409	-934
Net Transfers	1,017	997	-20
Balance on Current Account	-381	-1,068	-687
as % of GNP	-¾	-1¾	-1

General

The outlook for the world economy has continued to improve over the past few months. Economic activity in most of the crisis-hit Asian countries is now recovering strongly, helping the prospects for major economies such as Japan and Europe, whose exports to the area are increasing. Aided by this, and by very low interest rates, such economies as Germany, France and Italy have avoided the recession which some commentators feared and are showing accelerated, although still moderate, growth. With the US economy still growing steadily, world output growth seems unlikely to drop below its 1998 rate, either this year or next.

In parallel with the improvement in output prospects, fears of widespread instability in the financial banking system have receded. There are still worries that share prices are unrealistically high, especially in the US, but there is no consensus as to whether a correction can be expected or about its consequences if it were to take place.

US Economy

Advance estimates for the second quarter 1999 show that the US economy grew by nearly 0.6 per cent. The performance of the USA has been important for both the world and Irish economic performance in recent years, with the steady growth of the US doing much to offset the various crises that occurred elsewhere. GDP growth of 3¼ per cent is expected in 1999. A small slowdown in activity is forecast for 2000 partly due to higher interest rates resulting in a lower rate of growth in consumption. However, continued recovery in the Asian economies and a more sustained recovery in Europe will help underpin activity in the US economy and on this basis GDP growth of 2¾ per cent is expected.

Despite the strong growth, inflation has remained low at an annual average of 2.1 per cent, partly due to gains in productivity and low commodity, import and energy prices. At the same time unemployment remains very low, a feature of the current expansion, at an annual rate in June of 4.3 per cent. Increases in employment in the services sector have offset declines in manufacturing employment levels. To date, the tightness of the labour market has not resulted in substantial wage increases. However, there are signs that some price and wage inflation may be beginning to emerge. Official interest rates were increased in June by ¼ per cent to 5 per cent. The signs of inflationary pressure means that a further small increase is expected later this year. Official interest rates are expected to increase further in 2000, although only by another ¼ to ½ per cent.

US equity prices have climbed during 1999, with all the major indices showing strong gains. The appreciation of the dollar against the euro and the Yen in the first half of 1999 has been partially reversed in recent weeks. However, the earlier strength of the dollar, coupled with strong domestic demand, has resulted in rapid growth in import volumes. At the same time the dollar appreciation and poor external demand subdued export volumes, leading to a growing trade deficit. Worries about the growing current account deficit coupled with a consolidation of growth in the euro-zone should result in a continued depreciation of the dollar during 2000.

The European Economy

Eurostat figures show that, for the 15 member states, GDP grew by a ½ per cent in the first quarter of the year due mainly to a rise in private consumption and in investment. This growth is marginally faster than the 0.3 per cent recorded during the fourth quarter of 1998. Despite this upturn in the first quarter, GDP growth in 1999 is expected to be lower than in 1998 at 2¼ per cent. The unemployment rate for the EU declined marginally in May to 9.4 per cent. This compares with a rate of 10.1 per cent in May 1998. Recent surveys point to increasing levels of consumer confidence. If this translates into a continuation of growth in consumer spending this should help to underpin recovery. The weakness of the euro since its launch in January has contributed to the competitiveness of European goods and services in export markets, which will be only slowly eroded as the euro appreciates. These factors, coupled with an improved world trade environment as the Asian region continues to recover, should lead to GDP growth of 2½ per cent in 2000.

According to preliminary calculations of the German Federal Statistical Office, GDP rose by 0.4 per cent in the first quarter of 1999. This compares with a decline of 0.1 per cent in the final quarter of 1998. The upturn in growth reflects a strong contribution from personal consumption and gross capital formation while net export levels declined, because export levels fell by nearly 1 per cent while imports rose by over 2 per cent. Later data show a significant improvement in net exports during the second quarter. Official figures show that annual inflation in Germany was 0.4 per cent in June, a marginal increase on the previous month. Despite this increase, inflation remains very subdued. However, higher import prices reflecting the past weakness of the euro may contribute to higher inflation in the future. Any increase is not expected to be substantial and an annual average of less than 1 per cent is forecast for 1999 and 1¼ per cent in 2000. The unemployment rate has persisted at a high level for some time, averaging 11.1 per cent in 1998. Stronger economic growth should mean a decline to an annual average of 10¾ per cent this year, and a further decline to an annual average marginally below 10½ per cent in 2000.

The French economy grew by 0.3 per cent in the first quarter of 1999. While the slowdown in growth was mainly as a result of stagnation in the industrial sector, growth was underpinned by stable domestic demand due mainly to strong personal consumption. In contrast to the situation in Germany, the French economy appears to be on a steadier growth path. GDP growth of 2¼ per cent is expected in 1999 and this should improve slightly in 2000 to over 2½ per cent. Growth in the economy has resulted in a decline in the unemployment rate, which should average 11¼ per cent this year, down from 11¾ per cent in 1998. This is higher than anticipated in our *May Commentary* and reflects the poor performance of the manufacturing sector. However, the decline in the unemployment rate is expected to continue next year to an annual average of 10¾ per cent. The rate of decline has slowed as the pace of job creation has levelled off from the very strong rate achieved in 1998.

Despite some recent signs of acceleration, growth will continue to be weak in the Italian economy this year, compared with that of Germany and France. Much of the difference can be explained by the relatively poor performance of Italian exports as the performance of domestic demand has been similar in all three countries. Italian growth in the first quarter of the year amounted to 0.2 per cent. Growth of 1½ per cent is estimated for 1999.

An improvement in personal consumption should lead to increased economic activity in 2000 and GDP growth of 2¼ per cent is forecast for that year. Most of the peripheral EU countries are expected to again grow rather more rapidly than the core countries, both this year and next.

UK Economy

Preliminary figures show that the UK economy grew by ½ per cent in the second quarter 1999. Despite the weakness of manufacturing for most of the past year, it now seems certain that the economy as a whole has avoided a recession. Indeed, signs are emerging of recovery. Retail sales volumes grew strongly in June compared to a year earlier, and both surveys and other data indicate a strengthening of activity in services, manufacturing and construction. Based on this, GDP growth of 1¼ per cent is expected in 1999. A further strengthening of consumer activity and some further recovery by the manufacturing sector should result in higher growth of 2¼ per cent in 2000.

A feature of the UK economy in recent years has been the continued strength of sterling on international currency markets. The temporary appreciation of sterling against the euro in the first half of 1999 can partly be explained by the weakness of the new single currency due to uncertainty about the economic outlook in the euro area when contrasted with strong growth in the US. The continued interest rate differential between the euro-zone and the UK is likely to limit the extent of the recent depreciation of sterling against the euro. As euro-zone interest rates rise next year, further sterling depreciation can be expected.

Despite the slowdown in GDP growth over the past year, the unemployment rate continues to be low. Indeed, the labour market remains tighter than expected. Statistics show that the ILO unemployment rate for the three months to May was 6.2 per cent, down from 6.3 per cent in the preceding three months. While a substantial rise in unemployment is not expected, some increase should occur as a result of the slowdown and an annual average of 6½ per cent is forecast for 2000.

Official short-term interest rates were cut by a ¼ percentage point in June to 5 per cent, the latest in a series of interest cuts by the Monetary Policy Committee that began in October 1998. Rates were lowered because the committee judged that it is now more likely that inflation will undershoot its 2½ per cent target. Underlying inflation (excluding mortgage interest repayments) is currently 2.2 per cent. It is somewhat puzzling that the underlying inflation rate is not lower, given the weakness of international inflation and the strength of sterling in the past two years. Perhaps some lagged effects of sterling appreciation remain to be felt, and little early change in the inflation rate is expected. Inflation is therefore expected to average 2.4 per cent in 1999. An upturn in overall economic activity during 2000, together with sterling depreciation, could see the annual average rate of inflation increasing to around 2.6 per cent.

The Rest of the World

Official figures show that the Japanese economy grew by a quarterly rate of 1.9 per cent in the first three months of the year, compared with a decline of 0.8 per cent in the final quarter of 1998. This was a better performance than had been expected, but a breakdown of the GDP figures shows that government spending continues to make the main contribution to growth.

Unemployment in Japan is now over 4½ per cent, an exceptionally high level for the country. The poor condition of the labour market has had a negative impact on consumer confidence and retail sales have fallen compared to 1998. While the fall in consumption has led to a fall in import volumes, the low level of economic activity in the region has also led to a fall in the volume in exports. With the recovery in many neighbouring countries, export growth could resume, although the recent appreciation of the Yen may impede this. Thus, throughout 1999 some moderate improvement in the economy is expected, and on this basis little change in the volume of GDP is estimated for 1999, with growth of ¾ per cent in 2000.

TABLE 1: Short-term International Outlook

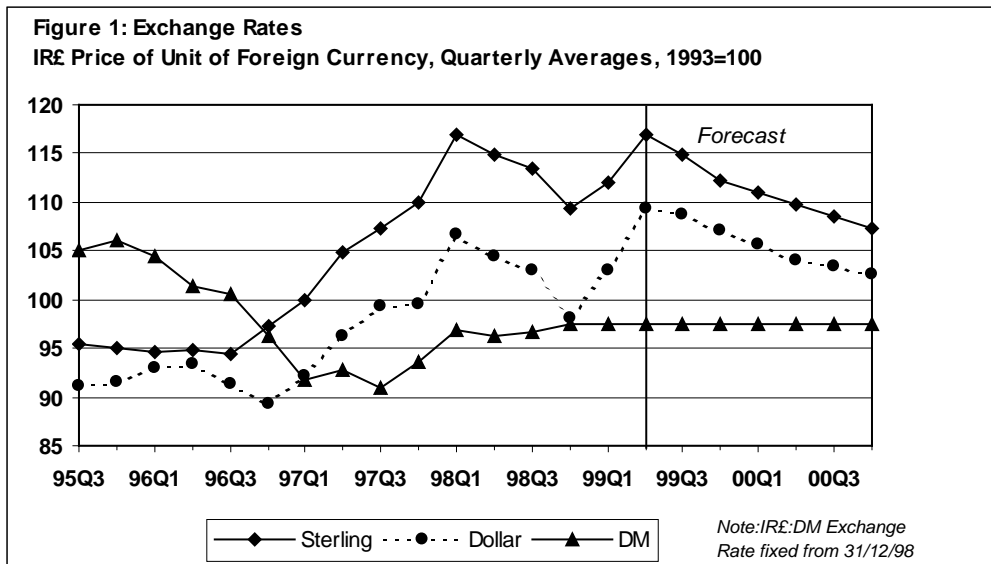
Country	GNP		Consumer Prices		Hourly Earnings		Unemployment Rate		Current Account Balance	
	Percentage Change		Percentage Change		Percentage Change		%		% of GNP	
	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
UK	1¼	2¼	2½	2½	5	5	6½	6½	-¼	¾
Germany	1¾	2½	1	1¼	2¾	2¾	10¾	10½	-¼	¼
France	2¼	2½	¾	1¼	2	2	11¼	10¾	2¼	2
Italy	1½	2¼	1½	1¾	3	3	12	11¾	2½	2½
Total EC	2¼	2½	1¼	1½	3	3	10	9½	1	1
USA	3¼	2¾	2	2¼	4	4	4¼	4½	-3½	-3½
Japan	0	¾	-¾	0	-½	0	4½	4½	3	3
Total (OECD)	2¼	2¼	2	2¼	3	3	7	7	-½	-½
Ireland	6	5¾	1½	2	6	6	6¼	5¾	-¾	-1¾

It now appears that the other Asian economies, particularly Korea, are putting the crisis behind them, which will have a positive impact on world trade. While the performance of different economies will vary, the region is clearly returning to moderate growth this year, having contracted in 1998. Inflation has declined, allowing an easing of monetary policy which has encouraged growth. Gains in competitiveness from the depreciation of their currencies will underpin growth in export volumes. It is hoped that the improved outlook will boost business and consumer confidence and encourage investment and consumer spending. These should help a return to more sustainable growth in 2000.

Context for Ireland

Having slowed markedly in 1998 world trade growth should remain stable at about 5 per cent in 1999. The recovery of the crisis regions, particularly South East Asia, should provide a boost to world demand, and trade growth is expected to accelerate to 6¾ per cent in 2000. World output growth will remain broadly stable over the next few years. However, recovery of the European economies should ensure that market conditions for the majority of Irish exports remain reasonably favourable in 1999 and improve a little in 2000.

With the US economy continuing to grow and the rest of the world tending to recover, the flow of global investment, especially from US sources, should remain quite high, unless there is a major collapse in share prices. However, with growth resuming in Asian markets, and with many Asian countries more competitive following large depreciations, Ireland might lose some of its share of such investment.



