SUMMARY

The Irish economy continues its remarkably strong rate of output growth. Demand accelerated in the latter half of last year and this has carried over into the first half of 2000, underpinned by low interest rates and expectations of significant increases in disposable incomes. It is estimated that the economy increased by 9.5 per cent in real GDP and 7.7 per cent in real GNP in 1999. Inflation as measured by the consumer price index (CPI), averaged 1.6 per cent last year, though broader measures of price pressures, incorporating house prices, were significantly higher.

Our projection for growth in real GDP is 8.8 per cent in 2000 and 6.9 per cent in 2001. This moderate slowdown in growth arises from emerging supply constraints, as evidenced by a tight labour market, with the unemployment rate expected to fall towards 4 per cent and interest rates rising over the next two years. Inflation in consumer prices is forecast to average 4.8 per cent in 2000 and 3.2 per cent in 2001. The strong demand in the economy is a cause for concern on a number of fronts. The most immediate concern is the sharp rise in consumer prices, but the strength of demand is also putting severe pressures on the economy's infrastructure and the natural environment, giving rise to quality of life considerations and concerns for the medium term sustainability of economic growth. A diminution in demand pressures from current levels is desirable to move the economy back towards sustainable output growth rates.

Inflation has become the prominent economic concern this year, with the growth in consumer prices surpassing the falling unemployment rate for the first time in nearly two decades. While external price developments play a crucial role in the determination of inflation in Ireland, the role of domestically generated price pressures must not be underestimated. Underlying inflationary pressures reflect overheating in the economy as it reaches temporary capacity constraints, nowhere more evident than in the housing and labour markets. Although a significant part of the hike in the CPI can be attributed to factors that can be expected to have a temporary impact on inflation, such as the budgetary increase in excise tax on tobacco, and external factors like high oil prices and a weak euro, the underlying upward trend reflects excess demand pressures in the economy. Consequently, short term responses to inflationary pressures are best aimed at reducing demand, where possible, supplemented by increasing supply capacity in the medium term.

Proposed measures such as reducing indirect taxes to manipulate the CPI in an attempt to preserve real wage increases arising from the national agreements, will further stimulate demand and, in the absence of other dampening measures, could prove to be self-defeating. The imperative for the future is how to slow the economy to growth rates sufficient to ensure sustainable development and its necessary counterpart of price stability.

FORECAST NATIONAL ACCOUNTS 1999

A: Expenditure on Gross National Product

	1998 Preliminary £m	1999 Forecast £m	Change in 1999 £m Value	Change in 1999 £m Volume	Change in 1999 % Value	Change in 1999 % Price	Change in 1999 % Volume
Private Consumer Expenditure	30,689	34,629	3,940	2,609	12.8	4.0	8.5
Public Net Current Expenditure	7,983	8,580	597	224	7.5	4.6	2.8
Gross Fixed Capital Formation	13,398	16,623	3,225	1,761	24.1	9.7	13.1
Exports of Goods and Services (X)	50,305	57,855	7,550	7,279	15.0	0.5	14.5
Physical Changes in Stocks	788	-340	-1,128	-1,067			
Final Demand	**103,163**	**117,348**	**14,185**	**10,805**	**13.7**	**3.0**	**10.5**
less:							
Imports of Goods and Services (M)	43,326	49,218	5,892	4,659	13.6	2.6	10.8
GDP at Market Prices	**59,837**	**68,129**	**8,292**	**6,146**	**13.9**	**3.3**	**10.3**
less:							
Statistical Discrepancy	200	-57	-257	476			
Adjusted GDP	**59,637**	**68,186**	**8,549**	**5,670**	**14.3**	**4.4**	**9.5**
less:							
Net Factor Payments (F)	7,455	9,138	1,683	1,640	22.6	0.5	22.0
GNP at Market Prices	**52,182**	**59,049**	**6,866**	**4,030**	**13.2**	**5.0**	**7.7**

B: Gross National Product by Origin

		1998 Preliminary £m	1999 Forecast £m	Change in 1999 £m	Change in 1999 %
Agriculture, Forestry, Fishing		2,301	2,026	-275	-12.0
Non-Agricultural:	Wages, etc.	24,542	27,758	3,216	13.1
	Other:	22,005	26,441	4,436	20.2
Adjustments:	Stock Appreciation	76	-160		
	Financial Services	-2,051	-2,341	-290	14.1
	Statistical Discrepancy	200	-57	-257	-128.4
Net Domestic Product		**47,073**	**53,667**	**6,594**	**14.0**
less:					
Net Factor Payments		7,455	9,138	1,683	22.6
National Income		**39,618**	**44,530**	**4,912**	**12.4**
Depreciation		6,075	7,011	936	15.4
GNP at Factor Cost		**45,693**	**51,541**	**5,848**	**12.8**
Taxes less Subsidies		6,489	7,508	1,018	15.7
GNP at Market Prices		**52,182**	**59,049**	**6,866**	**13.2**

C: Balance of Payments on Current Account

	1998 Preliminary £m	1999 Forecast £m	Change in 1999 £m
Exports (X) less Imports (M)	6,979	8,637	1,658
Net Factor Payments (F)	-7,455	-9,138	-1,683
Net Transfers	1,039	1,011	-28
Balance on Current Account	**563**	**510**	**-53**
(New Balance of Payments Series)	(1,173)	(233)	(-940)
as % of GNP	1.1	0.9	-0.1

FORECAST NATIONAL ACCOUNTS 2000

A: Expenditure on Gross National Product

	1999	2000	Change in 2000				
	Preliminary £m	Forecast £m	£m		%		
			Value	Volume	Value	Price	Volume
Private Consumer Expenditure	34,629	39,458	4,828	2,736	13.9	5.6	7.9
Public Net Current Expenditure	8,580	9,270	690	257	8.0	4.9	3.0
Gross Fixed Capital Formation	16,623	20,274	3,651	1,810	22.0	10.0	10.9
Exports of Goods and Services (X)	57,855	66,665	8,810	6,950	15.2	2.9	12.0
Physical Changes in Stocks	-340	-220	120	-44			
Final Demand	**117,348**	**135,447**	**18,099**	**11,708**	**15.4**	**5.0**	**10.0**
less:							
Imports of Goods and Services (M)	49,218	55,731	6,512	5,164	13.2	2.5	10.5
GDP at Market Prices	**68,129**	**79,716**	**11,587**	**6,544**	**17.0**	**6.8**	**9.6**
less:							
Statistical Discrepancy	-57	206	263	562			
Adjusted GDP	**68,186**	**79,510**	**11,324**	**5,983**	**16.6**	**7.2**	**8.8**
less:							
Net Factor Payments (F)	9,138	11,292	2,154	1,839	23.6	2.9	20.1
GNP at Market Prices	**59,049**	**68,218**	**9,170**	**4,144**	**15.5**	**8.0**	**7.0**

B: Gross National Product by Origin

		1999	2000	Change in 2000	
		Preliminary £m	Forecast £m	£m	%
Agriculture, Forestry, Fishing		2,026	2,280	254	12.5
Non-Agricultural:	Wages, etc.	27,758	31,049	3,291	11.9
	Other:	26,441	32,034	5,592	21.2
Adjustments:	Stock Appreciation	-160	-120		
	Financial Services	-2,341	-2,655	-314	13.4
	Statistical Discrepancy	-57	206	263	-463.3
Net Domestic Product		**53,667**	**62,794**	**9,127**	**17.0**
less:					
Net Factor Payments		9,138	11,292	2,154	23.6
National Income		**44,530**	**51,503**	**6,973**	**15.7**
Depreciation		7,011	7,964	953	13.6
GNP at Factor Cost		**51,541**	**59,467**	**7,926**	**15.4**
Taxes less Subsidies		7,508	8,752	1,244	16.6
GNP at Market Prices		**59,049**	**68,218**	**9,170**	**15.5**

C: Balance of Payments on Current Account

	1999	2000	Change in 2000
	Preliminary £m	Forecast £m	£m
Exports (X) less Imports (M)	8,637	10,935	2,298
Net Factor Payments (F)	-9,138	-11,292	-2,154
Net Transfers	1,011	930	-81
Balance on Current Account	**510**	**573**	**63**
as % of GNP	0.9	0.8	0.1

FORECAST NATIONAL ACCOUNTS 2001

A: Expenditure on Gross National Product

	2000	2001	Change in 2001				
	Forecast £m	Forecast £m	£m Value	£m Volume	% Value	% Price	% Volume
Private Consumer Expenditure	38,458	43,932	4,474	2,683	11.3	4.3	6.8
Public Net Current Expenditure	9,270	10,100	830	371	9.0	4.8	4.0
Gross Fixed Capital Formation	20,274	23,922	3,648	1,753	18.0	8.6	8.6
Exports of Goods and Services (X)	66,665	74,694	8,029	6,431	12.0	2.2	9.6
Physical Changes in Stocks	-220	140	360	-6			
Final Demand	**135,447**	**152,788**	**17,341**	**11,232**	**12.8**	**4.2**	**8.3**
less:							
Imports of Goods and Services (M)	55,731	62,279	6,548	5,100	11.7	2.4	9.2
GDP at Market Prices	**79,716**	**90,509**	**10,793**	**6,132**	**13.5**	**5.4**	**7.7**
less: Statistical Discrepancy	206	302	95	610			
Adjusted GDP	**79,510**	**90,207**	**10,697**	**5,522**	**13.5**	**6.1**	**6.9**
Net Factor Payments (F)	11,292	13,009	1,717	1,439	15.2	2.2	12.7
GNP at Market Prices	**68,218**	**77,199**	**8,980**	**4,084**	**13.2**	**6.8**	**6.0**

