SUMMARY

The preliminary estimates of the national accounts show that output in 2001 increased by 5.7 per cent in real GDP and 4.6 per cent in real GNP. While these growth rates remain substantially higher than in most other developed economies, they are still only about half of the growth rates experienced in Ireland in recent years. Our estimate for growth in 2002 is 4.0 per cent in real GDP and 2.5 per cent for real GNP. These rates are below the economy's potential growth with unemployment showing a consequential rise and the public finance position deteriorating. This would still constitute a relatively "soft landing" for the Irish economy given the widespread fears about how it could adjust from the rapid growth rates of the Celtic Tiger phase.

The future prospects are not as benign and domestic policy actions in the spheres of wage determination and budgetary policy need to reflect this. The anticipated international recovery continues to be delayed amid fears about the robustness of global equity valuations and the overhang from uncertainty about possible military conflicts in response to international terrorism. The main macroeconomic impact has been upon economic sentiment reflected both in producer and consumer confidence indicators. The economic fundamentals of the major world economies still appear sound. The policy mix of loose monetary and stimulatory fiscal policies, already in place for a year, still augurs well for the prospects of a strong international recovery once current uncertainty dissipates.

Predicated on a recovery in the international economies next year, the prospects for the Irish economy in 2003 are for output growth of 4.2 and 3.3 per cent in real GDP and real GNP terms respectively. Consumer price inflation is predicted to be 4.7 per cent this year and 4.0 per cent in 2003, well in excess of Ireland's main trading partners, and it remains am ongoing threat to future economic prospects. Unemployment is expected to rise to average 4.8 per cent in 2003 as the delay in the expected international recovery may unwind the possible labour hoarding by firms as evidenced this year in reduced hours worked rather than large scale redundancies. The General Government Balance used in the EU Stability and Growth Pact is anticipated to rise to a deficit of 1.2 per cent of GDP in 2003 even with tighter control being exercised on public expenditure growth.

As Ireland's physical economic horizon expands with the accession of ten new member states into the EU, the challenge is to shape the Irish economic model to embrace it. The first immediate test will be to adapt the social partnership model to introduce the necessary wage flexibility to reflect changing circumstances without reliance as in the past on reduced taxation. The forthcoming Budget 2003 needs to avoid major innovations in taxation, given the significant current uncertainty regarding the link between tax revenue and economic growth, whilst bringing expenditure growth under control.

PRELIMINARY NATIONAL ACCOUNTS 2001

A: Expenditure on Gross National Product

	2000	2001	Change in 2001				
		Preliminary	€m		%		
	€m	€m	Value	Volume	Value	Price	Volume
Private Consumer Expenditure	50,330	55,144	4,814	2,657	9.6	4.2	5.1
Public Net Current Expenditure	12,880	15,288	2,408	1,391	18.7	7.1	10.8
Gross Fixed Capital Formation	24,767	26,670	1,903	-124	7.7	8.2	-0.5
Exports of Goods and Services (X)	100,889	112,368	11,479	6,726	11.4	4.4	6.7
Physical Changes in Stocks	590	279	-311	65			
Final Demand	**189,455**	**209,749**	**20,293**	**10,625**	**10.7**	**4.8**	**5.6**
less:							
Imports of Goods and Services (M)	86,854	95,491	8,637	5,281	9.9	3.6	6.1
GDP at Market Prices	**102,601**	**114,258**	**11,656**	**5,344**	**11.4**	**5.8**	**5.2**
less:							
Statistical Discrepancy	-307	-221	86	-531			
Adjusted GDP	**102,908**	**114,479**	**11,571**	**5,875**	**11.2**	**5.2**	**5.7**
less:							
Net Factor Payments (F)	14,976	17,677	2,701	1,859	18.0	5.0	12.4
GNP at Market Prices	**87,932**	**96,802**	**8,870**	**4,016**	**10.1**	**5.3**	**4.6**

B: Gross National Product by Origin

	2000	2001	Change in 2001	
		Preliminary		
	€m	€m	€m	%
Agriculture, Forestry, Fishing	3,157	3,315	158	5.0
Non-Agricultural: Wages, etc.	41,433	46,857	5,424	13.1
Other:	40,965	45,182	4,217	10.3
Adjustments: Stock Appreciation	-800	185		
Financial Services	-3,574	-4,038	-464	13.0
Statistical Discrepancy	-307	-221	86	-27.9
Net Domestic Product	**80,874**	**91,280**	**10,406**	**12.9**
less:				
Net Factor Payments	14,976	17,677	2,701	18.0
National Income	**65,898**	**73,603**	**7,705**	**11.7**
Depreciation	10,280	11,466	1,186	11.5
GNP at Factor Cost	**76,178**	**85,069**	**8,891**	**11.7**
Taxes less Subsidies	11,754	11,733	-21	-0.2
GNP at Market Prices	**87,932**	**96,802**	**8,870**	**10.1**