Although global inflationary pressures continue to be subdued, the long downward trend in international interest rates would appear to have reached its nadir. Long-term rates turned up in the second quarter, and are expected to rise gradually in the remainder of 1999 and in 2000, although remaining low by historical standards. Short-term rates in the US were raised in June by $\frac{1}{4}$ per cent, and another similar rise is expected during 1999. In both the euro-zone and the UK it would appear that the downward trend in short-term interest rates has ended, and the next move is likely to be upwards. It still seems probable that any increases will not take place until very late in 1999 or in early 2000. On balance it is likely that euro interest rates will be raised by more than UK rates. For forecasting purposes, it is assumed that short-term euro interest rates rise fairly steadily by about $\frac{3}{4}$ per cent between late 1999 and the end of 2000.

Following the recent strengthening of the euro against the dollar and sterling it is possible that there will be little further movement during 1999, with interest rate differentials holding back the appreciation of the euro. However, once euro-zone interest rates begin to rise, an acceleration in euro appreciation can be expected, against both the dollar and sterling.

The Domestic Economy

General

The publication of the preliminary national accounts in *National Income and Expenditure 1998* confirms most of the estimates we made of economic performance during 1998, but changes general perceptions of the level of economic activity in recent years. Thus the official

preliminary estimates of economic growth in 1998 show real GDP rising by 8.9 per cent and real GNP by 8.1 per cent, compared with our final estimates in the May *Commentary* of 9 per cent and 7¾ per cent respectively.

On the other hand, a combination of methodological changes and outright revisions to earlier estimates has raised the current-price level of GNP by about 5 per cent in the early nineties and by 8½ per cent in 1997. For every year since 1991, most forms of income, most economic sectors and most forms of domestic expenditure are now shown as higher in current-price terms, than in the previous national accounts. The upward revisions are most marked from 1995 to 1997, where the GNP deflator has been increased significantly. The corollary of this, of course, is that the changes in estimates of real GNP have been less marked, although these too show considerable upward revisions for 1996 and 1997.

The impact of revisions and methodological changes is likely to have been greater on the Irish national accounts than on those of most other countries in the European Union. Thus, when comparative data are published it is probable that Ireland's position relative to the EU average will be seen to have risen.

One minor consequence of the methodological changes introduced in *National Income and Expenditure 1998* is that we have had to modify some of the tables in this *Commentary* slightly, in order to keep them compatible with the relevant national accounts tables. Most of the changes, such as the introduction of the CSO's new statistical adjustment to balance the income and expenditure estimates at current prices, should be self-explanatory.

Exports

Revisions contained in the *Balance of Payments Estimates* for the first quarter of 1999 reduced the level of merchandise exports in 1998 by about £400 millions; and brought the annual growth in the value of merchandise exports in 1998 down from almost 26 per cent to 24¾ per cent. Even after revision this remains an exceptionally large increase, which is most unlikely to be matched either this year or next.

Nevertheless early indications from the *Balance of Payment Estimates* and the trade statistics are that the growth of visible and merchandise exports remained reasonably buoyant in the first quarter of 1999. With the European economy expected to expand more rapidly in the later months of the year, as discussed in the International Section, and with additional industrial capacity due to come into commission in the course of the year, an annual increase of 14 per cent is forecast for the value of both visible and merchandise exports in 1999. With some prices rising and others falling, but no marked trend in international prices of manufactured goods, no change in the average price of visible exports is predicted for 1999.

Taking into account the revised estimates for service exports in 1998, it now seems reasonable to forecast that tourism will increase by about 7 per cent in volume this year, and that other service exports will rise by over 13 per cent in volume. Thus, as shown in Table 2, total exports of goods and services are forecast to increase in 1999 by just under 13¾ per

cent in volume and just over 13¾ per cent in value, with average prices about 0.2 per cent higher than last year.

TABLE 2: Exports of Goods and Services

	1998	% Change		1999	% Change		2000
	£m	Volume	Value	£m	Volume	Value	£m
Agricultural	2,972	3	5	3,121	3	4	3,246
Manufactured	37,445	16¼	16	43,436	12½	12¼	48,757
Other Industrial	3,527	3	4	3,668	3	4	3,815
Other	1,004	3	3	1,034	3	3¼	1,068
Total Visible	44,948	14	14	51,259	11	11	56,886
Adjustments	614			700			777
Merchandise	45,562	14	14	51,959	11	11	57,663
Tourism	2,281	7	8¾	2,479	7	9	2,702
Other Services	2,462	13¼	15	2,831	11	13¼	3,206
Exports of Goods and Services	50,305	13¾	13¾	57,269	10¾	11	63,571

With a smaller carryover from the preceding year, and with supply constraints operating in some sectors, it seems likely that the annual rate of growth in visible and merchandise exports will decline again next year, perhaps to about 11 per cent in volume and value. As usual, the fastest growth is likely to be in the high-technology sectors, where capacity is due to increase further.

Tourism growth is projected at much the same rate as this year, while other services exports are forecast to grow less rapidly, in keeping with the trend in visible exports. Thus exports of goods and services in 2000 are forecast to increase by about 10¾ per cent in volume and 11 per cent in value.

Stocks

The preliminary national accounts for 1998 reveal an unexpectedly large increase in stocks, particularly in non-agricultural, non-intervention, stocks. Some reaction to this heavy rate of stockbuilding seems likely this year, and may well account for the subdued level of imports in the first quarter. For the year as a whole a level of £500 million is forecast for "other" stock building, roughly in line with the average of the past five years. With a fall in intervention stockbuilding likely as existing stocks are sold off, and little change expected in the level of farm stocks, total stockbuilding in 1999 is forecast at £400 million, as shown in Table 3.

TABLE 3: Stock Changes

	1998	Change in Rate	1999	Change in Rate	2000
	£m	£m	£m	£m	£m
Farm Stocks	43	-43	0	-20	-20
Irish intervention Stocks	-13	-87	-100	0	-100
Other Non-agricultural Stocks	758	-258	500	20	520
Total	788	-388	400	0	400

With movements in both farm and intervention stocks likely to remain mildly negative next year, a small increase in industrial and distribution stocks is projected to hold the value of total physical changes in stocks constant at £400 million.

Investment

National Income and Expenditure 1998 contains some significant revisions both to classifications and to actual estimates of gross fixed capital formation in recent years. Thus the level of the value of investment in building and construction in 1997 was some £323 million, or over 5 per cent, higher than shown in NIE 1997, while other fixed investment, including some new elements, was £912 million, or 28½ per cent, higher. With regard to 1998 itself, the volume of growth in investment in building and construction, at 13.8 per cent, was very close to our final estimate of 14 per cent, although the price deflator of 11.6 per cent was significantly higher than our estimate of about 8 per cent. However, the official estimate of the increase in the volume of investment in machinery and equipment etc. was a massive 20.9 per cent compared to our estimate of 11 per cent. Thus, for 1998 the national accounts show that total gross fixed capital formation increased by 16.8 per cent in volume and 25.4 per cent in value, well above our final estimates of 13 per cent and 20 per cent.

Despite this changed view of the recent past, we have made only minor revisions to our forecast of investment in 1999, mainly through raising our forecast price deflator for building and construction. It still seems reasonable to expect that most forms of building and construction are continuing to increase strongly although at a slightly slower percentage rate than last year. Such a view tends to be confirmed by the available indicators, which show a high level of planning permissions, for both residential and other development, in the first quarter, together with a large increase in progress payments, but a smaller rise than last year in building employment. The exceptionally large increase in investment in machinery and equipment last year suggests that a much more modest rise is likely this year. Thus, as shown in Table 4, total gross fixed capital formation in 1999 is forecast to increase by 11½ per cent in volume and 19½ per cent in value.

TABLE 4: Gross Fixed Capital Formation

	1998	% Change		1999	% Change		2000
	£m	Volume	Value	£m	Volume	Value	£m
Building and Construction	8,355	12½	24½	10,402	7	15	11,962
Machinery and Equipment	5,043	10	11	5,598	7	8¼	6,057
Total	13,398	11½	19½	16,000	7	12½	18,019

If our 1999 forecast is correct, gross investment will account for about 27¼ per cent of expenditure on GNP this year. Such a proportion is very high by either historical or international standards, although it could be argued that it is in keeping with the recent exceptional growth rate of the economy. It is inevitable that at some stage the increase in investment volumes will slacken or even be reversed, especially as the economic growth rate is expected to slacken. As always, it is difficult to

predict the turning point when the slowdown in investment will take place, but there are good reasons for expecting that it might be during next year.

With regard to housing in particular, our forecast implies that somewhere in the region of 47,000 dwellings will be completed in 1999. A continuation of recent rates of increase would result in the completion of well over 50,000 dwellings next year. On the basis of any analysis of housing demand, and even allowing for the bringing forward of purchases in expectation of future price increases, such a number of completions would seem likely to prove excessive. At some time in the course of the year an easing of pressure on the supply of dwellings can be expected, with a subsequent check in the rate of increase in new house building. Our assumption is that such a check will take place quite late in the year, and that the total number of completed new dwellings will be higher than in 1999. Other new construction seems likely to expand further, especially as interest rates will remain low by historical standards. Thus our forecast for 2000 is that the volume of investment in building and construction will increase by about 7 per cent. A deceleration in the volume of building seems likely to be accompanied by a slowing of the rise in prices and margins, so the value of investment in building and construction is projected to increase by 15 per cent. Investment in machinery and equipment expected to increase more slowly than this year, in keeping with the general easing in the expansion of final demand, and the effects of declining competitiveness on industrial investment. Thus total gross domestic fixed capital formation in 2000 is forecast to increase by 7 per cent in volume and 12½ per cent in value, the smallest percentage rise since 1993.

Consumption

As in the case of fixed investment, *National Income and Expenditure 1998* shows a sharp upward revision in estimates of the value of personal consumption, with the 1997 estimate being raised by 9.4 per cent from £25,191 million to £27,555 million. One element in the revision is a much higher allowance for the purely notional expenditure of owner-occupiers “paying” an imputed rent to themselves for the use of their house. These imputed rents rose rapidly in 1998, in line, of course, with actual rents, resulting in an unexpectedly and, in some ways misleadingly, large increase of 3.8 per cent in the personal consumption price deflator.

With rents, both actual and imputed, likely to rise quite strongly again in 1999, the personal consumption deflator is forecast to rise by 3.2 per cent, roughly double the expected increase in the consumer price index. The retail sales index and trade estimates of new car sales both suggest that the volume of personal consumption is increasing at much the same rate as in 1998. Our forecast for 1999, shown in Table 5, is thus that

TABLE 5: Consumption Indicators

	1995	1996	Annual Percentage Change				1998 Forecast	2000 Forecast
			1997	1998	1999 To Date			
<i>Consumption Value</i>								
<i>NIE 1998, Personal</i>								
Consumption	6.6	9.3	10.0	11.4		11.0	9.0	
Retail Sales Index, Value	4.8	8.3	8.5	10.0	10.4	9.8	8.0	
Divergence	1.8	1.0	1.5	1.4		1.2	1.0	
<i>Consumption Volume</i>								
<i>NIE 1998, Personal</i>								
Consumption	3.7	6.5	7.3	7.4		7.6	5.8	
Retail Sales Index, Volume	2.8	6.2	7.9	8.8	9.4	8.8	6.8	
Divergence	0.9	0.3	-0.6	-1.4		-1.2	-1.0	
<i>Consumer Prices</i>								
<i>NIE 1998, Personal</i>								
Consumption Deflator	2.8	2.6	2.5	3.7		3.2	3.0	
Retail Sales Index Deflator	1.9	2.0	0.6	1.1	0.9	0.9	1.1	
Consumer Price Index	2.5	1.6	1.5	2.4	1.5	1.6	1.9	

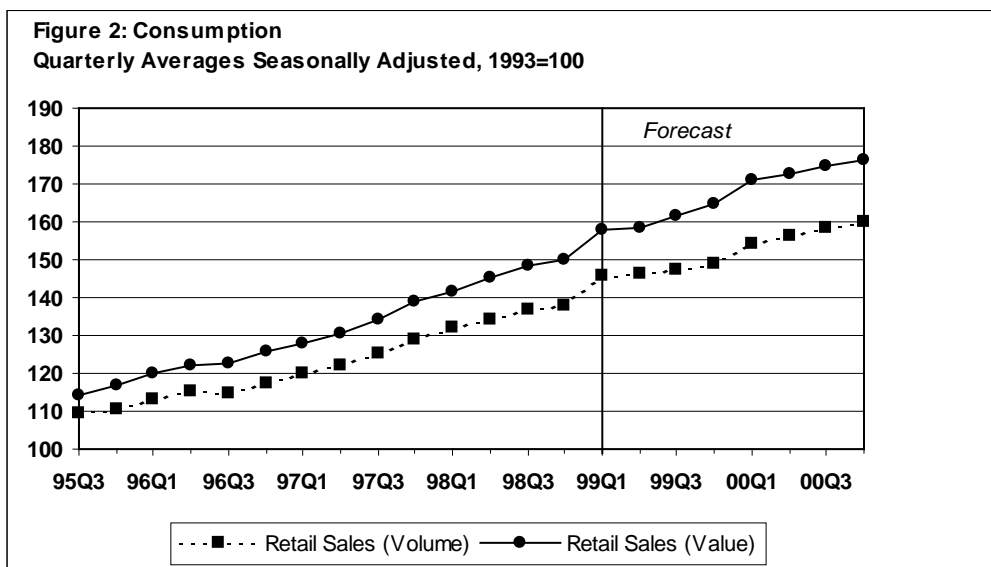
personal consumption will rise by just over 7½ per cent in volume and about 11 per cent in value. Taken in conjunction with our income forecasts, to be discussed later, this implies that the personal savings ratio will decline substantially this year.