B: Gross National Product by Origin

	2000	2001	Change in 2001	
	Forecast £m	Forecast £m	£m	%
Agriculture, Forestry, Fishing	2,280	2,304	24	1.1
Non-Agricultural: Wages, etc.	31,049	34,626	3,577	11.5
Other:	32,034	37,252	5,219	16.3
Adjustments: Stock Appreciation	-120	-60		
Financial Services	-2,655	-2,955	-300	11.3
Statistical Discrepancy	206	302	95	46.3
Net Domestic Product	**62,794**	**71,470**	**8,675**	**13.8**
Net Factor Payments	11,292	13,009	1,717	15.2
National Income	**51,503**	**58,461**	**6,958**	**13.5**
Depreciation	7,964	8,930	966	12.1
GNP at Factor Cost	**59,467**	**67,391**	**7,924**	**13.3**
Taxes less Subsidies	8,752	9,808	1,056	12.1
GNP at Market Prices	**68,218**	**77,199**	**8,980**	**13.2**

C: Balance of Payments on Current Account

	2000	2001	Change in 2001
	Forecast £m	Forecast £m	£m
Exports (X) less Imports (M)	10,935	12,415	1,480
Net Factor Payments (F)	-11,292	-13,009	-1,717
Net Transfers	930	754	-176
Balance on Current Account	**573**	**160**	**-413**
as % of GNP	0.8	0.2	-0.5

The International Economy

General

The international outlook has become more positive in recent months. Economic indicators suggest the rate of growth in Europe is increasing and the US economy remains strong. Although remaining weak, the Japanese economy is expected to improve in 2000 and the Asian economies will continue their recovery from the sharp downturn in 1997. World trade growth picked up in the latter half of 1999 and estimates suggest that growth could be between 9 and 10 per cent this year. The US economy continues to grow strongly and this growth has had a positive impact on the world economy. A sudden slowdown in US economic growth would constitute the most serious risk for the international economy in the short term. Oil prices remaining higher than in recent times, are increasing inflationary worries and monetary policy is likely to be tightened this year to counteract this.

US Economy

Final figures for 1999 show that the US economy grew by 4.2 per cent, driven primarily by personal consumption expenditure. Preliminary figures for the first quarter of this year show that the economy grew by 1.4 per cent compared with the previous quarter. This is a slower growth rate than in the fourth quarter of 1999, and partly reflects a downturn in export growth. As has been the case in recent years, growth is being mainly driven by personal consumer expenditure and investment. The contribution of foreign trade was negative, as in recent years. A carryover of activity from 1999, coupled with a strengthening of economic activity world–wide, means a further year of strong growth is projected for 2000, with the US economy expanding by 4.3 per cent. A gradual slowdown in activity is forecast for 2001 as higher interest rates slow increases in personal consumption growth, and with the labour market expected to remain very tight. On this basis, growth will continue to be strong at around 3.5 per cent. However, there is the risk that a sudden correction of imbalances would lead to significantly slower growth rates. While inflationary pressures have remained low, the strength of US domestic demand is reflected in the widening current account deficit, which increased to 3.7 per cent of GDP in 1999.

The US unemployment rate remains low at 4.1 per cent. Despite the decline in unemployment, growth in average hourly earnings has remained broadly stable. Unit labour costs have tended to decline over the past number of years due to the productivity growth in the economy. Despite the length and strength of the current boom, US inflation has remained under control. Consumer price inflation increased to 0.1 per cent month on month in April, bringing the annual rate to 3 per cent. The Federal Reserve is increasing the emphasis placed on the personal consumption deflator as a measure of inflation, as it is considered more comprehensive. In the first quarter of 2000 this measure rose by 3.2 per cent.

Having reduced interest rates to offset the impact of the various financial crises in Asia, Russia and Latin America, the Federal Reserve began to again tighten interest rates in June 1999. A large increase of 0.5 percentage points in May of this year brought official rates to 6.5 per cent, on the back of worries about heightened inflationary pressures. Short-term rates are expected to increase again in 2000 to peak at 7 per cent towards the end of the year. Official interest rates are expected to remain high in 2001, although a decline towards 6.25 per cent is expected.

The European Economy

European economic growth began to recover in the second half of 1999. The Spring Forecasts of the European Commission have raised projected GDP growth to 3.4 per cent in 2000 and 3.1 per cent in 2001 for the EU 15. The increase in growth will be driven initially by exports, and should be sustained by increased domestic demand. The strength of the upturn in activity suggests that these forecasts will be realised. The strong performance is the result of external demand and heightened competitiveness from a weak euro. Comparative business surveys for Italy, Germany and France indicate a widespread strengthening of the recovery in production and a further improvement in confidence. Unemployment appears to have peaked and has been declining significantly as the upturn begins to have an impact. The unemployment rate should average around 8.5 per cent this year before falling further to an annual average of 8 per cent in 2001.

Having under-performed in recent years, it now appears that the German economy is set to enjoy a strong recovery. Economic activity increased during the latter half of 1999, driven by growth in both external demand and private consumption. While some slowdown in export growth is expected as the euro appreciates, growth in private consumption is expected to increase as unemployment falls and disposable income rises. According to recent figures from the German Federal Statistical Office, seasonally adjusted real GDP growth in the first quarter of this year amounted to 0.7 per cent compared with the previous quarter, due mainly to increased investment and net exports. For 2000 as a whole real GDP growth of 2.75 per cent is projected, with a further rise to 3 per cent in 2001. The unemployment rate began to decline at a slow pace towards the end of 1999 and finished the year at 8.9 per cent. Sustained recovery in the economy means that the decline in unemployment is expected to continue during the next two years. An annual average unemployment rate of 8.5 per cent is forecast for 2000 with a further fall to 8 per cent in 2001. Provisional figures for May 2000 show consumer price inflation in Germany at 1.5 per cent. Inflation has risen in recent months due to higher energy costs and the weak euro. Although these factors are expected to unwind during the course of 2000, rising import prices and consumer demand will mean that consumer price inflation will not decline, and an annual average of 1.5 per cent is expected this year and next.

Box 1: Shared Dilemma for the Dutch and Irish Economies

In common with the Irish economy, the Dutch authorities are also trying to deal with the consequences of strong growth and emerging inflationary pressures. GDP growth was 3.6 per cent in 1999, the third successive year in which growth was 3.5 per cent and over. The Dutch Central Planning Bureau[1] forecast growth of 4 per cent in 2000 with one of the main factors driving growth being increases in personal consumption, which between

[1] Central Planning Bureau Quarterly Report 2000/01, also available online at http:/www.cpb.nl/.

1996 and 1999 grew by an annual average rate of 3.7 per cent. Consumer prices rose by 2.2 per cent in 1999 and a similar increase is expected in 2000 due to higher import prices. Tax reforms involving cuts in income taxes and rises in expenditure taxes, will increase the consumer price index further in 2001 to around 3.25 per cent. The strong growth resulted in the unemployment rate falling to 4 per cent in 1999.

This positive economic performance has resulted in commentators on the Dutch economy raising issues that are similar to those currently being discussed in the context of the Irish economy. In its annual report, the President of the Dutch Central Bank warned about the dangers of the economy overheating unless the growth of domestic consumption slows down. Rising employment has resulted in a tightening of the labour market, with firms in several sectors reporting labour shortages across a range of skills. The increase in consumer spending has been partly attributed to increases in disposable income arising from tax reform and a boom in asset prices. House prices are estimated to be increasing at an annual rate of around 20 per cent.

Similarities also extend to the debate on suitable economic policy responses for a strongly growing economy. These include the appropriate stance of fiscal policy, how to tackle rising inflation and upward pressure on wages. Since 1994 fiscal policy has remained broadly neutral. Labour market policy has focused on making wage formation more flexible, reducing non-wage costs as well as improving employment prospects for low productivity workers and those approaching long-term unemployment. A major reform of the income tax system, including tax cuts, is to take place in 2001 aimed at improving the functioning of the labour market, partly financed by a broadening of the tax base and environmental levies. While the participation rate has increased, measures to encourage further increases, including participation of women, low-skilled and older people and immigrants are being implemented. Tax reforms have been designed to increase the participation of females and the low-skilled in particular. At the same time some Dutch companies have begun to recruit abroad to ease labour bottlenecks. The rise in house prices is making it more difficult for new entrants to the housing market. Furthermore, some of the increase in the value of housing is being used to fund extra consumption, making the Dutch economy vulnerable to a shock.

The factors pointing to excess demand pressures in the Dutch economy are very similar to those in Ireland. As members of EMU both economies will need to find domestic solutions to slow their economies down.

The French economy has performed strongly in recent years. Last year growth was 2.7 per cent, underlying inflation was moderate and the unemployment rate fell. The increasingly positive international environment should see strong growth continue during this year and next. Export growth should benefit from euro weakness and consumer confidence, and personal consumption will be boosted by falling unemployment and tax cuts. On this basis GDP growth of 3.5 per cent is forecast for 2000 and 3 per cent for 2001. The growth in the French economy has had a positive impact on the unemployment rate, which had averaged 11.7 per cent in 1998. Throughout the course of 1999 it is estimated that 465,000 jobs were created, reducing the unemployment rate to 11.2 per cent. A similar rate of decline is expected in 2000 to an annual average of 10.3 per cent before falling further to 9.4 per cent in 2001. Inflation in France was very subdued in 1999, averaging just 0.6 per cent. An increase in oil and commodity prices will have some impact, as will higher levels of activity. However, competition and wage moderation will limit price increases. Annual average consumer price increases of 1.25 per cent are forecast for each of the next two years.

Most other European member states are expected to show a similar pattern of strengthening growth and declining unemployment. No great upturn is anticipated in inflation, although there remains the risk that strengthening labour markets will result is some upward pressures. The Greek economy has stabilised during the past few years and Greece will become a member of the euro area at the beginning of 2001. Real GDP growth of 3.8 per cent is forecast for 2000 and 2001. A deceleration in inflation, improvement in public finances and a stable exchange rate ensure that Greece satisfies most of the convergence criteria.

The UK Economy

Latest figures show that the UK economy grew by 0.5 per cent in real terms compared to the previous quarter. It is estimated that the volume of output of production industries declined by 0.8 per cent while the output of the service sector increased by 0.8 per cent. While the components of domestic demand are all expected to grow during the year this will to some extent be offset by a further negative contribution from net trade as import growth continues to exceed growth in export volumes. The dual economy is expected to become more pronounced, with slow recovery in manufacturing output contrasting with a continuation of growth in the services sector. Real GDP growth of 2.8 per cent is expected for this year. Partly in response to monetary tightening, some slowdown in growth to 2.5 per cent is forecast for 2001.