C: Balance of Payments on Current Account

	2000	2001	Change in 2001
		Preliminary	
	€m	€m	€m
Exports (X) less Imports (M)	14,035	16,877	2,842
Net Factor Payments (F)	-14,976	-17,677	-2,701
Net Transfers	994	455	-539
Balance on Current Account	**53**	**-345**	**-398**
as % of GNP	0.1	-0.4	-0.4

FORECAST NATIONAL ACCOUNTS 2002

A: Expenditure on Gross National Product

	2001	2002	Change in 2002				
	Preliminary €m	Forecast €m	€m		%		
			Value	Volume	Value	Price	Volume
Private Consumer Expenditure	55,144	59,413	4,269	1,820	7.7	4.3	3.3
Public Net Current Expenditure	15,288	17,460	2,172	841	14.2	8.3	5.5
Gross Fixed Capital Formation	26,670	27,341	671	39	2.5	2.4	0.1
Exports of Goods and Services (X)	112,368	121,808	9,440	5,460	8.4	3.4	4.9
Physical Changes in Stocks	279	120	-159	-85			
Final Demand	**209,749**	**226,142**	**16,394**	**8,074**	**7.8**	**3.8**	**3.8**
less:							
Imports of Goods and Services (M)	95,491	101,512	6,021	3,788	6.3	2.2	4.0
GDP at Market Prices	**114,258**	**124,630**	**10,373**	**4,285**	**9.1**	**5.1**	**3.8**
less:							
Statistical Discrepancy	-221	-210	12	-313			
Adjusted GDP	**114,479**	**124,840**	**10,361**	**4,598**	**9.1**	**4.8**	**4.0**
less:							
Net Factor Payments (F)	17,677	20,517	2,840	2,170	16.1	3.4	12.3
GNP at Market Prices	**96,802**	**104,323**	**7,521**	**2,428**	**7.8**	**5.1**	**2.5**

B: Gross National Product by Origin

	2001	2002	Change in 2002	
	Preliminary €m	Forecast €m	€m	%
Agriculture, Forestry, Fishing	3,315	3,200	-115	-3.5
Non-Agricultural: Wages, etc.	46,857	51,477	4,620	9.9
Other:	45,182	48,381	3,198	7.1
Adjustments: Stock Appreciation	185	455		
Financial Services	-4,038	-4,326	-288	7.1
Statistical Discrepancy	-221	-210	12	-5.3
Net Domestic Product	**91,280**	**98,978**	**7,698**	**8.4**
less:				
Net Factor Payments	17,677	20,517	2,840	16.1
National Income	**73,603**	**78,461**	**4,858**	**6.6**
Depreciation	11,466	12,437	971	8.5
GNP at Factor Cost	**85,069**	**90,898**	**5,829**	**6.9**
Taxes less Subsidies	11,733	13,425	1,692	14.4
GNP at Market Prices	**96,802**	**104,323**	**7,521**	**7.8**

C: Balance of Payments on Current Account

	2001	2002	Change in 2002
		Preliminary	
	€m	€m	€m
Exports (X) less Imports (M)	16,877	20,296	3,419
Net Factor Payments (F)	-17,677	-20,517	-2,840
Net Transfers	455	272	-183
Balance on Current Account	**-345**	**51**	**396**
as % of GNP	-0.4	0.0	0.4

FORECAST NATIONAL ACCOUNTS 2003

A: Expenditure on Gross National Product

	2002	2003	Change in 2003				
	Forecast €m	Forecast €m	€m Value	€m Volume	% Value	% Price	% Volume
Private Consumer Expenditure	59,413	63,853	4,441	2,079	7.5	3.8	3.5
Public Net Current Expenditure	17,460	19,020	1,560	663	8.9	4.9	3.8
Gross Fixed Capital Formation	27,341	28,733	1,391	486	5.1	3.3	1.8
Exports of Goods and Services (X)	121,808	132,372	10,564	7,304	8.7	2.5	6.0
Physical Changes in Stocks	120	275	155	205			
Final Demand	**226,142**	**244,253**	**18,111**	**10,739**	**8.0**	**3.1**	**4.7**
less:							
Imports of Goods and Services (M)	101,512	111,184	9,672	5,845	9.5	3.6	5.8
GDP at Market Prices	**124,630**	**133,069**	**8,439**	**4,893**	**6.8**	**2.7**	**3.9**
less: Statistical Discrepancy	-210	-584	-374	-314			
Adjusted GDP	**124,840**	**133,653**	**8,813**	**5,207**	**7.1**	**2.8**	**4.2**
less:							
Net Factor Payments (F)	20,517	22,803	2,285	1,724	11.1	2.5	8.4
GNP at Market Prices	**104,323**	**110,850**	**6,528**	**3,483**	**6.3**	**2.8**	**3.3**