With interest rates likely to remain relatively low, it is reasonable to assume that the personal savings ratio will fall again in 2000, although not so sharply as this year. On the basis of our income forecasts, this suggests that the value of personal consumption next year might rise by about 9 per cent. With the annual average increase in rents likely to be significantly slower than this year, but the consumer price index expected to rise a little faster, the personal consumption price deflator for 2000 is projected at about 3 per cent. Thus the volume of personal consumption is forecast to increase by about 5¾ per cent next year, rather slower than in the four preceding years, but still well above the long-term average.

Revised national accounts estimates show government consumption rising in volume by 4.8 per cent in 1997 and 5.9 per cent in 1998. These increases were above the average since 1990 of 3.2 per cent, although well below the rate of increase of other forms of expenditure. A slight reduction in the rate of growth to about 4¼ per cent is forecast for 1999 and 2000. With the price deflator for government consumption expected to remain little changed at around 5 per cent, the value of public consumption is forecast to increase by about 9½ per cent in each year.

Final Demand

Final demand increased in 1998 by 14¾ per cent in volume and 19 per cent in value, compared with our final estimates of 15 per cent and 18½ per cent respectively. This exceptionally rapid growth in final demand reflected the buoyancy of domestic demand, which grew by 9.3 per cent in volume, and of exports which showed a volume growth of 20.5 per cent.



Both domestic demand and exports are expected to grow quite strongly again in 1999, although not at the extraordinary rate seen last year. In volume terms, domestic demand, excluding stocks, is forecast to increase by just over 8 per cent, while exports of goods and services rise by almost 14 per cent. Thus total final demand in 1999 is forecast to increase by 10½ per cent in volume and 13 per cent in value. Although still quite high, the import-intensity of final demand should be significantly lower than in 1998.

A further easing in the rate of growth of final demand is projected for 2000, with forecast increases of 8¼ per cent in volume and 10½ per cent in value. This slowing is expected to be shared between domestic demand and exports, with the volume of the former rising by just under 6 per cent and of the latter by 10¾ per cent. Once more the import-intensity of demand seems likely to be moderately high.

Imports

After rising by 20.4 per cent in 1998, initial trade statistics show that the value of visible imports in the first quarter of 1999 was no higher than in the corresponding period of 1998. When allowance is made for slightly lower average import prices and for a different number of working days, it seems probable that the volume of visible imports was a little higher than in the first quarter of last year, but by much less than would be expected from trends in final demand.

It is possible, of course, that these initial figures will be revised upwards. If not, the most plausible explanation is that importers used the

first quarter to run down excessive inventories built up in the course of 1998. In either case it seems very probable that import values will resume their upward trend in the remainder of the year. For 1999 as a whole, visible imports are forecast to rise by 12½ per cent in volume and 12¾ per cent in value, with increases expected in imports of capital goods, consumer goods and goods and materials for industrial processing.

The value of tourist spending abroad is forecast to increase by 13¼ per cent, much the same rate as last year. Other service imports, which on revised estimates grew by an extraordinary 48 per cent in 1998, are forecast to increase by 25 per cent in value in 1999, a rate similar to that observed in the first quarter. Thus, as shown in Table 6, imports of goods and services in 1999 are forecast to rise by 15 per cent in volume and 15¾ per cent in value.

With final demand predicted to grow more slowly next year, the increase in visible imports is projected to fall to under 10 per cent, with the value rise about 1 per cent higher. Similarly, the reduction in the rate of growth in consumer spending is likely to be reflected in a slower increase in tourist spending abroad. From a very much higher base than in recent years, the percentage rise in other service imports is also forecast to be slower, especially as the increase in high-technology exports, to which royalty payments tend to be linked, is projected to be smaller than in most recent years. Thus total imports of goods and services in 2000 are forecast to increase by about 10¾ per

TABLE 6: Imports of Goods and Services

	1998	% Change		1999	% Change		2000
	£m	Volume	Value	£m	Volume	Value	£m
Capital Goods	4,039	12	12¾	4,554	9½	11	5,055
Consumer Goods	6,448	14	14¾	7,399	10	11½	8,250
Intermediate Goods:							
Agriculture	492	0	0	492	0	0	492
Other	18,555	13	13	20,967	10½	11¼	23,326
Other Goods	1,628	5	5¼	1,713	5	5¼	1,811
Total Visible	31,162	12½	12¾	35,125	9%	10%	38,934
Adjustments	-469			-529			-586
Merchandise Imports	30,693	12½	12¾	34,596	9%	10%	38,348
Tourism	1,663	11½	13¾	1,883	10	12	2,109
Other Services	10,970	23	25	13,713	13	15	15,770
Imports of Goods and Services	43,326	15	15¾	50,192	10%	12	56,227

cent in volume and 12 per cent in value. This would be the lowest annual increase in imports since 1993, which would be in keeping with the projected rise in real GNP also being the smallest since 1993.

Balance of Payments

Revised balance of payments estimates incorporated in *National Income and Expenditure 1998* show that the current account surplus in 1998 was £563 million, rather than the £1,047 million shown in the preliminary balance of payments estimates for the year. Most of the shift was concentrated in estimates of merchandise trade, with exports lower and imports higher than originally stated, but there were also smaller,

mutually offsetting, revisions to the service trade balance and net factor outflows.

On the basis of our export and import forecasts, the visible trade balance this year will increase by about 17 per cent, with a further 11¼ per cent rise in 2000. Increases in the merchandise trade balance are expected to be broadly similar. The deficit on service trade is projected to continue its rapid increase, although slowing in percentage terms from 66 per cent in 1998 to 30¼ per cent in 1999 and 16½ per cent next year. Thus, on the forecasts discussed in earlier sections of this *Commentary* the surplus on trade in goods and services would increase by 1½ per cent this year and 3¾ per cent next year, as shown in Table 7.

In keeping with the predicted slowing of the rate of increase in the exports of high-margin multinational companies, the rise in the profits of foreign companies either remitted abroad or re-invested in Ireland is forecast to decline from 25.7 per cent in 1998 to 18 per cent in 1999 and 14 per cent in 2000. National debt interest paid abroad is expected to continue its secular

TABLE 7: Balance of Payments

	1998 £m	Change %	1999 £m	Change %	2000 £m
Visible Trade Balance	13,785	17	16,134	11¼	17,952
Adjustments	1,083	13½	1,229	11	1,363
Merchandise Trade Balance	14,869	16¼	17,363	11¼	19,315
Service Trade Balance	-7,890	30¼	-10,286	16½	-11,971
Trade Balance in Goods and Services	6,979	1½	7,077	3¼	7,344
Factor Flows:					
Debit Flows:					
Remuneration of Employees	-51	0	-51	0	-51
Distributed Profits, etc.	-7,506	18	-8,857	14	-10,097
Reinvested Earnings	-1,790	18	-2,112	14	-2,408
National Debt Interest	-651	-14	-560	-8	-515
Other Debit Flows	-4,489	23½	-5,544	17	-6,486
Total Debit Flows	-14,487	18¼	-17,124	14¼	-19,557
Credit Flows:					
Remuneration of Employees	216	0	216	0	216
Direct Investment Income	806	18	951	16	1,103
Other Credit Flows	6,010	24½	7,482	18	8,829
Total Credit Flows	7,032	23	8,649	17¼	10,148
Net Factor Flows	-7,454	13¼	-8,475	11	-9,409
Net Current Transfers	1,038	-2	1,017	-2	997
Balance on Current Account	563		-381		-1,068
Capital Transfers	661	9	720	-9¼	650
Effective Current Balance	1,224		339		-418

decline, and other debit flows are projected to decelerate from their exceptional increase of 47 per cent in 1998 to 23½ per cent in 1999 and 17 per cent in 2000. A similar pattern of rates of increase declining from exceptional 1998 levels is also projected for credit flows, so the rise in

net factor outflows is forecast to be reduced from almost 18 per cent in 1998 to 13¾ per cent in 1999 and 11 per cent in 2000.

Throughout the past decade, net current transfers have tended to fluctuate around a gently declining trend. Projected decreases of 2 per cent both this year and next would be in keeping with a continuation of the underlying trend.

If our trade, factor flow and net transfer forecasts are broadly correct, the current account of the balance of payments will slip into deficit in 1999 for the first time since 1990. At a projected £381 million the deficit would be small and would still be outweighed by the inflow of capital transfers. The forecast current account deficit in 2000, however, at over £1,000 million would no longer be trivial as a proportion of GNP, and would not be fully offset by capital transfers. This probable trend in the balance of payments would be worrying if Ireland still possessed an independent currency vulnerable to speculation. Even in the context of a single currency it can be interpreted as an indicator that demand is growing faster than the domestic economy can accommodate, and that current trends cannot continue indefinitely.

Gross National Product

Despite the major revisions to the levels of components of GNP already discussed, the 1998 estimates of the volume growth of GDP at 8.9 per cent and GNP at 8.1 per cent were very close to our final estimates. Perhaps due to the influence of re-basing the ratio of accounts to 1995, the terms of trade adjustment were more favourable than expected, leaving the official estimate of real growth in gross national disposable income (adjusted for the terms of trade) at 7.6 per cent, compared with our final estimate of only 5½ per cent.

The terms of trade are forecast to deteriorate marginally in 1999. Together with a small reduction expected in net current transfers, this is forecast to result in an increase of almost 5½ per cent in real GNDI, compared to 7 per cent in real GDP and 6 per cent in real GNP. Similarly, anticipated declines of about 1 per cent in the terms of trade and of 2 per cent in net transfers in 2000 are projected to intensify the slowdown of real GNDI, which is forecast to increase by 4¾ per cent, while real GDP grows by 6½ per cent and real GNP by 5¾ per cent.

Agriculture

In contrast to earlier estimates of a large decline in the volume of gross agricultural product in 1998, *National Income and Expenditure 1998* shows a small increase of ½ per cent in the volume of gross domestic product in the broad agriculture sector last year.

It seems probable that the weather will prove more favourable for most agricultural products in 1999 than in 1998. In consequence, a moderate increase can be expected in gross agricultural output, although this could be largely offset by a rise in imports following last year's fodder problems. Assuming that there is an increase in forestry output, a rise of about 1 per cent in the volume of GDP in the broad agriculture sector is forecast for 1999. On the assumption of "average" weather conditions and in the absence of any new agricultural crises, a marginally slower increase of ¾ per cent is projected for next year.

Industry

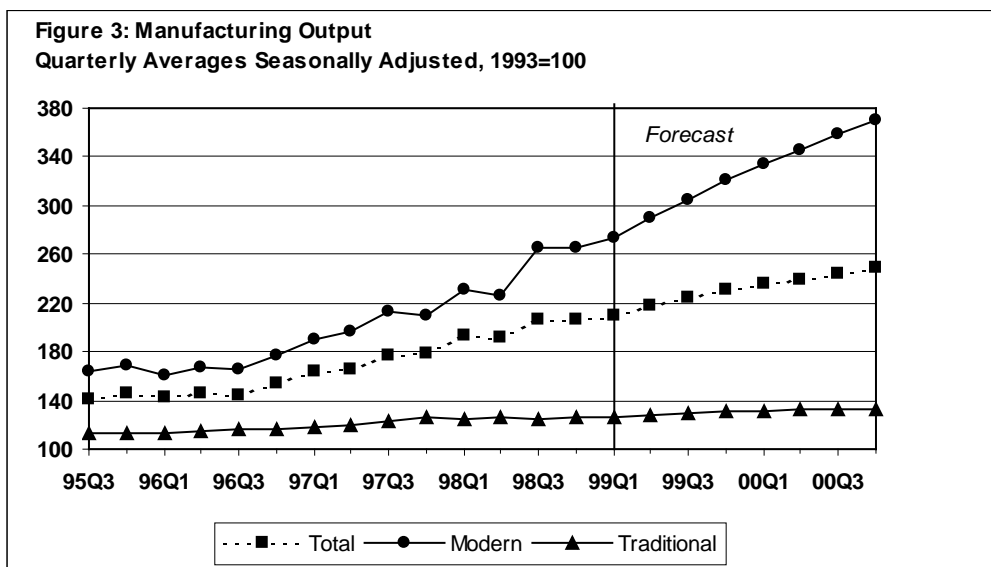
With the volume of production index for manufacturing industry rising by 16.7 per cent, and the output of the building industry rising strongly, the volume of gross domestic product in the broad industry sector increased by 13.6 per cent in 1998.