The recent decline of sterling on the international exchanges would seem to suggest that sterling has peaked against the euro. Despite the currency being considered overvalued for a number of years it has remained strong. Official interest rates were last raised in February 2000 to 6 per cent. Some further tightening is expected during this year, although interest rates are now considered to be close to their peak. Retail sales figures for the three months February to April show an increase of 0.2 per cent in volume compared to the previous quarter and 4.5 per cent above the corresponding quarter a year earlier. Inflation in the UK remains subdued. In the twelve months to April, underlying inflation, excluding mortgage interest, rose by 1.9 per cent, down from 2 per cent in February. Inflation is expected to remain low and annual increases of 2.3 per cent are forecast for 2000 and 2001.

The UK unemployment rate has continued to fall. In the three months to March, the ILO measure declined to 5.8 per cent, compared with 5.9 per cent in the previous three months and down from 6.2 per cent a year earlier. The upturn in growth is expected to reduce unemployment further, although future declines are expected to be moderate. The strength of the labour market and rising real incomes are expected to underpin consumer confidence.

The Rest of the World

The Asian economic outlook has improved significantly since the downturn brought about by the financial crisis of 1997. Most of the crisis countries experienced a recovery last year, led by South Korea. Much of the recovery has been supported by weaker currencies on international currency exchanges.

The recovery of the Japanese economy remains slow. Having recorded growth in the first half of 1999, the economy contracted again in the second half of the year. While there are some concerns about Japanese GDP data, part of the decline can be attributed to lower levels of public investment and private consumption. Annual growth of 0.3 per cent was recorded for 1999. Stronger growth is anticipated in 2000 but this will have to be driven by the consumer and the external sectors. Past fiscal stimuli have resulted in a large increase in budget deficits and the public debt, limiting the government's ability to stimulate the economy over the next few years. Some of the benefits of the Asian recovery and upturn in world trade growth will be offset by strength in the yen, while increasing unemployment will subdue growth in domestic demand. Real GDP growth of 1 per cent is forecast for this year with an improvement to 1.7 per cent in 2001.

The Context for Ireland

World trade growth increased by about 5.5 per cent in 1999, only marginally up on the previous year. The upturn in the world economy, coupled with continued strong growth in the US economy means that the increase in 2000 is likely to be much stronger. World output growth is also expected to show stronger growth this year and next. This upturn should maintain a reasonably high level of international productive investment. While Ireland should continue to attract a share of this investment, this may be lower than in recent years reflecting resource constraints, such as a tightening labour market, and some loss of competitiveness from rising wages and the expected appreciation in the euro.

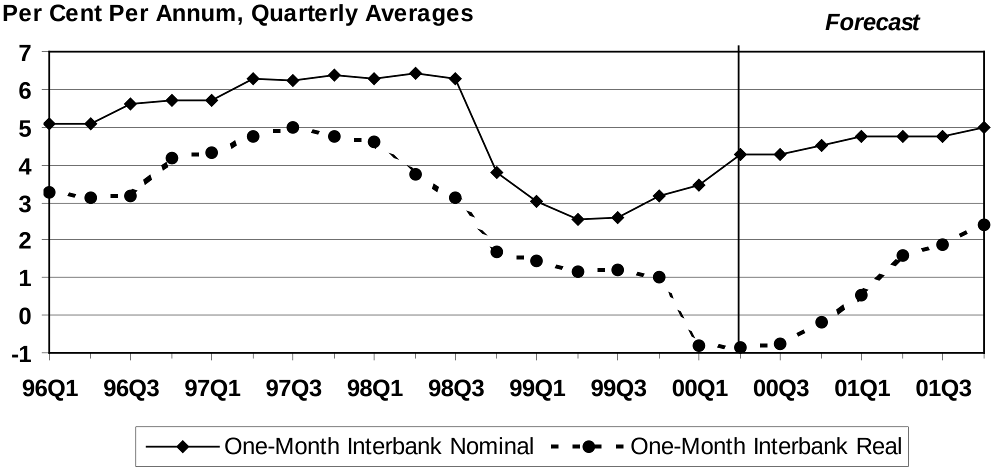
TABLE 1: Short-term International Outlook

	GNP		Consumer Prices		Hourly Earnings		Unemployment Rate		Current Account Balance	
	Percentage Change						%		% of GNP	
Country	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**
UK	2.8	2.5	2.3	2.3	6.0	6.0	5.8	5.8	-1.5	-1.8
Germany	2.8	3.0	1.5	1.5	2.8	2.8	8.5	8.0.	-0.5	-0.5
France	3.5	3.0	1.3	1.3	3.0	3.1	10.3	9.4	2.0	2.0
Italy	2.6	2.6	2.2	1.9	2.5	2.5	11.0	10.5	0.5	0.5
Total EU	3.4	3.1	2.0	1.8	2.5	2.3	8.5	8.0	0.0	0.3
USA	4.3	3.5	2.0	2.3	4.0	4.0	4.0	4.3	-4.0	-4.0
Japan	1.0	1.7	-0.5	0.0	1.0	1.0	4.8	5.0	2.6	2.6
Total (OECD)	3.8	3.0	2.8	2.6	5.0	5.0	6.3	6.0	-1.0	-1.0
Ireland	7.0	6.0	4.8	3.2	7.3	8.0	4.6	4.1	0.8	0.2

Overall, world commodity price indices rose sharply during 1999. Much of this can be accounted for by the sharp increase in oil prices. Excluding energy components, European forecasting institutes estimate that the rise in commodity prices was more moderate. The increase in commodity prices excluding crude oil is expected to remain moderate during 2000 and 2001, with an increase of 6 per cent forecast for this year and 5 per cent for 2001. Following its sharp rise over the last year, growth in crude oil prices is expected to slow. Although some increase in inflation rates is expected this year, consumer price growth internationally is not expected to accelerate significantly.

Concerns about inflationary pressures internationally has resulted in higher interest rates. The European Central Bank (ECB) raised official interest rates by 0.25 percentage points in April, and by a further 0.5 percentage points to 4.25 per cent in early June due to concerns about inflationary pressures arising from recovery in economic activity in Europe and the weakness of the euro. As outlined in our March *Commentary*, the ECB has a twin pillar monetary policy strategy based on its assessment of the risk to price stability and on a reference value of 4½ per cent for broad money supply growth. Economic indicators point to a stronger than anticipated upturn in activity in the euro zone. Furthermore, the three-month average of the annual growth in broad money (M3) for the period February to April was 6.3 per cent, up from 5.9 per cent in the three months from January to March. Official euro interest rates are expected to increase steadily, possibly reaching 5 per cent by the end of next year. Further increases are expected in both the US and UK, although official rates are now probably close to their peak.

Figure 1: Interest Rates
Per Cent Per Annum, Quarterly Averages



The outlook for exchange rates is always difficult to predict. For a long time sterling has appeared overvalued, and in recent months the economic fundamentals would suggest that the euro is undervalued. Recovery in Europe coupled with increases in euro interest rates means that the euro should appreciate steadily against both sterling and the dollar. The risk remains of a sharp correction in exchange rates against the dollar. However this is impossible to predict and so, for forecasting purposes, we have assumed that the euro will return to close to parity against the dollar by the end of this year, implying an Irish pound rate against sterling of around 85 pence. An improvement in the euro exchange rate will go some way towards reducing inflationary pressures from import prices.

The Domestic Economy

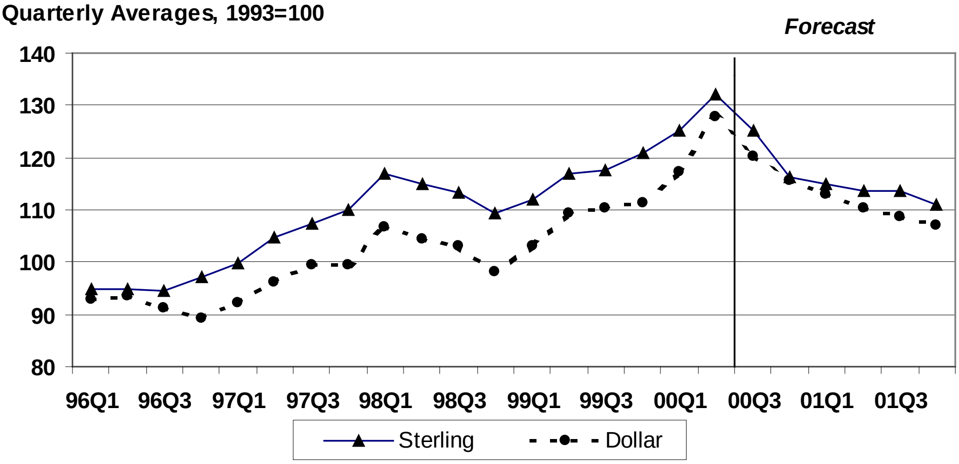
General

Quarterly national accounts for the first three quarters of 1999 show GNP growth accelerating towards the end of the year. This suggests that the final outturn will show stronger growth than we had previously estimated. On the basis of indicators released since the last *Commentary* we estimate that the Irish GNP grew by 7.7 per cent in 1999 in volume terms. The economy is forecast to grow strongly, though slowing somewhat, in 2000 and 2001. Our forecast is for GNP growth at 7 per cent in 2000 and 6 per cent in 2001. The GDP and GNP figures in this *Commentary* are based on independent forecasts of the expenditure and output sides of the economy. The difference between the forecasts is reconciled as an Adjusted GDP figure which is an average of the two. The amount of the difference is shown by the Statistical Discrepancy figure.

Exports

Provisional statistics show that the value of visible exports reached £52 billion in 1999, an increase of 15.3 per cent on the previous year. The increase was mainly accounted for by organic chemicals, computer equipment, telecommunication and sound equipment, and electrical and electronic goods. Geographically there was a large rise in exports to the US, while visible exports to the UK rose by 11 per cent and exports to euro countries rose by nearly 9 per cent. With average export prices increasing by 0.4 per cent, the volume of visible exports in 1999 is estimated to have risen by 14.9 per cent. On the basis of growth of over 17 per cent in other services, exports of goods and services are estimated to have grown by 14.5 per cent in volume terms in 1999.