B: Gross National Product by Origin

	2002	2003	Change in 2003	
	Forecast €m	Forecast €m	€m	%
Agriculture, Forestry, Fishing	3,200	3,260	60	1.9
Non-Agricultural: Wages, etc.	51,477	55,256	3,778	7.3
Other:	48,381	52,153	3,773	7.8
Adjustments: Stock Appreciation	455	13		
Financial Services	-4,326	-4,500	-174	4.0
Statistical Discrepancy	-210	-584	-374	178.5
Net Domestic Product	**98,978**	**105,598**	**6,620**	**6.7**
Net Factor Payments	20,517	22,803	2,285	11.1
National Income	**78,461**	**82,795**	**4,335**	**5.5**
Depreciation	12,437	13,438	1001	8.1
GNP at Factor Cost	**90,898**	**96,234**	**5,336**	**5.9**
Taxes less Subsidies	13,425	14,617	1,192	8.9
GNP at Market Prices	**104,323**	**110,850**	**6,528**	**6.3**

C: Balance of Payments on Current Account

	2002	2003	Change in 2003
	Forecast €m	Forecast €m	€m
Exports (X) less Imports (M)	20,296	21,188	892
Net Factor Payments (F)	-20,517	-22,803	-2,285
Net Transfers	272	-198	-470
Balance on Current Account	**51**	**-1,812**	**-1,863**
as % of GNP	0.0	-1.6	-1.7

The International Economy

General

International activity has weakened significantly in recent months and the outlook remains uncertain. Following a year of below-potential growth in 2001, the international economy underwent a tentative recovery in the first quarter of 2002. As the year progressed activity slowed and events over recent months regarding corporate governance, volatility in equity prices and the possibility of military action on Iraq have served to depress both consumer and business confidence. It now appears that the global recovery will be slower and weaker than previously forecast. The major world economies are now expected to return to potential growth levels during 2003.

US Economy

Following revisions that show that there were three successive quarters of negative growth in 2001, the US economy rebounded strongly in the first quarter of 2002. Gross Domestic Product increased at an annual rate of 5.0 per cent in the first quarter of 2002, its highest rate since the final quarter of 1999. However, the pace of the recovery has slowed and recent data releases confirm growth in GDP was 1.3 per cent in the second quarter of 2002. The decline in GDP growth in the second quarter primarily reflected lower growth in private inventory investment, residential fixed investment and in expenditure by both consumers and the government. These factors were partially offset by stronger export growth and an upturn in investment in equipment and software.

The tentative recovery in the world's largest economy is expected to continue for the remainder of the year, although growth rates are unlikely to match the inventory-led expansion of the first quarter. The rebound is not anticipated to be as robust as in previous recoveries. We are forecasting annual average GDP growth of 2.3 per cent for 2002. Assuming the recovery continues throughout 2003, GDP is expected to increase by 2.8 per cent for the year as a whole, a downward revision since the last *Commentary*.

The outlook for the industrial sector is beginning to deteriorate. Industrial activity declined marginally for the second consecutive month in September, but on an annual basis industrial production was 1.5 per cent above its September 2001 level. After a strong first quarter, the Purchasing Managers' Index from the Institute of Supply Management indicates that the manufacturing sector has weakened significantly. The index fell to 49.5 in September from 50.5 in August, where a reading below 50 indicates that the manufacturing sector is generally contracting. The survey shows declines in employment, backlog of orders and inventories while new orders, production and new export orders are expanding.

Following strong growth in the first quarter of 2002 investment has remained an important contributor to GDP growth in the US. Gross private domestic investment grew at 18.2 per cent in the first quarter of 2002, albeit from a low base, and was dominated by an expansion in inventory investment. Investment increased by 7.9 per cent in the second quarter and accounted for most of the 1.3 per cent increase in GDP. Strong growth in private inventories dominated the decline in fixed investment in the second quarter. Residential investment increased by 2.7 per cent in the second quarter and this growth is continuing and is likely to strengthen

given the prevailing low mortgage rates. Investment is expected to remain strong for the remainder of 2002 and continue to strengthen throughout 2003.

As mentioned in previous *Commentaries*, the household sector has proven to be one of the main drivers of growth in the US. Following a sharp rebound in the fourth quarter of 2001, personal consumption expenditure is continuing to grow, albeit at a lower rate. Consumer expenditure increased 1.8 per cent in the second quarter of 2002 supported by high auto sales, compared with an increase of 3.1 per cent in the first quarter. In the second quarter, consumer expenditure figures were largely driven by increases in expenditure on durable goods, while expenditure on non-durable goods fell sharply.

Recent data on retail sales, a leading indicator of consumer activity, show sharp declines for September. However, recent rallies in the equity market, if sustained, may help to bolster falling consumer confidence. The marked growth in mortgage refinancing, at prevailing lower long-term rates of interest, could help support consumer expenditure growth. The household sector will continue to add positively to growth in the US although it is likely its contribution will be lower in the future.

Conditions in the labour market are stabilising with almost flat employment growth in both the second and third quarter of 2002. Total employment increased marginally over the summer months, although much of the increase is attributable to teenage employment. Data for September indicate that decreases in employment in manufacturing and transport offset increases in finance and health services. As activity in the labour market traditionally lags that in other sectors of the economy, it will be some time before employment conditions improve, even if output recovers next year as forecast. We forecast average unemployment of 5.8 per cent in 2002, increasing further to 6 per cent in 2003, indicating that it will be some time before the US economy reaches full employment again.