Trends in the early months of the year, together with expectations regarding annual export volumes, suggest that the annual increase in the volume of production index for manufacturing industry in 1999 could be in the region of 11 per cent. With the volume of production in building and construction again increasing strongly and the rise in depreciation in the sector likely to be large, the volume of GDP in the broad industry sector is forecast to grow by just over 10 per cent in 1999.

A slight deceleration in the rate of growth of manufacturing output, and a sharper slowdown in the expansion of building output, are together projected to result in the volume growth of GDP in the broad industry sector easing back to about 8½ per cent in 2000.

Services

Although the volume increase in public administration and defence in 1998 was very modest, at just 1.4 per cent, both the distribution, transport and communication sector and other domestic activity increased strongly. Thus the volume of GDP in the services sector as a whole, after adjustment for financial services, rose by 6.5 per cent.



The expansion in the volume of public administration and defence is expected to remain moderate in both 1999 and 2000, although perhaps a little above the annual average increase so far in the 90s, which has been under 1 per cent. Private sector output is forecast to continue to grow quite strongly in both years, although easing back somewhat from the 1998 rate as final demand increases less rapidly. The adjusted volume of GDP in the total services sector is projected to increase by between 4½ and 5 per cent in both 1999 and 2000.

Employment

As explained in the May *Commentary* the move from the annual *Labour Force Survey* to the *Quarterly National Household Survey* has had the temporary paradoxical effect of making it more difficult to monitor recent trends in employment patterns. For the time being, therefore, Table 8 remains based on principal economic status rather than ILO definitions, and the annual averages are based on interpolation between April (or March to May) figures, influenced, but not determined, by quarterly data where these are available.

Indeed, on the basis of quarterly survey figures, we have revised upwards our estimate of the annual average total at work in 1998 by 4,000, although neither of the relevant Spring figures has been altered. For the future, we have slightly scaled back our forecast of employment in the Spring of next year, mainly on grounds of labour availability, and are projecting a further deceleration in the following twelve months. With the numbers engaged principally in agriculture expected to continue their long-term decline, the forecast increase in total employment is divided fairly evenly between industry and services. On an annual basis, the rise in non-agricultural employment is estimated to have been 84,000 or 6¾ per cent in 1998, and is forecast to be 66,000, or 5 per cent, this year and 49,000 or 3½ per cent in 2000. The annual increases in full-time equivalent non-agricultural employment are likely to be between ½ per cent and ¾ per cent lower than the total increases.

TABLE 8: Employment and Unemployment

A: Mid-April Estimates '000					
	1997	1998	1999	2000	2001
Agriculture	134	129	127	124	121
Industry	386	425	456	481	500
Services	818	873	913	940	965
Total at Work	1,338	1,427	1,496	1,545	1,586
Unemployed	179	155	128	115	108
Labour Force	1,517	1,581	1,624	1,660	1,694
Unemployment Rate % ¹	10.3	7.8	6.3	5.8	5.5
Live Register	256	231	197	182	177
B: Annual Averages '000					
	1997	1998	1999	2000	
Agriculture	132	129	126	123	
Industry	407	436	466	492	
Services	839	894	930	953	
Total at Work	1,378	1,459	1,522	1,568	
Unemployed	172	149	123	112	
Labour Force	1,550	1,608	1,645	1,680	
Unemployment Rate % ¹	10.2	7.5	6.3	5.7	
Live Register	254	227	195	180	

¹ Official Standardised Unemployment Rate, based on ILO definitions. This cannot be derived directly from the figures in Table 8, which are based on principal economic status. Unemployment rates since April

1998 have been revised downwards in anticipation of official revisions when the March-May 1999 Quarterly National Household Survey becomes available.

Unemployment has fallen very rapidly in recent years according to any of the available measures. However, the greatest proportionate fall has been in the ILO measure of those out of work and seeking employment in the week before the survey was taken. This is the basis on which the official standardised unemployment rate is calculated, but suffers from the disadvantage of a long delay before the final annual average rate can be calculated. Thus the unemployment rates shown in Table 8 for 1998 and early 1999 are lower than the current official rates on the assumption that the latter will be revised downwards when full information becomes available.

The projected increase in the labour force in 1999 and 2000 implies a slight further increase in female participation rates and an assumption that net immigration will continue quite high by historical standards, but at annual rates below the exceptional increase of 22,800 seen in the year to April 1998.

Incomes

As in 1997, adverse movements in relative prices resulted in a fall in agricultural incomes in 1998. Despite the $\frac{1}{2}$ per cent rise in real GDP in the broad agriculture sector, incomes in the sector fell by $3\frac{3}{4}$ per cent. There are grounds for expecting a modest reversal of price trends, and incomes in the broad agriculture sector are accordingly forecast to increase by about 3 per cent in both 1999 and 2000.

Non-agricultural wages, salaries and pensions rose in aggregate by 11.1 per cent in 1998, made up of an increase of almost 6 per cent in effective employment and of almost 5 per cent in average earnings. For 1999 the rise in full-time equivalent employment is forecast to be rather slower, at about $4\frac{1}{4}$ per cent, but the increase in average earnings is forecast at 6 per cent, as labour shortages result in higher pay in a wide variety of sectors. Thus, aggregate non-agricultural earnings are forecast to increase by almost $10\frac{1}{2}$ per cent this year. The rise in average earnings is projected to again be in the region of 6 per cent next year, as the labour market remains very tight. However, the growth in effective employment is expected to be considerably slower, at about 3 per cent, leading to an increase of $9\frac{1}{4}$ per cent in aggregate earnings. Although considerably lower than the increases in 1997, 1998 and 1999, such a rise would still be significantly above the annual average throughout the nineties.

Other personal income, comprising earnings from self-employment and income from interest dividends and rent, rose by about 16 per cent in 1998. This exceptionally large increase was to a considerable extent due to the increase of $28\frac{3}{4}$ per cent in income from rent, much of it imputed. With the rise in rents expected to be less dramatic this year and with national debt interest likely to decline again, a more moderate increase of $6\frac{3}{4}$ per cent is forecast for other personal income in 1999. A further slight easing, to $5\frac{1}{2}$ per cent, is projected for 2000. Thus, as shown in Table 9, total income received from economic activity is forecast to rise by 9 per cent in 1999 and by 8 per cent next year.

TABLE 9: Personal Disposable Income

	1998 £m	Change %	£m	1999 £m	Change %	£m	2000 £m
Agriculture, etc.	2,301	3	69	2,370	3	71	2,441
Non-Agricultural Wages, etc.	24,542	10½	2,577	27,119	9¼	2,508	29,627
Other Non-Agricultural Income	9,253	6¼	620	9,873	5½	535	10,408
Total Income Received	36,096	9	3,266	39,362	8	3,114	42,476
Current Transfers	6,904	6¼	469	7,373	6¼	502	7,875
Gross Personal Income	43,000	8¼	3,735	46,735	7¼	3,616	50,351
Direct Personal Taxes	8,550	7¼	665	9,215	5¼	535	9,750
Personal Disposable Income	34,450	9	3,070	37,520	8¼	3,081	40,601
Consumption	30,689	11	3,376	34,065	9	3,066	37,131
Personal Savings	3,761	-8¼	-306	3,455	½	15	3,470
Savings Ratio		10.9		9.2			8.5

Net current transfer income is estimated to have increased by 6¼ per cent in 1998, despite the very rapid fall in unemployment. Increases of 6¾ per cent per year are forecast for this year and next, so that gross personal income is forecast to increase by 8¾ per cent in 1999 and by 7¾ per cent in 2000.

Direct personal taxation increased by 10½ per cent in 1998. Slightly slower income growth and greater cuts in effective tax rates are likely to reduce the increase in direct personal taxation to about 7¾ per cent in 1999. On the assumption of further moderate reductions in effective tax rates, an increase of 5¾ per cent in direct personal taxation is projected for 2000. Thus personal disposable income is forecast to rise by about 9 per cent this year and about 8¼ per cent next year.

Revisions to the national accounts have left the personal savings ratio for 1997 and 1998 significantly higher than had been expected. The revised ratio for 1997 was 11.7 per cent, while the derived ratio for 1998 was 10.9 per cent. A rapid reduction in the ratio to about 9.2 per cent is projected for 1999, in response to lower annual average interest rates and a delay in reacting to a slight deceleration in the growth of disposable income. A more moderate decline in the personal savings ratio to about 8½ per cent is projected for 2000, suggesting that the value of personal consumption next year will increase by about 9 per cent.

Consumer Prices

The consumer price index increased by 2.4 per cent in 1998, on an annual average basis, with the price of housing costs rising by 1.3 per cent and other prices by 2.6 per cent. In the first half of 1999, non-housing price inflation eased marginally to an annual rate of just under 2.5 per cent. Due to the massive fall in interest rates associated with the commencement of EMU, housing costs, of which mortgage interest rates are a major component, were running almost 10 per cent below the levels a year earlier. For the remainder of the year mortgage rates are expected to show little change, while other housing costs will tend to rise moderately. Non-housing prices are likely to continue their moderate rise. Thus, as shown in Table 10, the annual average increase in the

consumer price index in 1999 is forecast at 1.6 per cent, comprising a fall of 9.2 per cent in housing costs and a rise of 2.4 per cent in other prices.

On the assumptions that the euro will tend to strengthen against other major currencies, and that the lagged effects of the substantial depreciation of the Irish pound/euro between early 1997 and mid-1999 will have been worked out by the end of this year, the increase in non-housing prices is likely to abate next year, with an annual average increase of about 1.8 per cent projected. Conversely, with interest rates likely to be a little higher, the price of housing costs is projected to increase by an annual 4 per cent. Thus the consumer price index as a whole is forecast to increase by an annual average of 1.9 per cent in 2000. This is higher than the probable rise in prices in the euro-zone as a whole, but well within the range of regional variations which can be accommodated without difficulty in a currency zone.

TABLE 10: Consumer Price Index – Recent Trend and Forecast

	Quarterly Trend								Annual		
	1997		1998				1999		1998	1999	2000
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
Index Nov. 1989=100											
Housing	121.1	122.2	122.6	123.9	125.2	120.8	112.6	111.3	123.2	112.8	117.3
Other	118.8	119.7	119.9	121.6	122.3	122.7	122.8	124.6	121.6	124.5	126.7
Total CPI	118.9	119.8	120.1	121.8	122.4	122.5	121.9	123.5	121.7	123.6	125.9
Annual % Change											
Housing	2.9	2.0	2.3	0.8	3.7	-1.2	-9.2	-10.2	1.3	-9.2	4.0
Other	1.2	1.5	1.9	2.8	2.9	2.5	2.4	2.5	2.6	2.4	1.8
Total CPI	1.3	1.5	1.9	2.7	2.9	2.3	1.5	1.4	2.4	1.6	1.9
Quarterly % Change											
Housing	-1.5	0.9	0.3	1.1	1.0	-3.5	-6.8	-1.2			
Other	0.4	0.8	0.2	1.4	0.6	0.3	0.1	1.5			
Total CPI	0.2	0.8	0.2	1.4	0.6	0.1	-0.5	1.3			

Public Finances

National Income and Expenditure 1998 confirms the extraordinary strength of the public finances shown in budgetary returns for 1998. Thus, public authorities' savings, which were negative for more than two decades until 1996, reached a record level of £1,726 million, representing 8¾ per cent of total public authorities' income, and over 3¼ per cent of GNP.

It is clear that the very rapid increase in tax revenue which characterised 1997 and 1998 is continuing in 1999. An increase of about 12¾ per cent seems likely in both tax revenue and total revenue, very close to the rise in 1998. Total net current expenditure seems likely to increase by no more than 7 per cent, even allowing for some end-year adjustments. Thus the current budget surplus in 1999 is forecast to approach £3,200 million and the Exchequer financing surplus to be in the region of £1,700 million. These forecasts, of course, exclude privatisation receipts, which depending on timing, are likely to lie between £3,800 million and £4,400 million in 1999.