Figure 2: Exchange Rates IR£ Price of unit of Foreign Currency, Quarterly Averages, 1993=100



Traditionally an upturn in world demand would represent an opportunity for Irish exporters. However, supply constraints and rising costs suggest that the benefit from the world upturn will be limited. The rising cost base is reflected in a higher export price deflator in both 2000 and 2001. Capacity constraints will continue to restrain increases in visible exports. The main source of growth will continue to be manufactured exports. Volume growth in merchandise exports is expected to slow to 12.4 per cent this year and under 10 per cent in 2001. With a substantially higher deflator in both years than in 1999, the value of merchandise exports should grow by 15.6 per cent in 2000 and 12.2 per cent in 2001. A similar picture is emerging for service exports, with capacity and rising costs reducing the volume of tourism exports in 2001. On this basis, the value of exports of goods and services should rise by 15.2 per cent this year and by 12 per cent in 2001.

TABLE 2: Exports of Goods and Services

Estimates

	1998 £m	% Change in 1999 Volume	% Change in 1999 Value	1999 £m
Agricultural	2,906	8.6	7.9	3,137
Manufactured	37,889	16.0	16.5	44,129
Other Industrial	3,502	9.1	9.4	3,832
Other	849	11.1	11.1	944
Total Visible	**45,146**	**14.9**	15.3	**52,042**
Adjustments	416	20.0	20.6	502
Merchandise	**45,562**	**14.9**	15.3	**52,544**
Tourism	2,281	3.0	4.5	2,385
Other Services	2,462	17.1	18.9	2,926
Exports of Goods and Services	**50,305**	**14.5**	15.0	**57,855**

Forecasts

	1999 £m	% Change in 2000 Volume	% Change in 2000 Value	2000 £m	% Change in 2001 Volume	% Change in 2001 Value	2001 £m
Agricultural	3,137	5.5	6.8	3,351	3.1	4.6	3,507
Manufactured	44,129	13.5	16.9	51,589	11.0	13.5	58,553
Other Industrial	3,832	6.3	9.2	4,184	2.3	4.3	4,363
Other	944	7.0	7.3	1,012	2.0	2.5	1,038
Total Visible	**52,042**	**12.4**	**15.6**	**60,136**	**9.8**	**12.2**	**67,460**
Adjustments	502	10.0	10.0	552	20.0	20.0	662
Merchandise	**52,544**	**12.3**	**15.5**	**60,688**	**9.9**	**12.3**	**68,123**
Tourism	2,385	3.5	7.1	2,555	2.0	4.8	2,677
Other Services	2,926	13.0	17.0	3,422	11.0	13.8	3,894
Exports of Goods and Services	**57,855**	**12.0**	**15.2**	**66,665**	**9.6**	**12.0**	**74,694**

Stocks

The *Quarterly National Accounts* show that the overall value of physical changes in stocks will be much lower than in 1999. Revisions to agricultural and intervention stocks are likely to be quite minor. However, the decline in other stocks is likely to be much larger than we had previously forecast. On this basis we estimate that overall stock levels fell by £340 million in 1999. For the purposes of forecasting in this *Commentary* we assume a smaller decline in agricultural and intervention stocks in 2000 and 2001. Other stocks are likely to be reduced again in 2000 as companies reduce stock levels to meet demand levels in the economy. After two years of falling stocks some increase in other stocks is forecast for 2001. Thus total stock building is forecast at £140 million in 2001.

TABLE 3: Stock Changes

	1998 £m	Change in Value £m	1999 £m	Change in Value £m	2000 £m	Change in Value £m	2001 £m
Farm Stocks	43	-43	0	-20	-20	10	-10
Irish intervention Stocks	-13	-37	-50	50	0	0	0
Other Non-Agricultural Stocks	758	-1,048	-290	90	-200	350	150
Total	**788**	**-1,128**	**-340**	**120**	**-220**	**360**	**140**

Investment

Strong growth in both the value and volume of investment over the first three quarters of 1999 was recorded in the quarterly national accounts. The number of house completions increased to over 46,500 in 1999, up by 9.8 per cent on the previous year, slightly lower than our previous estimate. Imports of capital goods grew strongly in 1999, up by 23 per cent on the previous year. While this is lower than the exceptionally high growth rate of 1998 it does indicate continuing strong levels of investment in plant and machinery. Registrations of goods vehicles in 1999 increased in line with 1998. On the basis of these revisions we now expect the volume of investment to grow by 13.1 per cent in 1999. A slightly increased price deflator of 9.7 per cent means that the value of investment should grow to £16,623 million in 1999.

The strength of investment in recent years, as well as capacity constraints, means that we forecast a slowdown in the volume growth of investment in building and construction to 9.4 per cent in 2000 and 7.8 per cent in 2001. As in 1998 and 1999, the increase in the price deflator in building and construction is likely to be high. While investment in machinery and equipment is likely to remain strong, a moderate slowdown is forecast in line with lower growth in overall economic activity. Thus, total gross fixed capital formation is forecast to rise in volume terms by about 11 per cent in 2000 and 8.6 per cent in 2001.

Consumption

Available indicators show that personal consumption increased very strongly in 1999. On the basis of retail sales, car registrations, exchequer returns figures and the quarterly national accounts value growth in personal consumption of 12.8 per cent is estimated for 1999, along with a price deflator of 4 per cent. Consumption indicators are only available for the first few months of 2000. The exceptional demand for "millennium" cars means that some of these indicators must be treated with a degree of caution. Notwithstanding this it is evident that consumption has continued to grow at a strong pace during the first half of 2000. Continuing growth in consumption is likely, driven by growth in aggregate personal disposable income, which is forecast to increase quite rapidly over the next two years, reflecting higher nominal wage increases and the impact of budgetary tax measures.

TABLE 4: Gross Fixed Capital Formation

Estimates

	1998 £m	% Change in 1999 Volume	% Change in 1999 Value	1999 £m
Housing	4,541	11.0	33.8	6,074
Other Building	3,814	10.6	18.3	4,514
Building and Construction	8,355	10.8	26.7	10,587
Machinery & Equipment	5,043	17.0	19.7	6,036
Total	13,398	13.1	24.1	16,623

Forecasts

	1999 £m	% Change in 2000 Volume	% Change in 2000 Value	2000 £m	% Change in 2001 Volume	% Change in 2001 Value	2001 £m
Housing	6,074	8.5	28.0	7,776	5.5	21.3	9,435
Other Building	4,514	10.6	20.6	5,441	11.0	20.7	6,568
Building and Construction	10,587	9.4	24.8	13,218	7.8	21.1	16,003
Machinery & Equipment	6,036	13.5	16.9	7,056	10.3	12.2	7,919
Total	16,623	10.9	22.0	20,274	8.6	18.0	23,922

Although nominal interest rates have increased they remain low by historical standards. The expectation is that nominal rates will increase over the next two years. This rise, combined with the possibility of reaction to increasing concerns about the sustainability of the current boom has led us to forecast an increase in the savings ratio over the next two years. For 2000 as a whole, increases of 13.9 per cent in value and 7.9 per cent in volume are forecast for personal consumption. This is forecast to slow to value growth of 11.3 and volume growth of 6.8 in 2001, partly reflecting a slower rate of employment growth.

We have lowered our estimate for the growth in public consumption for 1999 on the basis of the most recent quarterly national accounts. Volume growth of 2.8 per cent is now forecast for 1999. We have also reduced slightly our forecasts for 2000, which at 3 per cent in volume is below the average of recent years. Growth of 4 per cent in the volume of government consumption is forecast for 2001, representing a return to more typical growth levels.

TABLE 5: Consumption Indicators

	Annual Percentage Change						
	1995	1996	1997	1998	1999 Forecast	2000 Forecast	2001 Forecast
Consumption Value							
NIE 1997, Personal Consumption	6.6	9.3	10.0	11.4	12.8	13.9	11.3
Retail Sales Index, Value	4.8	8.3	9.0	9.7	10.9	11.0	9.0
Divergence	1.8	1.0	1.0	1.7	1.9	2.9	2.3
Consumption Volume							
NIE 1997, Personal Consumption	3.7	6.5	7.3	7.4	8.5	7.9	6.8
Retail Sales Index, Volume	2.8	6.2	7.9	8.1	9.1	8.3	6.8
Divergence	0.9	0.3	-0.6	-0.7	-0.6	-0.4	0.0
Consumer Prices							
NIE 1997, Personal Consumption Deflator	2.8	2.6	2.5	3.7	4.0	5.6	4.3
Retail Sales Index Deflator	2.0	1.7	1.2	1.9	1.5	2.5	2.1
Consumer Price Index	2.5	1.6	1.5	2.4	1.6	4.8	3.2

Final Demand

Final demand is estimated to have increased by 10.5 per cent in volume terms and 13.7 per cent in value in 1999, marginally lower than we forecast in our previous *Commentary* but substantially lower than the exceptionally strong growth in 1998. Domestic demand (excluding stocks) grew by 8.8 per cent in volume terms in 1999, while exports of goods and services rose by 14.5 per cent. The import intensity of final demand in volume terms is significantly lower in 1999 than in preceding years.

We continue to forecast a gradual slowing down in the rate of growth of the volume of final demand. Volume growth in final demand is projected to increase by 10 per cent in 2000 and 8.3 per cent in 2001. This slowdown in volume growth is balanced between domestic demand and exports. Domestic demand (excluding stocks) is expected to fall back to 8 per cent in 2000 and 7 per cent in 2001, with exports falling over the same period to 12 and 9.6 per cent.

Imports

At £34,315 million the value of visible imports in 1999 was 9.7 per cent higher than the previous year. Average import prices increased by 2.9 per cent and the volume increase for the year was 6.6 per cent. The volume increase is much lower than our expectations given the level of domestic demand growth suggested throughout the year.