The considerable productivity increases enjoyed during the first quarter of 2002, when the US had strong GDP growth combined with weak employment data, have begun to decrease. In the second quarter, productivity in the non-farm business sector increased by 1.5 per cent, down from 8.6 per cent from the first quarter, which is not unexpected given the lower growth in output and the weaker employment data. Unit labour costs increased in the non-farm business sector in the second quarter by 2.1 per cent, following a 4.6 per cent fall in the first quarter. However, real hourly compensation for the sector increased marginally by 0.2 per cent in the second quarter, in comparison to an increase of 2.2 per cent in the first quarter. We are forecasting an annual increase in hourly earnings of 3.6 per cent in 2002 and 3.8 per cent in 2003.

Monetary conditions continue to remain very loose and the interest rate continues to stand at a forty year low of 1.75 per cent. Given the uncertainty surrounding the strength of the recovery and the weaker dollar on the foreign exchange markets the direction of future interest rate changes is more uncertain. Although rates usually rise as the economy is expanding, falling business and consumer confidence and expenditures puts pressure on the Federal Reserve to ease rates further. However, it seems likely that rates will be held constant for the duration of this year with some increase in early 2003. This loose monetary stance is viable, as inflation has remained at very low levels. Inflation averaged 1.3 per cent for the first half

of the year although it has begun to increase during the third quarter and stood at 1.5 per cent in September. We are forecasting inflation of 1.6 per cent in 2002 for the year as a whole and it is estimated to increase to 2.4 per cent for 2003.

The continuing deterioration in the current account of the balance of payments remains a cause of concern for investors. The deficit increased to $130 billion in the second quarter of 2002 from $112.5 billion in the first quarter. The dollar has been under pressure on the foreign exchange markets throughout this year, although it has recovered slightly in August and September. The current account deficit is likely to worsen in the short run as the trade valuation dis-improvement outweighs the anticipated trade volume improvement resulting from the currency depreciation. We are forecasting a US current account deficit of 4.6 per cent of GNP for 2002 and 4.4 per cent of GNP in 2003.

Euro Area

Following moderate economic growth of 1.5 per cent in 2001, which weakened as the year progressed and ended with a quarter of negative growth, the euro area rebounded somewhat in the first quarter of this year. Preliminary estimates for the second quarter of 2002 show that economic activity has slowed and GDP on an annual basis by 0.6 per cent. As in the US, the recovery in the euro area has lost pace particularly in the German economy. Therefore, we are revising our growth rate for the euro area downwards to 1.1 per cent in 2002. On the basis of the expected world recovery, a rebound in euro area growth to 2 per cent is forecast in 2003.

Growth in the first quarter of 2002 was largely driven by net trade, which served to offset falling domestic demand. Preliminary data for the second quarter indicates more balanced growth from each of the components of demand. Although net trade made a positive contribution to first quarter growth, this is largely explained by falling imports, as export growth remained weak. On an annual basis there was no export growth in the second quarter, reflecting a stronger euro currency exchange rate and weak external demand. Imports grew by 1.7 per cent in the second quarter compared with a fall of 0.7 per cent in the first quarter, indicating some improvement in domestic demand. Net trade contributed 0.1 per cent to overall GDP growth in the second quarter as the growth in exports was largely offset by the improved import situation.

While annual growth rates indicate that domestic demand stabilised at –0.2 per cent in the second quarter, quarterly growth rates indicate some expansion in demand, albeit moderate. Consumption grew by 0.4 per cent in the second quarter following a contraction in the first quarter of 0.2 per cent, assisted by the effect of lower inflation on disposable income. Indicators of consumer confidence suggest a decline in the third quarter of 2002 as compared with the previous quarter. Government consumption has remained robust, increasing by 0.8 per cent and 0.4 per cent in the first and second quarters respectively.

Gross fixed capital formation contracted in the second quarter of 2002 for the sixth consecutive quarter, due in large part to the uncertainty for the world economy and reduced sentiment. On an annual basis investment contracted by 2.9 per cent falling to 0.8 per cent quarter on quarter. Industrial production fell by 0.9 per cent in July as compared with a 1 per cent rise in June. The Purchasing Managers' Index (PMI) for the

manufacturing sector fell in the second quarter, although the index remained marginally above the critical 50 point. However, the index fell below 50 in September, for the first time since February, pointing to a contraction in the manufacturing sector. The survey indicates that manufacturing output, new orders, and employment all declined during September. A marked decrease in the German index was recorded with higher oil prices adding inflationary pressure to input costs. The French and Italian indices point to a near stagnant manufacturing sector in September with both encountering falling employment while other euro zone countries such as Spain, Greece and Ireland managed to remain above the 50 threshold indicating an expanding sector.

The Harmonised Index of Consumer Prices (HICP) rate of inflation for September was 2.2 per cent compared with 2.1 per cent in August and 1.9 per cent in July. Thus inflation in the third quarter of this year has remained stubbornly above the 0-2 per cent target of the European Central Bank (ECB). Detailed HICP data for August indicate that the rise in inflation can mainly be attributed to services and processed foods. Prices of air transport and accommodation services contributed significantly to the services inflation. The index benefited from base effects arising from the fall in energy prices in August 2001. The outlook for inflation will be strongly influenced by oil price developments and exchange rate movements. The HICP is anticipated to fluctuate closely around the 2 per cent level for the remainder of the year, thus we are forecasting average inflation of 2.1 per cent for the year as a whole declining slightly to 1.8 per cent for 2003.