In national accounts terms, public authority saving is forecast to be in the region of £2,800 million, or over 4¾ per cent of GNP, again

excluding privatisation receipts. Total net current spending by central and local government, which as recently as 1990 accounted for 41.3 per cent of GNP, is forecast to decline from 34.4 per cent of GNP in 1998 to 33.1 per cent this year.

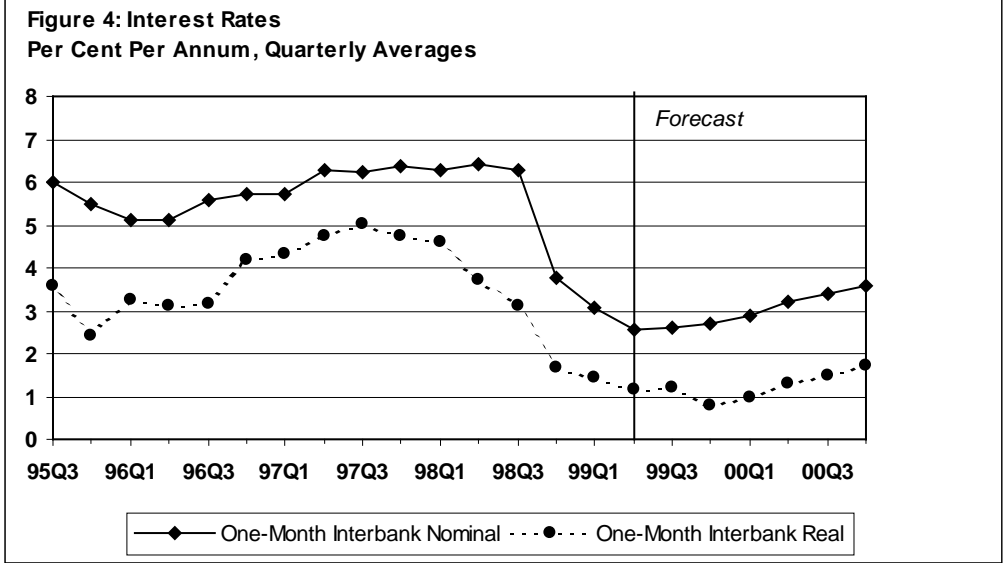
The course of the public finances next year will obviously be influenced by decisions yet to be taken on expenditure and tax rates. It will also be affected by the detailed disposition, both in reality and in its statistical treatment, of the massive public surplus, including privatisation receipts, which has accrued this year. On the basis of public statements so far, it seems possible that some of the funds may be used in a manner, such as the paying-off of specific pension liabilities which may not be reflected in future national accounts flows.

For the purpose of this *Commentary*, it is assumed that the majority of this year's surplus will be deployed, via the proposed new pension fund or otherwise, in ways which will effectively reduce the net national debt. In purely budgetary terms, it is likely that interest and dividends accruing to the new pension fund will not be regarded as current income. Because of this, and of the commitment to continue transferring some revenue to the fund, the improvement in such traditional measures as the current budget surplus or the Exchequer Financing surplus is likely to be very limited in 2000. However, on the accruals basis which will presumably be used in compiling the national accounts, a substantial further improvement is forecast, with public authorities' savings likely to exceed £3,400 million, or almost 5½ per cent of GNP.

Such a high rate of public saving enables substantial public investment to be financed without recourse to new borrowing, even in the context of declining EU funding. It also maintains a degree of balance in the economy by offsetting the predicted reduction in the personal savings ratio.

Interest Rates

Given that Irish interest rates can no longer diverge significantly from those in the euro-zone as a whole, the relevant issues concerning the probable course of rates has already been discussed in the International section. In summary, long-term interest rates seem likely to continue the gentle increases they have shown so far in 1999, perhaps exceeding 5 per cent in the course of next year. Short-term interest rates are forecast to remain extremely low until almost the end of 1999, and then increase gradually next year, perhaps by a total of ¾ per cent.



General Assessment

The general picture painted in this *Commentary* is of Irish economic growth gradually slowing under the pressure of supply constraints. From an average level of 8.1 per cent since 1995, maintained in 1998, our forecasts show real GNP growth declining to 6 per cent this year and 5¾ per cent next year. These are, of course, still very high rates of growth by either historical or international standards, and are almost certainly above the rate which can be sustained in the medium term. This is evidenced by the significant deterioration in the current account of the balance of payments which is incorporated in them. Although a rising current account deficit no longer has the immediate practical disadvantage it had when putting pressure on the exchange rate of an independent currency, it can be taken, both inside and outside the country, as an indicator that effective demand is rising at a rate which cannot be satisfied by the growth of potential supply.

It follows that the rate of increase in demand will have to ease back to the rate of potential supply growth, which in the medium-term is probably of the order of 5 per cent. Our forecasts are consistent with the optimistic assessment that the required adjustment in demand can take place relatively smoothly, without major shocks to output and employment.

As explained in previous *Commentaries* we believe that this adjustment is already taking place through a gradual loss of competitiveness as Irish wages and salaries rise rather faster than those in other euro countries, even after allowing for differences in productivity growth. A continuation of this trend in 2000 appears likely on the basis of our forecasts. Next year could also see an easing of the rise in house prices as supply continues to increase. Most other prices, of course, are constrained by the single currency, and thus are likely to rise only moderately this year and next.

Over 1999 and 2000, the strength of the public finances widens the range of choices available to the nation. Especially when massive privatisation receipts are taken into account, the short-term availability of public funds has ceased to be a realistic constraint on decision-making although such issues as the long-term sustainability of commitments or the possible inflationary impact of fiscal decisions cannot be ignored. Instead the principal constraint now is the fundamental one of the scarcity of economic resources in general, and the problem is the basic core of political economy – how best to allocate scarce resources.

It is in this context that the call made in our previous *Commentary* for a search for a new consensus on socio-economic policy should be viewed. The absence of a single over-riding aim, as in the past, makes the discovery of a national consensus which transcends purely sectoral interests more difficult to achieve, but also potentially more rewarding. As we stated, such a consensus can only emerge from discussion and negotiation. While past experience suggests that it would be beneficial if the new consensus were formalised in a further national agreement, even in the absence of a formal agreement the greater the area of common ground between the social partners and among political parties the more successful can national policy be devised and implemented.

If any new consensus is not only to emerge but also to prove lasting, it is essential that it is grounded in economic and political realities.

The first of these, as just stated, is that real resources remain scarce, even if the specific public finance constraint has eased. Thus, for instance, any proposals for a major increase in particular public services must address the issues of where the requisite personnel, buildings and other inputs can be obtained, and what other services, public or private, might need to be cut back to release these resources. Adjusting to this reality of a general scarcity of resources calls for a significant shift in attitudes from the traditional position where it was regarded as a central role of the Department of Finance to argue simply that there was no public money available for most potential schemes. Also, of course, in a situation of general shortage, care must be taken to maintain a sensible balance in policies aimed at creating employment. Moderate employment growth will remain a necessity for many years, suggesting that what might be described as the institutional infrastructure of job creation needs to be maintained. However, uncritical acceptance of any scheme simply on the grounds that it will provide jobs has become an inadequate approach. Increasingly, attention will need to focus on the simultaneous upgrading of the skill mix of both the labour force and of available jobs, and on the correction of specific regional, social, and sectoral imbalances. While the labour market itself can be expected to resolve some of these issues over time, judicious institutional intervention and policy initiatives should make the process both quicker and smoother.

The second economic reality which must be borne in mind in seeking a revised consensus is that Ireland has joined in the European Monetary Union. Given the prominence of EMU in public debate before entry, it is somewhat alarming to observe the extent to which its implications are ignored in current statements. It bears repeating, to the point of tedium, that membership of a currency union imposes constraints on movements in prices, margins and wages which could prove very damaging to ignore. In the absence of the possibility of devaluing as a corrective response to

an uncompetitive economic situation, the adjustment to an undue relative inflation of costs is likely to prove a difficult and lengthy process. As we have pointed out in previous *Commentaries*, Ireland's very rapid growth rate since 1993 is evidence that the economy has been extremely competitive, and that some loss of competitiveness is needed to bring the growth rate back to a sustainable level. Losing competitiveness through a moderate increase in relative earnings, or an appreciation of the real exchange rate, is thus desirable, with rising real disposable incomes replacing increased employment as the principal form of benefit from economic progress. However, this process should be gradual, as it is impossible to tell in advance just what degree of relative cost increase is needed to restore equilibrium. Overshooting, and allowing costs to rise too high, would be difficult to correct, and there has already been a considerable loss of cost competitiveness *vis-à-vis* the euro-zone as a whole.

Related to this issue of a controlled loss of competitiveness, and of crucial importance if another formal national agreement is to be negotiated is the widespread perception that the fruits of *Partnership 2000* have not been equitably distributed. This is not primarily a matter of the shares of wages and profits in the national economy. There is widespread acceptance of a high share of profits as reflecting the unusual sectoral structure of Irish industry and as being one of the conditions necessary for the rapid growth of the Irish economy. In any case, in absolute terms there can be no dispute that under *Partnership 2000*, as under its predecessors, there has been a significant improvement in the real living standards of almost all sections of Irish society. Again in absolute terms, it would be quite unrealistic to expect a sustained acceleration in this rate of improvement.

However, perceptions are often coloured as much by relative changes as by absolute, especially in the field of industrial relations. Since 1997 it is clear that a few groups have obtained increases in disposable income very much in excess of either the bulk of wage and salary earners or of welfare recipients. The terms of *Partnership 2000* and the manner in which it has been applied have tended to exacerbate this trend. At the time the agreement was being negotiated, there was widespread concern, shared by government, employers, responsible union leaders and commentators such as ourselves, that the then forthcoming entry to EMU would be followed by a loss of competitiveness, especially in relation to a depreciating sterling. In those circumstances it was obviously prudent to ensure that basic, irreversible pay increases were kept very moderate. Unfortunately, arguments that such moderation should be linked to flexibility through various forms of profit sharing were accepted by only a minority of employers, and were not fully incorporated into the agreement.

When the anticipated depreciation of sterling did not take place, there was no mechanism to transfer a portion of the exceptional windfall profits to employees in many firms. Dissatisfaction with this effect of the central pay bargaining has been exacerbated by the manner in which the taxation commitments of the agreement have been implemented. Again in absolute terms there can be no doubt that the amount cut from effective tax rates has met, and indeed exceeded, the government's total commitment. Again, however, the relative effects of the precise forms of

tax-cut chosen has led to some dissatisfaction that a wealthy minority has received an undue share of the benefits.

Recognising the reality of this attitude towards the results of *Partnership 2000* is a necessary step if a new consensus is to emerge. Dealing with the perceived grievances is likely to prove difficult. Obviously the past cannot be re-negotiated, while the scope for any retrospective compensation is very limited, even if it were felt to be justified. Some commitment to the future distribution of direct or indirect tax-cuts is theoretically possible, as is agreement on a reordering of priorities in public spending. It must be recognised, however, that there is a limit to the scope of tax cuts or new spending plans, both in terms of the real resource allocation they represent and in terms of the need for domestic funding of infrastructure needs. With regard to the pay element of a new consensus, especially if it is to be incorporated in a formal new agreement, a much larger place could be given, belatedly, to the concept of profit sharing in various ways. What still needs to be avoided, however, is a schedule of excessive increases in basic pay over the next few years. Uncertainties still abound, and rigidities imposed by large basic increases could impose severe employment losses in the future. As always, a long-term perspective in determining pay settlements, as in seeking-broader consensus, remains a fundamental requirement for the well-being of Irish society.