The classification of imports by main use shows that imports of both producer and consumption goods increased strongly. The resource constraints operating in the domestic economy at present mean that further growth in import volumes is forecast for this year and next. On the basis of our forecasts for economic activity, imports of capital and intermediate goods will show lower rates of growth, but imports of consumer goods will remain strong. The lower growth in the intermediate goods component is very significant as it accounts for more than half of all imports. Total visible imports in 2000 are forecast to rise by 6.3 per cent in volume in 2000 and 9.2 per cent in value.

Tourism expenditure abroad is expected to rise by nearly 11 per cent in 1999. A slight increase in the rate of growth is forecast in 2000, boosted by higher disposable incomes. A more modest, but still substantial, increase is projected in 2001. Other service imports also grew strongly in 1999, in keeping with the strong growth in final demand. The slower rate of increase in final demand projected for this year and next is likely to be reflected in a slower rate of increase in other service imports. Thus, total imports of goods and services are forecast to increase by 10.5 per cent in 2000 and 9.2 per cent in 2001 in volume terms.

TABLE 6: Imports of Goods and Services

Estimates

	1998	% Change in 1999		1999
	£m	Volume	Value	£m
Capital Goods	4,076	19.7	23.2	5,020
Consumer Goods	6,520	9.3	13.1	7,372
Intermediate Goods:				
Agriculture	497	10.9	12.3	559
Other	18,619	2.5	5.4	19,625
Other Goods	1,566	8.4	11.1	1,739
Total Visible	**31,279**	**6.6**	**9.7**	**34,315**
Adjustments	-586	20.0	22.4	-717
Merchandise Imports	**30,693**	**6.3**	**9.5**	**33,599**
Tourism	1,663	10.8	13.0	1,879
Other Services	10,970	23.1	25.3	13,740
Imports of Goods and Services	**43,326**	**10.8**	**13.6**	**49,218**

Forecasts

	1999	% Change in 2000		2000	% Change in 2001		2001
	£m	Volume	Value	£m	Volume	Value	£m
Capital Goods	5,020	16.0	19.5	5,998	13.3	16.6	6,997
Consumer Goods	7,372	9.3	12.6	8,300	9.8	12.8	9,359
Intermediate Goods:							
Agriculture	559	9.5	10.6	618	6.0	7.3	663
Other	19,625	2.5	5.1	20,618	2.0	4.3	21,514
Other Goods	1,739	8.2	10.6	1,924	6.0	8.4	2.086
Total Visible	**34,315**	**6.3**	**9.2**	**37,458**	**5.8**	**8.4**	**40,619**
Adjustments	-717	20.0	20.0	-860	20.0	20.0	-1,032
Merchandise Imports	**33,599**	**6.0**	**8.9**	**36,598**	**5.5**	**8.2**	**39,587**
Tourism	1,879	11.3	13.8	2,139	10.0	12.8	2,412
Other Services	13,740	21.3	23.7	16,993	17.0	19.3	20,280
Imports of Goods and Services	**49,218**	**10.5**	**13.2**	**55,731**	**9.2**	**11.7**	**62,279**

Balance of Payments

The methodology and presentation of the CSO balance of payment statistics has been revised significantly since the last *Commentary*. The changes result in a discontinuity in the long-term balance of payments series. The changes have not been included into our forecasts as they have not yet been incorporated into the national account series released by the CSO.

On the basis of our external trade forecasts the merchandise trade balance is set to rise to over £24.1 billion in 2000 and £28.5 billion in 2001. Despite an increase in the service trade deficit, the surplus on trade in goods and services will grow by over 26.5 per cent to £10,935 million in 2000. Lower merchandise trade growth in 2001 will see growth in this surplus fall to 13.5 per cent in 2001, giving a figure of £12,415 million.

TABLE 7: Balance of Payments

	1998 £m	Change %	1999 £m	Change %	2000 £m	Change %	2001 £m
Visible Trade Balance	13,867	27.8	17,727	27.9	22,678	18.4	26,841
Adjustments	1,002		1,219		1,412		1,695
Merchandise Trade Balance	**14,869**	**27.4**	**18,945**	**27.2**	**24,090**	**18.5**	**28,536**
Service Trade Balance	-7,890	30.7	-10,309	27.6	-13,155	22.5	-16,120
Trade Balance in Goods and Services	**6,979**	**23.8**	**8,637**	**26.6**	**10,935**	**13.5**	**12,415**
Factor Flows:							
Debit Flows:							
Remuneration of Employees	-51	10.0	-56	8.0	-61	8.0	-65
Distributed Profits, etc.	-7,506	24.0	-9,307	22.0	-11,355	17.0	-13,285
Reinvested Earnings	-1,790	24.0	-2,220	22.0	-2,708	17.0	-3,168
National Debt Interest	-651	-12.0	-573	-9.0	-521	-9.0	-474
Other Debit Flows	-4,489	25.0	-5,611	21.0	-6,790	17.0	-7,944
Total Debit Flows	**-14,487**	**22.6**	**-17,767**	**20.6**	**-21,435**	**16.3**	**-24,937**
Credit Flows:							
Remuneration of Employees	216	0.0	216	0.0	216	0.0	216
Direct Investment Income	806	23.0	991	16.0	1,150	16.0	1,334
Other Credit Flows	6,010	23.5	7,422	18.3	8,777	18.3	10,379
Total Credit Flows	**7,032**	**22.7**	**8,630**	**17.5**	**10,143**	**17.6**	**11,929**
Net Factor Flows	**-7,455**	**22.6**	**-9,138**	**23.6**	**-11,292**	**15.2**	**-13,009**
Net Current Transfers	1,039	-2.7	1,011	-8.0	930	-18.9	754
Balance on Current Account	**563**		**510**		**573**	**-**	**160**
Capital Transfers	661	-9.2	600	-8.3	550	-9.1	500
Effective Current Balance	**1,224**		**1,110**		**1,123**		**660**

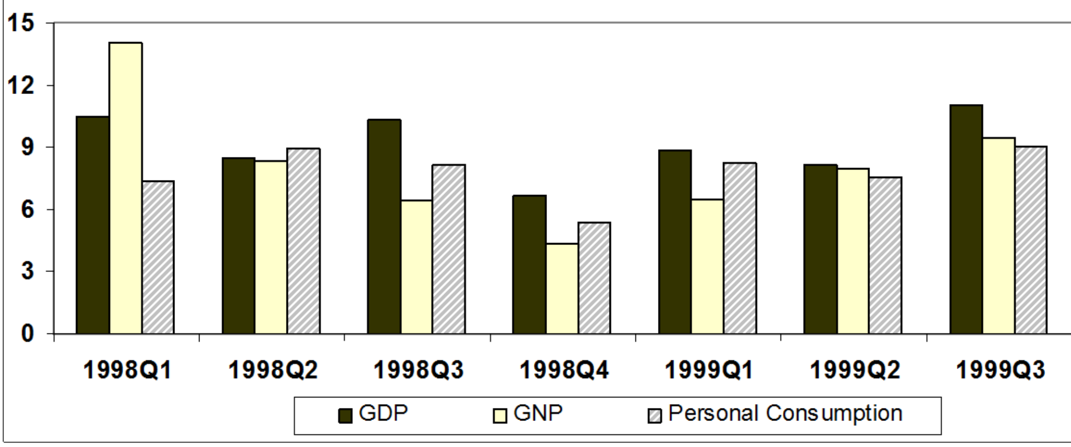
A continuation of the strong export performance of the multinational sector means that the rise in the profits of foreign companies either remitted abroad or reinvested in Ireland is forecast to remain high. National debt interest is now a relatively small component of debit flows and this is unlikely to change. Allowing for strong growth in other debit flows and the main credit flow items suggests that net factor flows should increase by 23.6 per cent in 2000 and by 15.2 per cent in 2001.

On the basis of the old balance of payment methodology the balance on the current account seems set to increase slightly in 2000 before falling back in 2001. However, the introduction of a new methodology means that these figures are subject to substantial revision. The new figures show a far higher surplus in 1998 than was previously the case and a far lower surplus in 1999 than had been suggested by releases for the first three-quarters of 1999 under the old methodology. The incorporation of the new methodology in future *Commentaries* will result in revisions to the presentation of the Balance of Payments and to the balance on the current account.

Gross National Product

Our estimate of real GNP growth for 1999 is 7.7 per cent, slightly higher than our March *Commentary*. The small upward revision in GNP volume growth reflects the acceleration in economic activity in the latter half of 1999, as revealed in the CSO *Quarterly National Accounts* for the third quarter (see Figure 3), moderated by a higher rate of growth in net factor payments of 22 per cent. The latter reflects high level of profitability in foreign owned firms.

Figure 3: Quarterly National Accounts, Constant 1995 Prices, Percentage Change



The most significant revision since the last *Commentary* is in the terms of trade for 1999. On the basis of external trade figures for the year, export price deflators were much lower, at 0.5 per cent, and import price deflators much higher, at 2.6 per cent, than anticipated. As a result, the terms of trade appear to have worsened significantly in 1999. When combined with a small reduction in net current transfers, the rise in real Gross National Disposable Income (GNDI) in 1999 is estimated at 5.3 per cent, which is significantly below growth in real GNP.

The projected growth rates of real GNP are 7 per cent and 6 per cent in 2000 and 2001, respectively. The terms of trade are forecast to oscillate between being positive in 2000 and negative in 2001. Current transfers are expected to continue falling at faster rates, such that living standards, as reflected by GNDI, are projected to rise in real terms by 7.2 per cent in 2000 and 5.4 per cent in 2001.

Agriculture

The volume of agricultural output is estimated by the CSO to have fallen by 1 per cent in 1999, though this masked some quite contrasting sectoral performances, such as the strong growth in milk and cereals compared to lower output in the cattle and pig sectors. The total volume of inputs of materials and services was only marginally lower given poor harvests in the previous year. The difference between gross output and inputs of materials and services is gross agricultural product which fell in volume terms by 1.7 per cent in 1999. When allowance is made for increased output in forestry and fishing, the volume of GDP in the broad agricultural sector is still estimated to have fallen by 1.7 per cent. The outlook for 2000 and 2001 is more favourable, projecting a rise of over 1 per cent in volume of GDP in the broad agricultural sector for both years assuming, "average" weather conditions, which would lower the volume growth of inputs.