The European Central Bank (ECB) left rates unchanged at 3.25 per cent at its last meeting in October. The annual growth of the M3 measure of broad money supply was 7.0 per cent in September as compared with 7.0 per cent in the previous month, well above the ECB target rate of 4.5 per cent. On an annual basis the M3 money supply grew by 7.6 in the first quarter and declined slightly in the second quarter when it grew by 7.3 per cent.

The continued monetary expansion can, at least in part, be explained by increased demand for short-term liquid assets in portfolios, which, in turn, is due to the prevailing uncertainty in the financial markets. Notwithstanding this monetary expansion, the ECB is unlikely to tighten monetary policy as inflation is close to the range deemed necessary for price stability and the euro is continuing to appreciate. Interest rates are forecast to remain unchanged for the next three quarters, before rising to 3.5 per cent in the second half of 2003.

The standardised euro area unemployment rate stood at 8.3 per cent in August, unchanged from the previous two months. This constitutes a modest increase from the second quarter average of 8.2 per cent. A further deterioration in unemployment is likely due to the expected continued weak growth in the euro area in the third and fourth quarter of this year. Employment growth declined in the first quarter of this year to 0.1 per cent compared with the previous quarter and stabilised at this rate in the second quarter. The meagre employment growth in the second quarter was largely driven by growth in service sector employment especially in finance and business. In contrast, the deterioration in labour market conditions in the industrial sector continued unabated, with employment falling in construction by 0.3 per cent quarter on quarter.

Recent information regarding budgetary developments across the euro area indicate that many countries will have difficulty in achieving budgetary targets. Portugal has breached the 3 per cent of GDP deficit constraint imposed by the Stability and Growth Pact last year. France, Germany and Italy look set to do likewise this year. While some of the deterioration of the consolidated euro area budget balance is explained by slower than anticipated growth, the ECB point to a failure of many countries to use previous growth to improve their financial position. There have been calls from member states for additional flexibility in the Stability and Growth Pact and recently the deadline for reducing deficits to a position of balance or surplus has been extended to 2006.

In the second quarter of 2002 foreign exchange markets were characterised by a depreciation of the dollar against the other major currencies in contrast to the predominant trend since the euro's launch. The depreciation of the dollar in the second quarter was largely driven by concerns surrounding corporate governance and the magnitude of the current account deficit on the US Balance of Payments. In the third quarter of the year the dollar has begun to gather momentum and is appreciating, albeit marginally, against the euro. This is largely due to the poor economic conditions in the euro area in the third quarter. It is forecast that the euro will begin to gain strength in 2003, appreciating against the dollar. This appreciation will imply competitive losses in the euro area and may restrain the rebound in output growth somewhat.

UK Economy

Although most of the world's economies slowed significantly last year, the UK performed relatively robustly and grew by 1.9 per cent in 2001, down from 3.1 per cent in 2000. However, this was driven by a strong performance in the first half of the year while in the second half the deterioration in global economic conditions hampered growth in the UK. On an annual basis, GDP growth was 1.0 per cent in the first quarter of this year and 1.3 per cent in the second quarter. Preliminary estimates of third quarter GDP indicate that the economy grew by 1.7 per cent on an annual basis and by 0.7 per cent compared with the previous quarter, implying a tentative rebound in activity. The divergence between the various sectors of the UK's two-speed economy and the sustained fall in investment remain causes of concern. As a result we are forecasting a drop in UK GDP growth to 1.6 per cent for this year, before rising to 2.4 per cent in 2003.

The development of a two-speed economy in the UK may have implications for future growth prospects. For some time now the services sector has continued to expand rapidly while the industrial sector has been contracting. Recent figures show that the manufacturing sector, which accounts for approximately 20 per cent of UK GDP, remains in recession. The second quarter of this year saw the sector decline for the sixth consecutive quarter falling by 0.7 per cent on the previous quarter. Recent indicators point to a modest rebound in the sector in the third quarter, as the forecast rebound in world trade will help support the sector. The UK Purchasing Managers' index (PMI) remained above the critical 50 mark in August and September with expansions in new orders and prices

outweighing decreasing employment in the sector. In contrast to the poor performance of the manufacturing sector, the services sector has maintained impressive growth over the past two years. Following annual growth of 3.3 per cent in 2001, preliminary data for the third quarter indicates annual growth of 2.2 per cent, an increase from the 1.9 per cent annual growth recorded in the second quarter.

Household consumption, the economy's growth engine, maintained strong growth in 2001 despite the worsening international economic climate. Consumer spending grew by 4.6 per cent in 2001 and this robust growth continued in 2002. Household spending grew by 4.5 per cent on an annual basis in the first quarter in 2002 and by 4.1 per cent in the second quarter. Retail sales, a leading indicator of consumer spending, were up 6.3 per cent in September on the previous year, following a 7.6 per cent increase in August. Although continued high levels of consumer spending is expected for the remainder of the year, growth may slow somewhat mainly due to weaker equity prices. As in the US economy, maintaining the growth in personal consumption will be necessary to underpin economic growth.