STATISTICAL APPENDIX

List of Tables	<i>Page</i>
Table A1: National Accounts	34
Table A2: Output Indicators	36
Table A3: Employment, Earnings and Unemployment Indicators	37
Table A4: IBEC-ESRI Monthly Industrial Survey	38
Table A5: Demand Indicators	39
Table A6: Monetary and Financial Indicators	40
Table A7: Trade Prices, Exchange Rates and Competitiveness	41
Table A8: External Trade and Balance of Payments Indicators	42
Table A9: International Indicators	43
Notes	48

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)	National Income (£m)	Depre- ciation (£m)	Taxes less Subs. (£m)	GNP (market prices) (£m)
	<i>Annual Series</i>								
1991	1,866	13,849	8,920	-1,095	-2,809	21,007	2,928	2,840	26,775
1992	2,147	14,868	9,033	-1,235	-3,225	21,830	3,087	3,264	28,181
1993	2,202	16,030	10,331	-1,419	-3,541	23,856	3,334	3,181	30,370
1994	2,301	17,069	10,786	-1,493	-3,594	25,263	3,715	3,907	32,885
1995	2,441	18,414	13,360	-1,749	-4,525	28,044	4,137	4,322	36,503
1996	2,499	19,959	15,045	-1,648	-5,064	31,120	4,528	4,498	40,146
1997	2,390	22,089	17,915	-1,621	-6,323	35,005	5,108	5,387	45,500
1998	2,301	24,542	22,081	-2,051	-7,454	39,620	6,074	6,489	52,183
	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>								
1991	2,252	9,317	4,975	1,510	9,510	-1,095	2,840	29,584	26,775
1992	2,535	10,038	4,513	1,603	10,446	-1,235	3,264	31,406	28,181
1993	2,592	10,659	5,198	1,719	11,729	-1,419	3,181	33,912	30,370
1994	2,694	11,774	5,158	1,771	12,474	-1,493	3,907	36,479	32,885
1995	2,860	13,880	5,791	1,817	14,004	-1,749	4,322	41,028	36,503
1996	2,945	14,835	6,876	1,908	15,466	-1,648	4,498	45,210	40,146
1997	2,854	17,516	7,777	2,039	17,316	-1,621	5,387	51,823	45,500
1998	2,790	20,692	8,776	2,184	20,556	-2,051	6,489	59,637	52,183
	Expenditure on GNP at Current Market Prices								
	19	20	21	22	23	24	25	26	27
	Private Consumption (£m)	Public Consumption (£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>								
1991	18,017	4,742	5,072	631	16,984	-15,587	29,584	-2,809	26,775
1992	19,085	5,155	5,211	-87	18,881	-16,597	31,406	-3,225	28,181
1993	20,063	5,495	5,259	-112	22,033	-18,573	33,912	-3,541	30,370
1994	21,509	5,838	6,043	-135	25,308	-21,891	36,479	-3,594	32,885
1995	22,934	6,177	7,124	428	30,837	-26,369	41,028	-4,525	36,503
1996	25,059	6,516	8,563	427	34,341	-29,367	45,210	-5,064	40,146
1997	27,555	7,175	10,684	649	40,640	-34,324	51,823	-6,323	45,500
1998	30,689	7,983	13,398	788	50,305	-43,326	59,637	-7,454	52,183

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)	Industry (1990= 100)	Distri- bution (1990= 100)	Public Admin- istration (1990= 100)	Other Dom- estic (1990= 100)	Adjust- ments (1990= 100)	Taxes less Subs. (1990= 100)	GDP (output) (1990= 100)	GNP (output) (1990= 100)
<i>Annual Series</i>									
1991	97.9	102.9	100.3	99.5	103.8	107.7	102.4	101.9	102.5
1992	97.9	109.4	91.3	101.3	108.8	119.1	112.6	105.2	104.5
1993	97.8	112.0	99.0	101.4	112.6	128.5	117.8	108.0	107.2
1994	95.5	123.4	101.7	100.8	117.4	133.8	127.2	114.2	113.9
1995	95.5	142.7	112.1	102.2	124.2	151.1	137.1	125.1	123.0
1996	99.5	155.1	130.3	104.0	127.7	139.4	143.0	134.7	131.8
1997	102.5	178.4	143.3	104.3	134.6	132.9	166.1	149.2	143.7
1998	103.0	202.7	156.9	105.7	144.0	159.2	182.2	162.5	155.3
	Expenditure on GNP at Constant (1990) Market Prices								
	37	38	39	40	41	42	43	44	45
	Private Consum- ption (1990= 100)	Public Consum- ption (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>									
1991	101.8	102.8	93.8	89.3	105.3	102.2	101.9	96.0	102.5
1992	104.7	105.9	92.2	-11.6	119.5	110.2	105.2	112.5	104.5
1993	107.8	105.4	88.9	-16.5	130.4	118.0	108.0	115.6	107.2
1994	112.4	109.8	99.6	-17.8	149.6	135.8	114.2	117.1	113.9
1995	116.6	112.9	113.1	59.5	178.9	157.6	125.1	144.8	123.0
1996	124.2	116.1	131.4	65.7	200.0	176.6	134.7	162.6	131.8
1997	133.3	121.6	154.3	95.3	234.0	205.0	149.2	200.8	143.7
1998	143.1	128.8	180.2	109.8	282.0	252.6	162.5	230.4	155.3
	Memorandum Items (Current Prices)								
	46	47	48	49	50	51	52	53	54
	GNDI (£m) (1990= 100)	GNP Deflator (1990= 100)	GNP per capita (£) (1990= 100)	Relative GNP (EU15= 100)	Gross Govt. Deficit (%) (1990= 100)	Debt- GDP ratio (%) (1990= 100)	Gov. Exp./ GNP (%) (1990= 100)	Pers. Savings Ratio (%) (1990= 100)	Invest- ment/ GNP (%) (1990= 100)
<i>Annual Series</i>									
1991	28,383	88.0	7,594	68.3	2.3	85.8	45.3	11.1	18.9
1992	29,426	90.9	7,928	70.8	2.4	83.9	46.2	9.8	18.5
1993	31,679	95.5	8,497	72.5	2.3	83.6	46.6	11.8	17.3
1994	34,041	97.3	9,171	76.6	1.6	80.1	45.4	7.9	18.4
1995	37,613	97.3	10,136	79.9	2.1	73.6	43.6	9.9	19.5
1996	41,501	102.6	11,071	79.7	0.3	66.2	42.0	9.1	21.3
1997	46,790	106.7	12,430	84.3	-1.1	59.2	40.3	11.7	23.5
1998	53,221	113.2	14,085		-2.4	49.5	37.8	10.9	25.7

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>									
1991	153.9	210.0	119.1	147.5	163.2	121.7	108.7	106.4	96.4
1992	169.6	245.2	122.7	160.1	185.4	124.1	110.5	107.3	97.8
1993	178.8	267.5	123.4	167.7	193.2	125.8	115.6	112.4	104.2
1994	201.6	313.8	129.8	184.0	212.5	130.6	116.9	113.5	105.8
1995	242.1	407.4	138.1	207.3	241.2	134.3	119.8	115.9	108.2
1996	261.9	447.1	142.4	217.2	239.0	138.5	120.6	116.4	102.9
1997	305.5	539.3	150.4	242.7	261.0	144.2	119.9	115.9	96.2
1998	356.6	653.7	154.7	275.1	299.9	145.9	120.9	117.6	95.3
<i>Quarterly Averages</i>									
1996I	257.4	451.6	133.4	217.2	245.6	132.0	121.3	117.5	109.5
II	268.8	453.0	147.6	224.0	244.3	144.0	121.2	116.9	107.0
III	239.9	396.9	137.0	197.4	211.2	132.0	120.3	116.1	100.4
IV	282.3	488.6	151.8	231.0	255.1	146.4	119.6	115.0	98.9
1997I	295.9	535.6	140.3	242.4	274.2	136.8	118.8	114.9	97.0
II	305.5	532.5	154.1	243.4	260.8	147.4	119.6	115.7	98.9
III	294.0	515.5	145.1	231.0	244.2	138.3	120.1	116.2	96.6
IV	326.7	574.5	162.0	254.0	266.1	153.8	121.1	116.9	95.6
1998I	349.9	650.5	148.4	275.4	306.0	142.4	121.9	118.4	96.2
II	354.6	636.3	161.2	274.0	292.0	152.3	121.6	118.4	98.4
III	342.6	626.2	147.7	262.4	284.4	138.4	120.9	117.9	95.6
IV	379.7	702.2	161.7	288.9	317.5	150.4	119.4	115.9	91.9
1999I	381.7	723.6	150.1				120.0		91.7
II							121.6		
III									
IV									
<i>Quarterly Averages (Seasonally Adjusted)</i>									
1996I	254.9	428.3	138.8	213.1	230.8	136.1	121.4	117.3	109.0
II	259.3	444.9	141.9	216.4	239.1	138.9	120.9	116.5	104.5
III	260.2	440.2	142.9	214.9	235.0	138.2	120.3	116.1	101.6
IV	274.8	473.4	144.5	225.9	249.0	139.7	119.8	115.5	100.4
1997I	293.1	506.0	145.9	237.8	256.7	140.9	118.9	114.7	96.8
II	294.8	524.5	148.5	235.2	256.2	142.5	119.3	115.3	96.7
III	316.3	570.1	151.1	249.5	271.0	144.7	120.2	116.3	97.8
IV	318.1	559.7	155.7	248.5	261.0	148.3	121.3	117.4	96.8
1998I	345.1	617.0	154.2	268.9	287.6	146.4	122.0	118.2	96.1
II	343.7	628.7	155.4	265.9	287.9	147.3	121.2	118.1	96.3
III	368.7	692.0	154.3	283.5	315.3	145.2	121.0	118.0	96.6
IV	369.9	685.6	155.2	282.7	311.8	144.9	119.6	116.4	93.0
1999I	376.2	685.4	155.7				120.1		91.8
II							121.3		
III									
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>									
1991	195.1	50.7	144.4	105.4	111.8	170,456	83,491	253,947	14.7
1992	198.0	52.1	145.9	105.7	116.0	187,168	95,974	283,142	15.2
1993	199.3	54.5	144.8	109.0	121.3	193,750	100,529	294,279	15.5
1994	204.8	58.2	146.7	109.4	124.6	184,393	98,020	282,413	14.1
1995	218.3	66.5	151.8	110.5	129.0	178,494	99,273	277,767	12.1
1996	225.4	73.7	151.7	112.8	133.8	175,642	103,593	279,235	11.5
1997	235.3	81.4	153.9	114.8	138.6	155,839	98,540	254,379	9.8
1998	242.3	85.8	156.5			135,692	91,404	227,096	7.7
<i>Quarterly Averages</i>									
1996I	221.5	72.4	149.1	111.7	132.0	182,002	103,340	285,342	
II	224.3	73.0	151.3	112.9	133.9	176,857	102,819	279,677	
III	227.2	74.0	153.2	111.7	133.2	177,022	107,882	284,905	
IV	228.4	75.4	153.0	113.7	136.2	166,687	100,328	267,016	
1997I	228.2	76.9	151.3	113.6	136.2	164,688	100,516	265,205	
II	234.6	80.4	154.2	113.9	137.2	155,693	97,120	252,813	
III	237.9	83.1	154.8	115.4	139.0	154,256	101,358	255,614	
IV	240.4	85.0	155.4	116.5	141.8	148,720	95,164	243,884	
1998I	237.5	83.7	153.8	117.1	142.9	147,202	93,825	241,027	
II	241.9	85.8	156.1	117.8	145.8	136,916	91,152	228,068	
III	244.1	86.7	157.4			133,513	93,981	227,494	
IV	245.7	87.1	158.6			125,138	86,657	211,795	
1999I						122,658	84,962	207,620	
II						114,384	81,473	195,857	
III									
IV									
<i>Quarterly Averages (Seasonally Adjusted)</i>									
1996I	223.5	73.0	150.5	127.0	150.0	136,933	45,467	182,400	11.9
II	224.0	73.2	150.7	126.9	150.4	142,900	47,133	190,067	11.8
III	226.4	73.7	152.6	128.4	153.2	146,867	48,900	195,733	11.4
IV	227.4	74.8	152.6	127.4	152.7	151,233	51,467	202,667	11.0
1997I	230.4	77.6	152.8	127.0	152.6	155,533	53,567	209,133	10.6
II	234.3	80.6	153.7	127.6	153.5	157,867	54,867	212,733	10.1
III	237.0	82.8	154.2	128.2	154.5	159,833	55,267	215,100	9.5
IV	239.3	84.4	154.9	127.2	154.9	163,200	56,533	219,800	8.9
1998I	239.9	84.4	155.5	127.0	155.2	168,200	58,433	226,633	8.2
II	241.6	85.9	155.6	126.0	155.5	168,867	59,767	228,633	7.8
III	243.1	86.4	156.7			172,300	61,700	234,000	7.5
IV	244.5	86.5	158.0			171,267	61,867	233,133	7.2
1999I						170,700	61,833	232,533	6.8
II						170,967	63,000	233,967	6.7
III									
IV									

Table A4: IBEC-ESRI Monthly Industrial Survey

	73 Expectations for Production (balance of %)	74 Expectations for Employment (balance of %)	75 Adequacy of Present Capacity (balance of %)	76 Trend in Selling Prices (balance of %)	77 Expectations for Home Sales (balance of %)	78 Expectations for Exports (balance of %)	79 Capacity Utilisation (%)	80 Months of Production Ensured
<i>Annual Averages</i>								
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	13.3	-1.1	2.7	-3.8	4.7	15.3	74.4	2.5
1998	9.7	0.6	8.7	-9.9	5.9	3.1	74.0	2.4
<i>Quarterly Averages</i>								
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	14.7	0.0	3.0	-3.3	5.7	12.0	73.0	2.5
1998I	16.7	0.7	2.7	-2.3	7.7	13.0	74.6	2.4
II	10.0	9.3	7.7	-13.3	8.3	10.0	74.0	2.5
III	14.3	2.7	9.7	-13.0	2.3	4.3	73.7	2.3
IV	-2.3	-10.3	14.7	-11.0	5.3	-15.0	73.6	2.5
1999I	15.7	-16.3	7.7	-10.7	11.0	17.3	74.1	2.3
II								
III								
IV								
<i>Quarterly Averages (Seasonally Adjusted)</i>								
1996I	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
II								
III								
IV								
1997I								
II								
III								
IV								
1998I								
II								
III								
IV								
1999I								
II								
III								
IV								