Industry

Manufacturing output in the first half of 1999 slowed considerably in comparison to 1997 and 1998. On the basis of data from the CSO industrial production index, real output growth in manufacturing was 8.2 per cent for the first half of the year. On the basis of expectations for production in the months ahead, provided in the IBEC-ESRI Monthly Industrial Survey and trends in the NCB Purchasing Managers Index there appears to have been a pick up in activity in the latter half of the year. Evidence of this activity pattern is reinforced by the growth of manufactured exports in the second half of the year. We estimate an annual increase in the volume of manufacturing output in 1999 of 9.6 per cent. Output in building and construction continued to rise strongly, and the growth in the volume of GDP in the broad industrial sector is still estimated at 10 per cent in 1999.

We continue to factor in some slowing down in building and construction volume growth during 2000, along with a deceleration in the rate of growth of manufacturing. But, with the carryover of increased activity from the end of 1999, we are forecasting slightly higher industrial volume growth than our March *Commentary* at 9.2 per cent in 2000, with the output price significantly higher at 5.4 per cent. The tight labour market is expected to constrain growth further in 2001. Both manufacturing and building are expected to have reduced volume growth, with an average volume rise of less than 6.1 per cent in the broad industrial sector. The increase in output prices is expected to accelerate to 5.7 per cent in 2001.

Services

Output in the services sector is estimated to have risen in volume terms by 8.5 per cent in 1999 given an average employment growth for the year of over 7 per cent. With a tightening labour market, the services sector's output growth cannot be sustained indefinitely given its high labour intensity. Even allowing for buoyant domestic demand, we forecast that the rate of growth in GDP volume in services will drift down to 7 per cent in 2000 and more sharply to 5.2 per cent in 2001. The volume increase over the period in the public sector is expected to be modest, with the main contribution to growth in the sector coming from the private sector in areas such as distribution, transport and communication.

Employment

The Quarterly National Household Survey (QNHS) for the first quarter of the year indicates that total employment increased significantly over the last twelve months with an additional 95,600 persons in work, an exceptional rate of increase in employment of just over 6 per cent. Most of the jobs created were in full-time positions, although there was a notable rise of 23,600 in numbers in part-time employment, particularly amongst females. The average amount of hours worked per week fell to 38.1 in quarter one of 2000, as compared with 38.3 last year and 38.7 in 1998.

The sectoral breakdown shows that services continues to be the main contributor to employment growth, with numbers employed rising by 70,600 or by 7.3 per cent, over the last year. Within this sector, job creation in financial and business services was highest with employment rising by approximately 19,800. Employment in industry rose by 6.4 per cent, mainly the result of a very large expansion in building and construction where numbers at work increased by 20,400, or by approximately 14.5 per cent.

The labour force grew by 5 per cent in the year up to quarter one of 2000, a level which is very high by international standards. Over the last few years, the supply of labour has been greatly increased as a result of rising labour force participation rates, the natural increase in those of working age and net immigration. It is envisaged that labour force growth will moderate over the next few years, as the rise in participation rates and the natural increase slows. Furthermore, net immigration is expected to decline because it is anticipated that the current high costs of accommodation in Ireland will deter some potential immigrants.

Another factor contributing to a slowdown in labour force growth is the fact that potential labour supply in Ireland is reaching a limit. In the QNHS, one measure of potential labour supply is the number of unemployed persons and discouraged workers as a percentage of the labour force, inclusive of discouraged workers[2]. By late 1997, approximately 11 per cent of the labour force consisted of unemployed and discouraged workers, whereas by quarter one of 2000, this number had halved to just 5.4 per cent. This indicates that those with a loose attachment to the labour market have increasingly been drawn into the labour force over the last few years.

Overall it is expected that the labour force growth will slow to 2.8 per cent this year and to 2.4 per cent in 2001. The ongoing rise in employment has resulted in a marked decline in unemployment and long-term unemployment.[3] Numbers unemployed fell by 23.6 per cent in 1999 reaching 95,000 persons, as compared with 125,000 in 1998. The unemployment rate has continued to fall in 2000, reaching 4.7 per cent, for the first quarter of this year. Within the space of a few years, Ireland has

[2] Discouraged workers are defined by the CSO as those "who are not looking for work as they believe they are not qualified or that no work is available" (see QNHS, June 2000, page 14).

[3] Part of the fall in long-term unemployment (those unemployed for at least one year) is accounted for by the number of individuals in government sponsored employment schemes.

been transformed from having one of the highest rates of unemployment in Europe, to now having a rate about half the EU average.

The long-term unemployment rate (LTUR) has more than halved since the beginning of 1998, falling from 4.5 per cent to reach just 1.7 per cent for the first quarter of 2000. Over the last year, effectively all of the decline in unemployment can be accounted for by the drop in the numbers of long-term unemployed. The decrease in the LTUR is very significant when one bares in mind that the rate averaged just over 8.5 per cent for much of the early 1990s. In contrast the short-term unemployment rate (STUR) has declined much more slowly since 1998 falling from 4 per cent to 3 per cent for the first quarter of 2000.

The decline in the LTUR in effect constitutes a fall in structural unemployment and it would appear that in the future there will be less scope for decreases of the magnitude that have been experienced lately. The STUR can be viewed as predominantly frictional unemployment since it has remained fairly stable over the last couple of years. One of the main implications of a tighter labour market is that the overall level of unemployment tends to become more and more dominated by frictional elements, as structural unemployment declines.

Numbers employed have continued to rise in 2000. For the year as a whole, it is anticipated that employment levels will rise by 62,000 persons or some 3.8 per cent. In 2001, it is envisaged that growth will moderate further with a 2.9 per cent rise in total employment forecast. The slowdown in employment is anticipated because of emerging capacity constraints and labour shortages (see Box 2). The services sector is expected to continue to provide the bulk of new jobs. In particular, employment in financial and business services, information technology and personal services in general, should continue to expand, although at rates below those experienced in the 1990s. By 2001, it is envisaged that employment in services will account for approximately 64 per cent of all employment in Ireland. Industrial employment is expected to continue rising, but somewhat less rapidly as output growth slows, and as labour shortages impede expansion.

In light of the employment forecasts, it is estimated that numbers unemployed will decline, averaging 81,000 this year and 75,000 in 2001. Thus, on an annual average basis, the unemployment rate is forecast to fall to just 4.1 per cent in 2001.

TABLE 8: Employment and Unemployment*

	Annual Averages '000			
	1998	**1999**	**2000**	**2001**
Agriculture	135	139	137	135
Industry	436	459	475	487
Services	950	1,018	1,065	1,104
Total at Work	**1,521**	**1,616**	**1,678**	**1,726**
Unemployed	125	95	81	75
Labour Force	**1,646**	**1,711**	**1,759**	**1,801**
Unemployment Rate %	7.6	5.6	4.6	4.1
Live Register	227	193	165	157

* All data (including the unemployment rate) are based on ILO definitions, except for the Live Register.

Box 2: Tightness in the Irish Labour Market[4]

The sharp decline in the rate of unemployment and the acceleration in wage levels are the best indicators of the extent of tightness in the Irish labour market. Nevertheless, there is additional evidence confirming that shortages of labour are becoming increasingly apparent.

To begin with, the IBEC/ESRI Monthly Industrial Survey can be used to gain an insight ahead of official statistics into the performance of manufacturing in Ireland. From the survey it is possible to gauge the extent to which production is being constrained as a result of an insufficient supply of labour. Figure 4 plots data for the fifteen year period up to April 2000, on the percentage of firms reporting that production is being constrained as a result of insufficient skilled and unskilled labour. The rise in the percentage of firms reporting skilled labour shortages is quite striking and currently stands at a record high, with nearly one in every ten firms encountering difficulties. Furthermore it is noticeable that there has been a sustained number of firms reporting shortages, indicative of a trend. The most noticeable feature is the persistent rise, since 1997, in the percentage of firms reporting unskilled labour shortages, a feature that was effectively non-existent prior to this period. It may even be the case that reported shortages are understated by the fact that new firms (which often experience the greatest problems in recruiting labour), are underrepresented in the sample.

Evidence from an ESRI survey[5] last year of 1,100 firms showed a marked rise in vacancy levels throughout all sectors of the economy. It was discovered that 27 per cent of firms in the private Non-Agricultural sector had vacancies. The vacancy rate, which is the ratio of current vacancies to employment plus vacancies, was estimated at 6 per cent, suggesting a total of 53,700 unfilled jobs. Compared with past surveys undertaken during the 1990s, the rise in vacancies is striking. For the manufacturing sector, the vacancy rate has effectively trebled since 1996 when it was estimated to be 1.9 per cent, compared with 5.4 per cent in 1998. With vacancy rates known to be highly sensitive to changes in employment and in the light of recorded employment growth since 1998, it is likely that vacancies have continued to rise.

With the numbers unemployed forecast to fall to 75,000 persons next year, it is foreseeable that the number of vacancies in the economy could equal the numbers unemployed, indicative of a situation of close to full employment.

Evidence on earnings trends across a broad range of occupations and sectors from 1987 to 1999,[6] highlighted the fact that wage inflation began to accelerate significantly from 1997 onwards. In addition, while the most highly skilled and qualified fared best in terms of income growth over the entire period. It was noted, that between 1994 and 1997, the earnings of semi-skilled and unskilled workers increased more rapidly than those of their skilled counterparts. A rising shortage of unskilled labour is

[4] An extract from a forthcoming paper by Diarmaid Smyth (2000) "Tightness in the Irish Labour Market", ESRI Working Paper Series.

[5] See Williams, J. and G. Hughes, 1999. *National Survey of Vacancies in the Private Non-Agricultural Sector 1998,* Dublin: The Economic and Social Research Institute.