Following growth of 1.9 per cent in 2000, investment contracted in 2001 by 0.4 per cent. Whole economy investment was flat in the second quarter of 2002 compared with the first quarter and declined 5.4 per cent on the previous year. Falling sentiment among investors is reflected in recent data releases. On an annual basis, business investment contracted by 10.8 per cent in the second quarter, while manufacturing investment fell by 13.3 per cent over the same period. Increased government investment of 33 per cent in the second quarter on an annual basis failed to provide the impetus to return the economy to potential growth. Uncertainty regarding both national and international conditions remaining high, coupled with equity market declines push back any revival in growth.

Conditions in the labour market remain strong with 5.2 per cent unemployment on an International Labour Office (ILO) basis in August, representing one of the lowest rates since the series began in 1984. Employment growth remains relatively strong, particularly in the services sector with strong growth in distribution, hotels and restaurants and public administration, education and health. Growth in manufacturing employment continues to decline. As activity in the labour market generally tends to lag economic activity, conditions are expected to abate somewhat in the coming months. We are forecasting an average unemployment rate of 5.5 per cent this year, rising to 5.6 per cent in 2003.

The underlying inflation rate, excluding mortgage payments, rose to 2.1 per cent in September, compared to 1.9 per cent in August. However, inflation remains below the Bank of England's official 2.5 per cent target. The main driving forces behind the increase are higher oil and manufacturing prices. The Retail Price Index (RPI) rose to 1.7 per cent in September compared to 1.4 per cent in August, with an important contributory factor being the persistent rise in house prices. The outlook for inflation remains benign in the short term and we forecast annual inflation of 1.7 per cent for 2002. This gives the Monetary Policy Committee (MPC) room to manoeuvre with interest rates. Three of the nine members of the MPC voted for a rate cut in their meeting in October, the first votes for a cut in nine months. Interest rates now stand at 4.0 per cent and a cut would help to boost investment. If economic conditions

deteriorate further in the coming months a rate cut is likely in the fourth quarter of the year.

Rest of the World

Recent data releases confirm signs of a tentative recovery in Japan. Following five quarters of contraction, the economy grew by 0.6 per cent in the second quarter of 2002, compared with the first quarter. Preliminary estimates for the first quarter of the year indicated the economy grew by 1.4 per cent, but this figure has been revised down to flat growth, due to a revised methodology of national income accounting. External demand is driving the recovery in Japan, with exports rising by 5.7 per cent in the first half of the year relative to the second half of 2001. However, domestic demand remains weak and exports are starting to slow, caused by falling US demand. Industrial production fell in September by 0.3 per cent on the previous month but increased by 4.9 per cent on a year earlier. Consumption remains weak because of ongoing deflation. In September the Consumer Price Index declined at an annual rate of 0.6 per cent. Weak consumption and increasing unemployment are continuing to dampen domestic demand. In September unemployment increased by 2.2 per cent on the previous year and the unemployment rate is now 5.4 per cent. We forecast a decline in GDP of 0.5 per cent this year for Japan, a downward revision since our last *Commentary*.

Looking forward, prospects for a recovery in Japan depend on reform of the banking sector. Bad and potentially non-performing loans are putting huge pressure on Japan's major banks, and failure to address structural problems in the banking sector could lead to the economy slipping back into contraction. Efforts by the Japanese government and the Bank of Japan are underway to solve the problem by 2004. Despite intervention by the monetary authorities the Yen continues to appreciate against the dollar, and is forecast to appreciate further. The Yen fell slightly in the third quarter of 2002 and this should stimulate export growth, however, the appreciation against the dollar has resumed. GDP growth is expected to recover in 2003 and we forecast growth of 0.8 per cent.

TABLE 1: Short-term International Outlook

	Output*		Consumer Prices		Hourly Earnings		Unemployment Rate		Current Account Balance	
			Percentage Change				%		% of GNP	
Country	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**
UK	1.6	2.4	1.7	2.7	4.1	4.5	5.5	5.6	-2.1	-2.6
Germany	0.6	1.5	1.4	1.5	3.2	3.0	8.7	8.5	1.6	1.2
France	1.4	2.3	2.0	1.5	3.2	3.3	9.4	9.3	2.2	1.7
Italy	0.9	2.0	2.3	2.1	3.1	3.8	9.7	9.5	-0.3	-0.6
Euro Area	1.1	2.0	2.1	1.8	3.5	3.9	8.6	8.4	0.4	0.4
USA	2.3	2.8	1.6	2.4	3.6	3.8	5.8	6.0	-4.6	-4.4
Japan	-0.5	0.8	-1.2	-0.8	0.7	0.3	6.3	6.3	2.5	2.7
OECD	1.4	2.3	1.6	1.7	3.6	3.9	7.0	6.6	-0.9	-1.1
Ireland	2.5	3.3	4.7	4.0	8.1	5.7	4.5	4.8	0.0	-1.6