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 Balance (£m)
	<i>Annual Series</i>								
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	12,954	14,018	292
1997	118.8	167,404	145.0	128.4	19,551	38,842	14,619	15,488	604
1998	121.7	178,104	159.6	139.8	20,485	42,349	16,503	16,343	2,091
	<i>Quarterly Series</i>								
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	118.1	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	118.6	36,008	144.3	128.1	4,584	9,964	3,523	3,934	-40
IV	119.9	30,209	159.6	140.5	5,224	11,197	3,845	4,767	-325
1998I	120.1	56,807	149.4	132.2	5,306	8,572	3,517	3,499	275
II	121.8	55,879	157.6	137.6	4,915	10,359	4,666	3,743	1,295
III	122.4	39,293	159.6	139.6	4,796	10,784	3,934	3,997	363
IV	122.4	26,125	171.8	149.8	5,468	12,634	4,386	5,104	158
1999I	122.0	65,797	166.4	146.3	5,632	10,784	4,025	4,007	337
II	123.5						5,604	4,240	1,737
III									
IV									
	<i>Quarterly Series (Seasonally Adjusted)</i>								
1996I	116.3	37,517	130.6	117.2	4,749	8,497	3,008	3,504	496
II	116.7	39,191	133.4	119.2	4,680	8,175	2,970	3,521	550
III	117.5	37,892	133.6	118.8	4,685	8,195	3,695	3,347	-348
IV	118.0	40,019	137.0	121.3	4,808	8,864	3,308	3,563	255
1997I	118.2	38,409	139.6	124.0	4,787	9,393	3,505	3,583	78
II	118.4	40,048	142.1	126.0	4,855	9,861	3,676	3,615	-61
III	118.7	41,081	146.1	129.6	4,967	9,812	3,633	4,140	507
IV	119.9	55,494	151.6	133.5	4,947	9,785	3,790	4,050	260
1998I	120.3	42,308	154.5	136.6	4,972	9,872	3,998	3,767	-231
II	121.5	45,161	158.5	138.6	5,154	10,606	4,089	3,985	-104
III	122.4	44,990	161.8	141.3	5,193	10,689	4,069	4,197	127
IV	122.3	47,682	163.3	142.5	5,177	11,040	4,337	4,308	-29
1999I	122.3	49,038	172.2	151.0	5,284	12,377	4,582	4,339	-243
II	123.2						4,886	4,530	-356
III									
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 M3E 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>									
1991	10.4	9.3	18,577	2,715	13,553	37,058	3,256	1,382.4	50,500	
1992	15.2	9.1	20,749	3,180	14,411	44,433	2,113	1,311.1	51,452	
1993	10.6	7.8	24,130	3,168	14,911	45,390	4,278	1,576.0	52,559	
1994	5.7	8.2	26,596	3,518	16,655	50,204	4,041	1,853.4	55,033	
1995	6.1	8.3	29,903	3,559	19,917	49,288	5,473	1,992.9	58,526	
1996	5.8	8.1	34,648	2,976	23,548	61,006	4,960	2,494.3	67,438	
1997	6.2	6.4	42,290	2,576	19,205	64,652	4,636	3,335.9	80,276	
1998	5.7	4.8	49,614	2,880	24,424	68,925	6,448	4,744.2	105,452	
	<i>Quarterly Series</i>									
1996I	5.1	7.8	30,502	4,031	20,585	14,084	5,213	2,304.7	61,248	
II	5.1	7.7	31,221	3,801	21,595	16,142	5,048	2,496.1	67,292	
III	5.6	7.5	32,447	3,241	22,218	16,363	5,722	2,511.0	69,599	
IV	5.7	6.9	34,648	2,976	23,548	14,417	4,960	2,665.6	70,858	
1997I	5.7	6.8	35,959	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	40,503	2,312	18,085	16,345	5,984	3,543.3	80,774	
IV	6.4	5.8	42,290	2,576	19,205	15,335	4,636	3,781.7	90,061	
1998I	6.3	5.2	43,129	2,468	20,528	16,311	4,950	4,524.1	91,883	
II	6.4	5.1	44,923	2,570	22,296	18,307	5,618	5,267.1	101,985	
III	6.3	4.6	47,217	2,842	22,878	17,423	5,699	4,795.9	110,321	
IV	3.8	4.2	49,614	2,880	24,424	16,884	6,448	4,389.7	116,403	
1999I	3.0	4.0		4,473	31,360	18,453	3,822	5,193.3	120,406	
II	2.6	4.3						5,128.1		
III										
IV										
	<i>Quarterly Series (Seasonally Adjusted)</i>									
1996I	No Seasonal Pattern		No Seasonal Pattern		14,647		No Seasonal Pattern		62,304	
II					14,928				66,558	
III					16,037				69,307	
IV					15,451				70,697	
1997I					15,302				73,531	
II					16,783				76,429	
III					16,065				80,517	
IV					16,466				89,711	
1998I					16,894				93,620	
II					16,846				100,832	
III					17,115				110,012	
IV					18,177				115,864	
1999I					19,104				122,700	
II										
III										
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 IRE)	104 Dollar (per IRE)	105 Deutsch- mark (per IRE)	106 Real Effective Index (1990= 100)
	<i>Annual Averages</i>							
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	99.6
1993	105.4	103.9	98.6	66.0	0.9771	1.4682	2.4241	92.1
1994	108.1	103.8	96.0	66.2	0.9777	1.4983	2.4263	92.1
1995	112.7	105.6	93.7	67.1	1.0168	1.6038	2.2971	93.2
1996	111.4	105.1	94.3	68.5	1.0255	1.6008	2.4092	94.4
1997	112.0	106.2	94.9	67.4	0.9271	1.5181	2.6286	93.0
1998	114.6	109.1	95.2	63.9	0.8601	1.4258	2.5049	90.5
	<i>Quarterly Averages</i>							
1996I	113.4	108.1	95.3	67.6	1.0317	1.5797	2.3193	93.3
II	112.1	106.6	95.1	68.1	1.0307	1.5703	2.3913	93.3
III	111.1	103.8	93.5	68.8	1.0347	1.6090	2.4090	94.7
IV	109.1	101.9	93.4	69.5	1.0050	1.6443	2.5170	96.1
1997I	110.8	104.6	94.5	69.7	0.9780	1.5943	2.6433	96.2
II	111.8	106.4	95.2	67.4	0.9317	1.5250	2.6127	92.8
III	113.1	106.8	94.5	66.8	0.9097	1.4777	2.6680	91.6
IV	112.2	107.0	95.3	65.7	0.8890	1.4753	2.5903	91.9
1998I	114.6	109.9	95.8	62.6	0.8357	1.3760	2.5023	88.1
II	115.6	109.8	95.0	63.6	0.8500	1.4057	2.5193	90.0
III	116.2	110.8	95.3	64.2	0.8617	1.4250	2.5097	91.5
IV	111.9	105.9	94.7	65.0	0.8930	1.4963	2.4883	92.4
1999I					0.8730	1.4263	2.4883	89.7
II					0.8353	1.3423	2.4883	
III								
IV								
	<i>Quarterly Averages (Seasonally Adjusted)</i>							
1996I	No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern		No Seasonal Pattern	
II								
III								
IV								
1997I								
II								
III								
IV								
1998I								
II								
III								
IV								
1999I								
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)	Exports (Value)	Trade Balance	Imports (Vol- ume)	Exports (Vol- ume)	Merch- andise Balance	Services Balance	Net Factor Flows	Current Account
	(£m)	(£m)	(£m)	(1990= 100)	(1990= 100)	(£m)	(£m)	(£m)	(£m)
	<i>Annual Series</i>								
1991	12,851	15,019	2,168	100.8	105.4	2,066	-668	-2796	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	22,429	30,407	7,978	161.0	202.3	8,756	-3,782	-5,064	1,265
1997	25,882	35,337	9,454	184.8	232.4	11,071	-4,755	-6,323	1,283
1998	31,163	44,948	13,785	217.7	288.1	14,869	-7,890	-7,454	563
	<i>Quarterly Series</i>								
1996I	5,867	7,792	1,925	165.5	201.7	2,003	-922	-1,429	-152
II	5,624	7,656	2,032	160.4	200.7	2,111	-790	-1,239	193
III	5,103	7,112	2,010	147.0	191.4	2,299	-917	-1,166	702
IV	5,836	7,847	2,011	171.0	215.2	2,344	-1,153	-1,230	522
1997I	5,941	7,915	1,974	171.4	211.5	2,303	-1,189	-1,725	-284
II	6,504	8,780	2,276	186.1	230.6	2,664	-1,085	-1,746	138
III	6,200	8,805	2,604	175.5	230.3	3,075	-1,135	-1,349	826
IV	7,237	9,837	2,600	206.2	257.2	3,029	-1,345	-1,503	603
1998I	7,780	10,408	2,628	217.1	264.6	3,140	-1,847	-1,641	-144
II	7,834	11,186	3,351	216.9	284.7	3,431	-1,697	-1,965	88
III	7,323	11,356	4,033	201.5	286.5	4,192	-1,833	-1,983	561
IV	8,225	11,999	3,773	235.2	316.7	4,106	-2,514	-1,865	59
1999I	7,755	11,654	3,899	208.7		4,536	-2,354	-2,065	352
II									
III									
IV									
	<i>Quarterly Series (Seasonally Adjusted)</i>								
1996I	5,661	7,793	2,132	160.6	201.4		No	No	
II	5,596	7,526	1,930	160.5	199.8		Seasonal	Seasonal	
III	5,522	7,455	1,933	159.2	201.0		Pattern	Pattern	
IV	5,633	7,631	1,997	163.2	206.6				
1997I	5,741	7,913	2,173	166.7	211.4				
II	6,468	8,635	2,167	185.8	229.5				
III	6,718	9,209	2,491	190.5	241.2				
IV	6,974	9,581	2,607	196.2	247.3				
1998I	7,533	10,414	2,881	211.8	264.6				
II	7,785	10,994	3,209	216.2	283.2				
III	7,932	11,861	3,929	218.8	299.7				
IV	7,926	11,698	3,772	223.6	305.0				
1999I	7,516	11,669	4,153	203.8					
II									
III									
IV									

Table A9 : International Indicators

	GDP (Volume)								
	116 UK (1990= 100)	117 Ger- many (1990= 100)	118 France (1990= 100)	119 Italy (1990= 100)	120 EU15 (1990= 100)	121 USA (1990= 100)	122 Japan (1990= 100)	123 OECD (1990= 100)	124 Ireland (1990= 100)
<i>Annual Averages</i>									
1991	98.0	102.8	100.8	101.1	103.0	99.1	103.8	101.4	101.9
1992	97.5	105.1	102.0	101.7	103.9	101.8	104.9	102.4	105.2
1993	99.5	103.9	100.6	100.5	103.4	104.1	105.2	103.4	108.0
1994	103.8	106.7	103.4	102.7	106.5	107.7	105.9	106.3	114.2
1995	108.2	108.0	105.6	105.7	106.8	110.2	107.4	108.5	125.1
1996	111.0	109.4	107.2	106.6	108.7	114.0	112.8	111.8	134.7
1997	114.9	111.9	109.7	108.2	111.6	118.5	114.5	115.3	149.2
1998	117.3	114.7	113.2	109.7	114.7	123.1	111.2	118.2	162.5
<i>Quarterly Averages</i>									
1996I									
II									
III									
IV									
1997I									
II									
III									
IV									
1998I									
II									
III									
IV									
1999I									
II									
III									
IV									
<i>Quarterly Averages (Seasonally Adjusted)</i>									
1996I	108.0	108.0	106.8	107.1	110.4	112.2	111.6	111.5	
II	108.4	109.4	106.7	106.0	110.7	113.8	111.7	112.4	
III	111.2	109.8	107.5	106.4	111.4	114.4	112.7	112.9	
IV	111.9	110.2	107.9	106.0	109.5	115.6	114.5	113.0	
1997I	113.4	110.6	108.0	106.3	110.1	116.8	116.4	114.1	
II	114.5	111.8	109.3	108.5	111.3	117.9	113.5	114.8	
III	115.4	112.4	110.3	108.9	112.2	119.1	114.6	115.9	
IV	116.3	112.8	111.2	109.1	113.0	120.0	113.6	116.5	
1998I	116.8	114.4	112.0	108.9	113.7	121.6	112.2	117.3	
II	117.2	114.4	113.0	109.7	114.4	122.2	111.4	117.7	
III	117.5	115.4	113.5	110.3	115.1	123.3	111.0	118.5	
IV	117.6	114.9	114.3	110.0	115.6	125.1	110.2	119.2	
1999I	117.6					126.5			
II									
III									
IV									