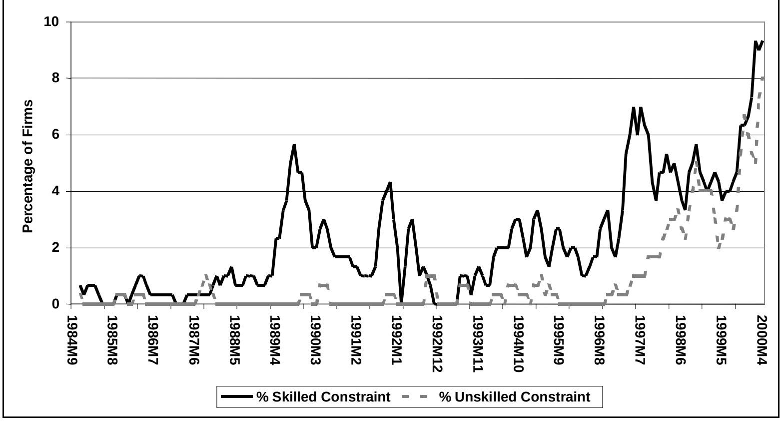
[6] Sexton, J.J., B. Nolan and B. McCormick, 1999. "A Review of Earnings Trends in the Irish Economy Since 1987", *Quarterly Economic Commentary*, December.

undoubtedly one of the main determinants of this sharp increase in earnings.

A number of anecdotal pieces of evidence also point towards a tightening labour market. For example, employers are increasingly recruiting labour from abroad, especially in sectors such as building and construction and in the catering industry. In addition, a number of recruitment fairs have been held in Europe and in North America in order to recruit labour from abroad. The tightness in the labour market is also apparent in the number of "help wanted" signs in shop windows, and in measures introduced by some large retailers to recruit older staff.

As the labour market tightens, workers are placed in a stronger wage bargaining position, as employers have to bid up wage rates in order to retain and attract labour. Similarly, in times when unemployment rates are low and competition for labour is intense, firms will bid up wages in order to discourage workers from leaving, because of the costs in terms of both time and money that it would take to replace staff. The current acceleration in wage rates will continue as long as the unemployment rate falls through a Phillips curve effect.[7]

Figure 4: Total Manufacturing: Firms Reporting Labour
3 Period Moving Averages



Incomes

Agricultural incomes fell by 12 per cent in 1999 through a combination of declines in the volume of gross agricultural product and lower subsidies. The outlook for 2000 is a strong reversal in income growth patterns as overall output is forecast to rise by about 1.7 per cent and subsidies will be boosted by the first payment under the EU Agenda 2000 package. The rise in agricultural incomes in 2000 is expected to be 12.5 per cent. Our forecast for 2001 is that incomes will stabilise in line with output developments in the sector at 1.1 per cent, assuming subsidies are maintained at anticipated levels.

Employment growth at 6.3 per cent in 1999, combined with an estimated rise in average earnings of around 7 per cent, resulted in a rise in the Non-Agricultural wage bill of 13.1 per cent. In 2000 and 2001 we expect average earnings to continue rising, reflecting the tightness in the labour market and the terms agreed in the Programme for Prosperity and

[7] Walsh, B., 1999. "What's in Store for the Celtic Tiger"*, Irish Banking Review*, Spring.

Fairness, including the commitments on increasing the national minimum wage. We forecast an increase in the wage bill of around 11.9 per cent this year and 11.5 per cent in 2001 despite a slowing in the rate of employment growth in both years.

The forecast rise in prices and the expected effect of dollar strength on traded prices is expected to result in an increase in margins and in profitability for many firms. This impact is particularly strong for large multinationals operating in Ireland because the rise in the dollar has enhanced profitability measured in Irish pound terms. A rise in the repatriation of these profits is anticipated in 2000 and 2001. Some industries in the non-traded sector, such as building and construction are also experiencing greater profitability. The increased demand for labour is likely to bid wage rates up considerably but it will take some time before current profit margins are eroded. The Other Non-Agricultural Income category is forecast to rise significantly by 19.3 per cent in 2000 and 16.6 per cent in 2001. It is noteworthy that income from sources other than wages are forecast to exceed Non-Agricultural wage income in 2001.

The reduction in taxation provided for in the budgets for 2000 and 2001 should lead to the share of personal taxation in personal income, which amounted to 19.7 per cent in 1999, falling to 18.7 per cent and 18.3 per cent in 2000 and 2001 respectively. Personal disposable income in 1999 is forecast to have grown by 9.4 per cent, with increases of 14.1 per cent and 12.2 per cent forecast for 2000 and 2001 respectively. This escalation in growth in disposable income is anticipated to arise from the timing of profits along with the combination of increased wages and lower taxation. The estimated fall in the personal savings ratio in 1999 from 11.6 per cent in 1998 to 8.8 per cent reflects the level of confidence in the economy encouraged by low interest and high income growth. We are forecasting that savings will rebound significantly in 2000 and 2001 and that the personal savings ratio will climb back up to 9.0 and 9.7 per cent respectively as interest rates start to climb from historically low levels.

TABLE 9: Personal Disposable Income

Estimates

	1998 £m	Change %	£m	1999 £m
Agriculture, etc.	2,301	-12.0	-275	2,026
Non-Agricultural Wages,	24,542	13.1	3,216	27,758
Other Non-Agricultural Income	9,341	8.0	744	10,085
Total Income Received	**36,184**	**10.2**	**3,685**	**39,869**
Current Transfers	6,905	8.0	551	7,456
Gross Personal Income	**43,089**	**9.8**	**4,236**	**47,325**
Direct Personal Taxes	8,378	11.4	957	9,335
Personal Disposable Income	**34,711**	**9.4**	**3,279**	**37,990**
Consumption	30,689	12.8	3,940	34,629
Personal Savings	4,022	-16.4	-661	3,361
Savings Ratio	11.6			8.8

Forecasts

	1999 £m	Change %	£m	2000 £m	Change %	£m	2001 £m
Agriculture, etc.	2,026	12.5	254	2,280	1.1	24	2,304
Non-Agricultural Wages,	27,758	11.9	3,291	31,049	11.5	3,577	34,626
Other Non-Agricultural Income	10,085	19.3	1,950	12,035	16.6	1,998	14,032
Total Income Received	**39,869**	**13.8**	**5,495**	**45,364**	**12.3**	**5,599**	**50,963**
Current Transfers	7,456	7.0	524	7,980	7.6	606	8,586
Gross Personal Income	**47,325**	**12.7**	**6,019**	**53,344**	**11.6**	**6,205**	**59,549**
Direct Personal Taxes	9,335	6.9	645	9,980	9.0	900	10,880
Personal Disposable Income	**37,990**	**14.1**	**5,374**	**43,364**	**12.2**	**5,305**	**48,669**
Consumption	34,629	13.9	4,828	39,458	11.3	4,474	43,932
Personal Savings	3,361	16.2	545	3,906	21.3	831	4,737
Savings Ratio	8.8			9.0			9.7

Consumer Prices

The rate of increase in the consumer price index rose towards the end of 1999. The first five months of this year have seen the growth in consumer prices rise to an annual rate of 5.2 per cent. As has been well documented, some of this increase is due to a number of special factors: a budgetary increase in tobacco taxes and rising oil prices. However, other factors are also at work such as high rates of price increase for services and related expenditure, the fall in the euro over much of the period, and most recently through rising interest rates.

The housing component of the CPI fell throughout 1999 reflecting the fact that euro interest rates were substantially lower than those prevailing in Ireland during 1998. Over the remainder of 2000 and during 2001 the housing index is expected to make a positive contribution to inflation, rather than offsetting upward moves in other prices, as interest rates are expected to rise over the period.

The remainder of the index is likely to be driven by two elements. Import prices are expected to increase both this year and next, although overall, internationally traded goods and services prices are likely to reflect a relatively subdued rate of inflation internationally. The index for services and related expenditure is likely to increase further as domestic supply pressures, particularly labour constraints, impact on prices. Thus, growth in the consumer price index is forecast to average 4.8 per cent in 2000. A decline in the impact of some of the one-off factors will result in the rate of consumer price growth declining to average 3.2 per cent in 2001.

TABLE 10: Consumer Price Index – Recent Trend and Forecast

	Quarterly Trend								Annual			
	1998			1999				2000	1998	1999	2000	2001
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1				
Index Nov. 1996=100												
Housing	103.2	104.5	100.8	93.6	92.2	93.1	86.7	92.0	102.6	91.5	92.5	93.5
Other	103.2	103.6	104.0	104.3	105.8	106.3	107.5	110.0	103.2	105.9	111.2	115.0
Total CPI	103.2	103.7	103.7	103.4	104.7	105.2	105.9	108.5	103.1	104.7	109.7	113.2
Annual % Change												
Housing	0.7	3.7	-1.2	- 8.3	-10.7	-10.9	-14.0	-1.6	1.3	-10.8	1.1	1.1
Other	2.9	3.2	2.4	2.5	2.5	2.6	3.4	5.2	2.6	2.6	5.0	3.4
Total CPI	2.7	3.2	2.1	1.6	1.5	1.4	2.1	4.6	2.4	1.6	4.8	3.2
Quarterly % Change												
Housing	1.1	1.3	-3.5	-7.1	-1.5	1.0	-6.9	3.7				
Other	1.4	0.4	0.4	0.3	1.4	0.5	1.1	1.2				
Total CPI	1.4	0.5	0.0	-0.3	1.3	0.5	0.7	1.3				

Public Finances

Strong economic growth continues to boost tax receipts and the exchequer returns for the first quarter of 2000 indicates that there will be a significant overshoot on budgetary revenue forecasts, as in recent years. Expenditure will also be under pressure, given the higher than anticipated rate of inflation. However, we have continued to assume that for 2000 the expenditure limits provided for in the Public Capital Programme will be adhered to. The continuing decline in unemployment should see a moderate increase in transfer payments this year. As in our last *Commentary* we have assumed that personal tax rates and bands, as well as social welfare rates, are indexed to the forecast increase in wage rates. The volume increase in current expenditure is forecast to be lower than in previous years at 2.8 per cent in 1999, rising to 3 and 4 per cent respectively in 2000 and 2001.

The effects of privatisations and special funds for pension pre-funding are complicating the public finance picture from previous years, but when these are excluded the exchequer surplus will increase significantly, by around a percentage point of GNP both this year and next.