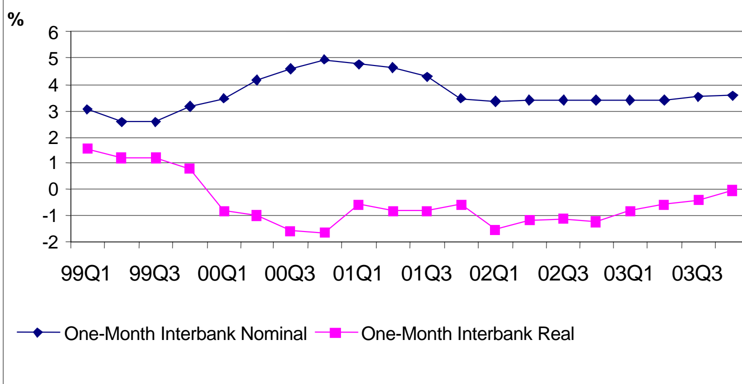
*Output growth as measured in GDP terms.

Context for Ireland

The growth prospects for the Irish economy rest largely upon the international economic environment. Output growth is quite low in almost all regions at present with an accompanying decline in trade growth. In

Figure 1: Interest

Per Cent Per Annum, Quartely Averages



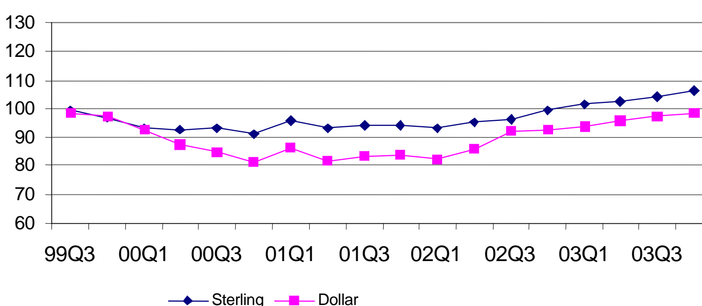
response to the deterioration in the economic environment, monetary conditions have been kept loose internationally. The spectre of deflation is a worry for monetary authorities so the pressure for further interest rate cuts to boost activity has been resisted so far. In addition, fiscal policies have been growth supportive in most economies over the last year. Our forecasts are based on a recovery of US and EU growth beginning in the first half of next year, though considerable downside risks remain given the turmoil in international equity markets and the prospects of war.

The main threat for the Irish economy arises from our forecast appreciation of the euro above parity with the dollar during 2003. A sharper euro appreciation than expected combined with continuing rapid rises in domestic labour costs would lead to a larger competitive loss for the economy than anticipated. Such a loss of competitiveness would have severe implications for employment and growth in the economy. The prospects for interest rates are to remain at current levels until the middle of 2003 and then rising moderately thereafter as economic growth resumes towards trend levels.

The Domestic Economy

Figure 2: Exchange Rates

Foreign Currency Per Euro, Quarterly Averages, 1999=100



General

The *National Income and Expenditure* accounts indicate that the Irish economy grew at rates near its potential rates in 2001. The contrast within the year was quite stark with double-digit rates in the first half matched by near stagnation in the second half. Real GDP grew by 5.7 per cent and real GNP by 4.6 per cent. We have for some time argued that such growth rates were unsustainable and that the Irish economy would begin to slow. In any event throughout 2001 the economy had suffered a series of shocks so the outcome for the year should be viewed as a relatively "soft landing" from the record growth rates of previous years.

The first half of 2002 would indicate that the economy is still experiencing reasonable growth though the contribution from the various sectors is more mixed. Growth this year is estimated to have slowed, with real GDP increasing by 4.0 per cent and real GNP by 2.5 per cent. Based on the assumptions and forecast for the external environment outlined in the *International* section, our forecast for 2003 is that the economy will begin to grow at higher rate but still below potential in 2003. The expectation is that real GDP growth will be 4.2 per cent and real GNP growth will be 3.3 per cent next year.

Exports

The annual *National Income and Expenditure 2001* show that the value of exports of goods and services amounted to over €112 billion. The annual results have revised the growth rates contained in preliminary estimates and now show slower growth rates for total exports of 11.4 per cent in value terms and by 6.7 per cent in volume terms, implying a price deflator of 4.4 per cent in 2001.

Quarterly National Accounts for the first quarter of this year show that the volume of exports of goods and services rose by an annual rate of 8.3 per cent. In the first six months of 2002, visible exports were 2.7 per cent higher in volume than the first six months of 2001. This low growth reflects in part a sharp decline in export volumes in June. Volume of production figures for manufacturing indicate a slower trend. Given the uncertain international environment already outlined in this *Commentary* it seems unlikely that the pattern of slower growth will be reversed significantly in the second half of the year. Thus, we have revised down our forecast for the volume growth of both visible exports and merchandise exports to 5.5 per cent and 4.8 per cent respectively. It has been a difficult year for tourism exports, while other service exports are also likely to experience slower growth. Thus, as shown in Table 2, total exports of goods and services in 2002 are forecast to rise by 8.4 per cent in value and by 4.9 per cent in volume terms. This implies an export price deflator of 3.4 per cent. If our forecasts are correct this will represent the lowest volume growth for exports since 1991.