Table A9 (cont'd): International Indicators

	Consumer Prices								
	125 UK	126 Ger- many	127 France	128 Italy	129 EU15	130 USA	131 Japan	132 OECD	133 Ireland
	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)	(1990= 100)
	<i>Annual Averages</i>								
1991	105.9	103.6	103.2	106.5	105.2	104.2	103.3	106.1	103.2
1992	109.8	108.9	105.7	112.1	109.9	107.4	105.0	111.4	106.4
1993	111.5	113.7	107.9	116.8	113.8	110.6	106.3	116.1	107.9
1994	114.3	116.8	109.7	121.4	117.3	113.4	107.1	121.2	110.5
1995	118.2	119.0	111.6	127.9	120.9	116.6	107.0	127.9	113.2
1996	121.1	121.0	113.9	132.8	123.9	120.0	107.1	134.4	115.1
1997	124.9	123.3	115.2	135.2	126.4	122.9	109.0	140.1	116.8
1998	129.1	124.5	116.1	137.5	128.6	124.8	109.7	145.3	119.6
	<i>Quarterly Averages</i>								
1996I	119.6	120.1	113.2	131.3	122.8	118.6	106.6	132.1	114.4
II	121.2	120.7	114.1	132.9	124.0	119.8	107.3	134.0	114.8
III	121.4	121.2	113.8	133.2	124.2	120.4	107.2	134.9	115.4
IV	122.1	121.1	114.3	133.9	124.7	121.3	107.5	136.5	116.0
1997I	122.8	122.2	114.9	134.5	125.4	122.1	107.2	138.0	116.0
II	124.4	122.6	115.1	135.0	126.1	122.6	109.5	139.5	116.6
III	125.6	123.5	115.3	135.2	126.7	123.1	109.5	140.7	116.9
IV	126.6	123.3	115.6	136.0	127.2	123.6	109.7	142.3	117.8
1998I	127.0	123.6	115.6	136.8	127.7	123.9	109.3	143.5	118.1
II	129.4	124.5	116.4	137.4	128.7	124.6	109.8	144.8	119.7
III	129.8	124.8	116.1	137.7	128.9	125.1	109.2	145.7	120.3
IV	130.4	124.4	116.1	138.1	129.1	125.5	110.3	147.1	120.4
1999I	129.8	124.4	116.1	138.6	129.2	126.0	109.2	148.1	119.8
II									
III									
IV									
	<i>Quarterly Averages (Seasonally Adjusted)</i>								
1996I	120.1	120.1	113.2	131.2	122.9	118.6	106.9	132.1	114.6
II	120.6	120.5	113.9	132.7	123.7	119.7	107.0	133.7	114.7
III	121.3	121.0	113.9	133.4	124.2	120.4	107.2	135.1	115.3
IV	122.2	121.5	114.4	134.0	124.9	121.4	107.4	136.6	116.0
1997I	123.3	122.2	114.9	134.4	125.5	122.1	107.6	138.0	116.2
II	123.8	122.4	114.9	134.8	125.8	122.5	109.2	139.2	116.5
III	125.5	123.3	115.4	135.4	126.7	123.1	109.5	140.9	116.8
IV	126.7	123.6	115.7	136.1	127.4	123.7	109.6	142.4	117.8
1998I	127.6	123.7	115.6	136.7	127.8	123.9	109.7	143.5	118.3
II	128.8	124.3	116.2	137.2	128.4	124.5	109.4	144.6	119.6
III	129.7	124.6	116.3	137.9	128.9	125.1	109.2	145.9	120.2
IV	130.5	124.7	116.2	138.2	129.3	125.6	110.2	147.2	120.3
1999I	130.4	124.5	116.1	138.5	129.3	126.0	109.6	148.1	120.1
II									
III									
IV									

Table A9 (cont'd): International Indicators

	Hourly Earnings (Manufacturing)								
	134 UK (1990= 100)	135 Ger- many (1990= 100)	136 France (1990= 100)	137 Italy (1990= 100)	138 EU15 (1990= 100)	139 USA (1990= 100)	140 Japan (1990= 100)	141 OECD (1990= 100)	142 Ireland (1990= 100)
<i>Annual Averages</i>									
1991	108.0	106.0	104.0	109.8	107.0	103.0	103.0	105.0	105.2
1992	115.0	112.0	108.0	115.7	113.0	106.0	105.0	109.0	110.3
1993	121.0	118.0	111.0	120.0	118.0	108.0	106.0	113.0	116.7
1994	126.0	122.0	113.4	124.0	123.0	111.0	109.0	116.0	118.4
1995	132.0	126.0	116.1	127.8	127.0	114.0	112.0	120.0	123.1
1996	138.0	131.0	118.0	131.7	132.0	118.0	115.0	124.0	126.4
1997	143.0	132.0	122.0	136.5	137.0	122.0	118.0	127.0	131.6
1998	150.0	134.0	124.0	140.2	140.0	125.0	118.0	130.0	
<i>Quarterly Averages</i>									
1996I	137.0	129.0	117.0	128.8	130.0	116.0	113.0	122.0	122.5
II	137.0	131.0	118.0	129.3	131.0	118.0	115.0	123.0	124.3
III	137.0	131.0	119.0	130.9	133.0	118.0	116.0	124.0	123.6
IV	140.0	131.0	119.8	133.2	135.0	120.0	117.0	126.0	126.4
1997I	143.0	132.0	120.6	135.5	135.0	120.0	116.0	126.0	126.4
II	143.0	131.0	121.3	135.8	135.0	121.0	119.0	127.0	127.3
III	143.0	132.0	122.6	137.0	137.0	122.0	118.0	128.0	129.0
IV	147.0	132.0	123.2	136.0	139.0	123.0	119.0	129.0	131.6
1998I	150.0	133.0	123.0	138.3	138.0	124.0	117.0	129.0	132.6
II	149.0	135.0	124.0	140.0	140.0	124.0	118.0	130.0	
III	149.0	135.0	125.0	140.9	141.0	124.0	118.0	130.0	
IV	152.0	136.0	125.0	141.7	143.0	126.0	119.0	132.0	
1999I	155.0					126.0	118.0		
II									
III									
IV									
<i>Quarterly Averages (Seasonally Adjusted)</i>									
1996I	135.6	129.4	117.1	128.5	130.3	116.0	114.3	122.4	122.5
II	137.1	130.6	117.9	129.4	131.6	117.9	114.4	123.1	124.5
III	138.5	130.8	118.8	130.9	133.0	118.3	115.8	124.2	124.2
IV	139.9	131.2	119.9	133.4	134.0	119.8	116.5	125.4	125.6
1997I	141.4	132.4	120.7	135.2	135.3	120.0	117.2	126.3	126.3
II	143.2	130.6	121.3	135.9	135.7	120.9	118.5	127.1	127.6
III	144.6	131.9	122.4	137.0	137.0	122.4	117.8	128.2	129.7
IV	146.9	132.2	123.3	136.2	138.0	122.7	118.5	128.3	130.7
1998I	148.3	133.3	123.1	138.0	138.3	124.0	118.2	129.3	132.5
II	149.2	134.6	124.1	140.1	140.8	123.9	117.5	130.1	
III	150.7	134.9	124.7		141.0	124.4	117.8	130.2	
IV	151.9	136.2	125.0			125.7	118.5		
1999I									
II									
III									
IV									

Table A9 (cont'd): International Indicators

	Unemployment Rate								
	143 UK	144 Ger- many	145 France	146 Italy	147 EU15	148 USA	149 Japan	150 OECD	151 Ireland
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
	<i>Annual Averages</i>								
1991	8.8	4.4	9.5	8.8	8.4	6.8	2.1	6.8	14.7
1992	10.1	4.6	10.4	9.0	9.1	7.5	2.2	7.4	15.2
1993	10.5	7.9	11.7	10.3	10.8	6.9	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	8.7	8.2	11.7	11.9	10.7	5.6	3.1	7.5	12.1
1996	8.2	8.9	12.4	12.0	10.8	5.4	3.4	7.7	11.5
1997	7.0	9.9	12.3	12.1	10.7	4.9	3.4	7.4	9.8
1998	6.3	9.4	11.7	12.3	10.0	4.5	4.1	7.1	7.7
	<i>Quarterly Averages</i>								
1996I									
II									
III									
IV									
1997I									
II									
III									
IV									
1998I									
II									
III									
IV									
1999I									
II									
III									
IV									
	<i>Quarterly Averages (Seasonally Adjusted)</i>								
1996I	8.4	8.7	12.3	12.0	10.9	5.6	3.3	7.6	12.0
II	8.3	8.8	12.3	12.0	10.9	5.4	3.5	7.6	11.9
III	8.1	8.9	12.4	12.0	10.8	5.3	3.3	7.5	11.6
IV	7.9	9.2	12.4	12.0	10.8	5.3	3.3	7.5	11.0
1997I	7.4	9.7	12.4	12.2	10.8	5.3	3.3	7.5	10.6
II	7.3	9.9	12.4	12.1	10.7	4.9	3.4	7.3	10.2
III	6.8	10.1	12.4	12.1	10.6	4.9	3.4	7.3	10.0
IV	6.6	10.3	12.3	12.1	10.5	4.7	3.5	7.1	9.8
1998I	6.5	9.8	12.1	12.1	10.2	4.6	3.7	7.0	8.4
II	6.3	9.5	11.7	12.3	10.1	4.4	4.1	7.1	7.9
III	6.3	9.3	11.7	12.3	9.9	4.5	4.2	7.1	7.6
IV	6.3	9.1	11.6	12.2	9.8	4.4	4.4	7.0	7.3
1999I		9.0	11.4		9.6	4.3	4.6	7.0	7.1
II									
III									
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>							
1991	11.5	9.3	9.6	12.2	5.9	5.8	7.4	10.4
1992	9.6	9.5	10.3	14.0	3.8	3.7	4.5	14.3
1993	5.9	7.3	8.6	10.2	3.3	3.2	3.0	9.1
1994	5.5	5.4	5.9	8.5	4.7	4.6	2.2	5.9
1995	6.7	4.5	6.6	10.5	6.0	5.9	1.2	6.3
1996	6.0	3.3	3.9	8.8	5.4	5.4	0.6	5.4
1997	6.8	3.3	3.5	6.9	5.7	5.6	0.6	6.1
1998	7.3	3.5	3.6	5.0	5.5	5.5	0.7	5.4
	<i>Quarterly Averages</i>							
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	5.7
IV	6.2	3.2	3.5	7.6	5.5	5.4	0.5	5.8
1997I	6.2	3.2	3.4	7.3	5.5	5.4	0.6	5.8
II	6.5	3.2	3.4	7.0	5.7	5.7	0.6	6.2
III	7.1	3.2	3.4	6.8	5.6	5.6	0.6	6.2
IV	7.5	3.7	3.7	6.4	5.8	5.7	0.7	6.1
1998I	7.5	3.5	3.6	6.0	5.6	5.6	1.0	5.9
II	7.5	3.6	3.6	5.2	5.6	5.6	0.6	6.3
III	7.6	3.5	3.6	4.9	5.5	5.5	0.7	5.9
IV	6.8	3.5	3.5	4.0	5.2	5.2	0.6	3.6
1999I	5.5				4.9	4.9	0.5	
II								
III								
IV								
	<i>Quarterly Averages (Seasonally Adjusted)</i>							
1996I	No	No	No	No	No	No	No	No
II	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal	Seasonal
III	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern
IV								
1997I								
II								
III								
IV								
1998I								
II								
III								
IV								
1999I								
II								
III								
IV								

Notes

- 1-48. Calculated on an ESA95 basis. *Source:* CSO.
49. GNP at current market prices per head of population calculated at PPS on an ESA79 basis. *Source:* Based on European Commission data.
- 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.
- 81-88. *Source:* CSO.
89. Not calculable from columns 87 and 88. *Source:* CSO.
- 90-91. *Source:* Central Bank of Ireland.
92. *Source:* OECD Main Economic Indicators.
- 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:* CSO.
- 125-155. *Source:* OECD.
156. Eurodollar market rate. *Source:* OECD.
- 157-159. *Source:* OECD.