General Assessment

The Irish economy looks set to grow strongly in 2000, marking the seventh consecutive year of high output growth. This remarkable achievement has occurred against a backdrop of low consumer price inflation, in line with a relatively stable price environment internationally and spare capacity within the domestic economy, particularly an abundant supply of productive labour. Concerns about excess demand pressures in the economy have been continually expressed over the last few years. However, annual consumer price inflation, as measured by changes in the consumer price index (CPI), remained very steady within a range of about 1.5 to 2.5 per cent. The growth in the CPI for 1999 averaged a modest 1.6 per cent, but by the end of the year the annual rate had doubled and has moved above 5 per cent during the first half of 2000.

While the dramatic rise in consumer prices, along with the continued high rates of output growth, have been seized upon as evidence of the economy overheating, this need not necessarily be the case. As a small open economy within a large monetary union, the inflationary process is significantly, though not exclusively, determined by external factors. A substantial part of the recent rise in inflation has nothing to do with overheating in the domestic economy but reflects the importance of external factors, such as the weakness in the euro exchange rate and a sharp rise in the international price of oil. This can best be described as "imported inflation". Indeed it was a different combination of these external factors that subdued the growth in the CPI over the last few years as the domestic economy continued to grow rapidly.

The main components in the inflationary process can be classified into internationally traded goods and services, whose prices are predominantly determined by external factors, and non-traded goods and services, whose prices are influenced significantly by domestic economic circumstances. Price pressures in the traded component are determined by the average rate of inflation in competitor countries and by the exchange rate. Currency movements such as the depreciation in the euro over the last year would be expected to impart inflationary pressure through higher import prices, particularly given the substantial trade undertaken in Ireland with non-euro area countries, mainly the US and the UK. While there has been some pass-through in higher prices from the depreciating exchange rate, it has been quite modest so far. Possible reasons for this are that exchange rate movements can have considerable lags such that the full impact has yet to feed through, or it may reflect a change in pricing behaviour by non-euro area producers to invoicing in euros. Either way, the weakness of the euro is only a partial, though possibly growing, explanation of the recent sharp rise in consumer price inflation.

In addition to external factors, the CPI is also influenced by domestically determined price changes that do not necessarily reflect demand conditions in the economy. These include administered prices changes, such as public transport fares, and modifications to indirect tax rates. The decision to increase the excise duty on tobacco in last December's Budget will add 0.75 per cent to the inflation rate until the end of the year. The impact of the tobacco duty on the inflation rate has received considerable attention, particularly in the context of the recently approved *Programme for Prosperity and Fairness* (PPF).

This issue highlights the importance of trying to distinguish between factors that influence inflationary pressures, or demand increases, and those that impact on the measurement of inflation. The increase in tobacco duty is motivated by public health considerations to alter consumption away from smoking; it is a price rise to reduce demand for a commodity considered socially undesirable. The CPI as a measure of inflation is affected because it is weighted to include tobacco based on its past share of the "average" basket of consumer goods. If the tax intervention achieves its aim, then tobacco's weight in the representative basket should decline and the impact of the duty change would have a very small impact on the measure of inflation. Where there is no fall in the demand for tobacco, the CPI measure of inflation will rise. It is clearly not the case, however, that the purchasing power of all consumers has fallen in real terms as a result of the tobacco duty. It is smokers, the original target of the intervention, whose real purchasing power is diminished.

Tightness in the labour market, as unemployment falls toward full employment levels, is pushing up wages throughout the economy. Nowhere is this more apparent than in the service component of the CPI, which has increased from 3.5 per cent at the start of 1999 to 6.4 per cent by the middle of 2000. Domestically generated inflation is trending upwards confirming its strong relationship with labour market tightness.[8] The demand for labour has increased significantly as a result of increased demand for output, particularly in the traded sector. Higher productivity growth in the traded sector allows for higher wage growth. Given the scarcity of labour this quickly bids up wages in the typically lower productivity non-traded sector. A fast growing economy within a monetary union would be expected to have a higher than average rate of inflation and this differential could persist for some time. Under a flexible exchange rate regime, these pressures can be alleviated by an appreciating currency and by higher interest rates. Since these mechanisms are not available to an individual country within EMU, strong demand in the economy is resulting in more sustained inflation.

Overall demand in the economy could also be reduced through a loss of competitiveness. The danger is that a sustained significant loss of competitiveness brought about by wage demands in excess of productivity growth could put the economy on a permanently lower growth path. The economy is currently experiencing severe, but possibly temporary, supply constraints. The National Development Plan is designed to alleviate these bottlenecks but this is a medium-term measure and will not produce short-term results.

[8] Meyler, Aidan, 1999. "The Non-accelerating Inflation Rate of Unemployment (NAIRU) in a Small Open Economy: The Irish Context", Central Bank of Ireland Technical Paper 5/RT/99.

The Institute in its most recent *Medium-Term Review*[9] examined the scenario of competitiveness loss resulting from delays in the implementation of infrastructural investment and excessive wage expectations. Wage inflation of 1 per cent per annum above the central forecast and congestion in infrastructure adding 2 per cent to production costs would result in the annual growth in GNP being permanently lower by 1.5 percentage points. This would be a very significant reversal in the economy's growth over the medium term and quite a disproportionate penalty to pay to deal with what may be a temporary inflationary spike.

Reductions in indirect taxes will do little to directly influence the main determinants of core inflation in Ireland. Nonetheless, changes in indirect taxes, whatever their motivation, can adjust the CPI measure of inflation. This in turn can influence perceptions about general price movements and real incomes, and so potentially affecting demand factors through increased wage pressures. Proposals to reduce indirect taxes, in response to inflation eroding real wage increases under the PPF, are under consideration. There may well be merit in changes in general expenditure tax rates but it not clear that manipulation of a measure of inflation is justifiable grounds. It would manoeuvre the CPI measure downwards as a one-off move but it could have the opposite intended impact on the underlying trend by increasing demand.

The principle of moving to trading wage moderation for indirect tax reductions would be a new departure in the social partnership arrangement, the convention being the use of income tax cuts to boost disposable incomes. Consideration could be given to this proposal, though the scope for modification may be limited by EU legislation. It is not sensible to undertake such a departure in reaction to what might yet prove to be a temporary rise in inflation.

A more fundamental concern is that the proposals appear consistent with a strategy of confronting inflation by learning to live with it through indexing real incomes to account for price level changes. The type of modification proposed is fixing the index rather than adjusting nominal wages but it has the same impact in that it does not confront the source of inflation, which is excess demand. The experience in the 1970s internationally of indexing arrangements is that such income proofing, while reducing the costs associated with a given level of inflation, pushes inflation rates higher through changed expectations about the costs associated with rising prices. There is justifiable concern that action be taken to protect real wages by bringing inflation under control but indexing is not always the best way to proceed. The danger with manipulating the consumer price index is that it would raise the expectation that the government would continually attempt to negate the impact of price rises on real wages. This could create a moral hazard, whereby individuals are provided with an incentive to incur costs that they do not have to bear.

The proposal to reduce indirect taxes on petrol would be particularly short-sighted and clearly against the aspiration in the PPF that …*the achievement of improvement in living standard in the shorter term is consistent with the long-term sustainability of economic and social progress, including protection of the*

[9] Duffy, D., J. Fitz Gerald, I. Kearney and D. Smyth, 1999. *Medium-Term Review 1999-2005*, Dublin: The Economic and Social Research Institute.

environment.[10] The role of energy prices, and in particular its fiscal component, is an important mechanism through which economic incentives can be transmitted to encourage environmental protection. Another undesirable aspect of reducing the tax margin on petrol would be to make the domestic price even more responsive to the rate of change in international oil prices, introducing greater volatility in Irish inflation rates.

Measures required to bring down domestically generated inflation can be aimed at both reducing demand and increasing the economy's supply capacity. A reduction in the rate of demand growth is the obvious short-term response required until the supply capacity comes on stream. Moderating growth in the economy is desirable, not just from inflationary concerns, but also to ensure that economy develops as well as grows in a sustainable manner. Development can be interpreted as qualitative increases in economic well-being in contrast to the quantitative increases implied by growth. It is clear that an economy may need to grow in order to develop but there comes a point at which continued growth can be at the expense of development. The growth in the Irish economy over the last decade has brought many qualitative improvements in living standards but the continued rapid pace of demand is giving rise to quality of life concerns and putting increasing pressure on the natural environment. A recent report by the Environmental Protection Agency[11] confirms that while Ireland's natural environment has been subject to fewer pressures and is at a better standard than most European countries, it is in danger of deteriorating at a faster rate in line with the demands imposed by higher economic growth.

Moderating growth in demand is also desirable to help plan for sustainable development. The impact of unforeseen demand outstripping planned supply is best exemplified in the built environment, where the process of urban sprawl, or uncoordinated development, is becoming a major concern with many quality of life consequences. Williams and Shiels, in a signed article accompanying this *Commentary*, suggest that a critical determinant for future economic activity will be the development of both the built and natural environments. The ability to retain and attract industries and workers will depend upon balanced growth and development.

The imperative then is to steer the economy to rates of growth that are both sustainable and non-inflationary. Price stability is a necessary counterpart to any sustainable development strategy. There is a limited range of economic tools available to Irish policymakers to moderate demand in the short term within EMU. The difficulty is compounded by expectations of real income increases. The onus falls on fiscal and competition policy as we have indicated in previous *Commentaries*. Further income tax cuts promised under the PPF should be pushed out towards the latter part of the agreement to temper demand. Immediate cuts in indirect taxes should be avoided until the economy begins to move to sustainable growth rates. Measures to speed up competition among non-traded services would help moderate price increases without being unduly stimulatory to demand in the short term.

[10] *Programme for Prosperity and Fairness*, 2000, page 48.

[11] Environmental Protection Agency, 2000. *Ireland's Environment: A Millennium Report,* Dublin: Environmental Protection Agency.

The economy is in strong shape but the success of the last decade presents its own dilemmas. Reacting to inflationary concerns by pursuing actions that further fuel growth could prove to be inconsistent with the professed desire for sustainable development.