Although there is the likelihood of a recovery in world trade next year, we anticipate that the rate of growth in visible exports will remain slow, reflecting domestic competitiveness losses and the impact of euro appreciation. A small recovery is expected for tourism exports as economic growth in the US and Europe improves. Thus, exports of goods and services are forecast to increase by just 6 per cent in volume and by 8.7 per cent in value in 2003.

TABLE 2: Exports of Goods and Services

Preliminary

	2000	% Change in 2001		2001
	€m	Volume	Value	€m
Agricultural	4,430	-11.8	-8.0	4,078
Manufactured	72,197	7.0	12.1	80,945
Other Industrial	5,540	-1.7	3.4	5,726
Other	1,612	5.5	10.0	1,774
Total Visible	**83,780**	**5.4**	**10.4**	**92,523**
Adjustments	-2,858	17.0	39.0	-3,972
Merchandise	**80,922**	**5.0**	**9.4**	**88,551**
Tourism	2,851	1.2	8.3	3,088
Other Services	17,116	15.6	21.1	20,729
Exports of Goods And Services	**100,889**	**6.7**	**11.4**	**112,368**

Forecasts

	2001	% Change in 2002		2002	% Change in 2003		2003
	€m	Volume	Value	€m	Volume	Value	€m
Agricultural	4,078	2.2	5.3	4,293	3.1	5.6	4,532
Manufactured	80,945	6.0	9.7	88,805	7.1	9.6	97,298
Other Industrial	5,726	1.7	4.9	6,004	3.1	5.2	6,314
Other	1,774	1.6	4.7	1,858	3.0	5.4	1,958
Total Visible	**92,523**	**5.5**	**9.1**	**100,960**	**6.6**	**9.1**	**110,102**
Adjustments	-3,972	20.0	22.4	-4,862	15.0	16.2	-5,647
Merchandise	**88,551**	**4.8**	**8.5**	**96,098**	**6.2**	**8.7**	**104,454**
Tourism	3,088	-2.0	-1.0	3,057	1.3	4.1	3,183
Other Services	20,729	6.0	9.3	22,654	5.8	9.2	24,735
Exports of Goods And Services	**112,368**	**4.9**	**8.4**	**121,808**	**6.0**	**8.7**	**132,372**

Stocks

The National Accounts for 2001 reveal a smaller increase in stocks than that which occurred in 2000, particularly in non-agricultural non-intervention stocks. A further slowdown in the increase in stocks is projected for 2002. For the year as a whole a level of €120 million is forecast for total stocks. With movements in farm stocks likely to moderate in 2003 an increase in industrial and distribution stocks is projected to result in stock levels increasing by €275 million.

TABLE 3: Stock Changes

	2000	Change in Value	2001	Change in Value	2002	Change in Value	2003
	€m	€m	€m	€m	€m	€m	€m
Farm Stocks	-162	136	-26	236	210	-20	190
Irish intervention Stocks	-114	129	15	-15	0	0	0
Other Non-Agricultural Stocks	866	-576	290	-380	-90	175	85
Total	**590**	**-311**	**279**	**-159**	**120**	**155**	**275**

Investment

Official figures confirm the downturn in investment in the economy. Annual figures for 2001 show that overall investment fell by 0.5 per cent in volume terms in 2001, due to a contraction of 6.5 per cent in investment in machinery and equipment. With a reported value increase of 7.7 per cent for total investment this implies that the price deflator remained strong at around 8 per cent. The first quarter National Accounts show that gross domestic fixed capital formation contracted by 5.1 per cent in volume terms and grew by just 1 per cent in value terms in the first three months of 2002. Much of this was due to a sharp decline in investment in machinery and equipment although the volume of building investment also contracted.

This is confirmed by the evidence of other indicators. Imports of capital goods for the first five months of the year are 8.7 per cent lower than in 2001. Employment in building and construction in the first eight months of 2002 is 2.9 per cent lower than last year. An annual increase in total investment in building and construction of just 0.7 per cent in volume and 4.4 per cent in value is forecast for 2002. Allowing for an expected decline of 1.0 per cent in volume for investment in machinery and equipment, the forecast increase in total gross capital formation in 2002 is 0.1 per cent in volume terms and 2.5 per cent in value terms. This implies an overall investment deflator of 2.4 per cent, significantly lower than in recent years.

TABLE 4: Gross Fixed Capital Formation

Preliminary

	2000 €m	% Change in 2001 Volume	% Change in 2001 Value	2001 €m
Housing	8,157	6.5	17.0	9,541
Other Building	7,632	3.0	11.5	8,509
Building and Construction	15,789	4.8	14.3	18,050
Machinery & Equipment	8,978	-6.5	-4.0	8,620
Total	24,767	-0.5	7.7	26,670

Forecasts

	2001 €m	% Change in 2002 Volume	% Change in 2002 Value	2002 €m	% Change in 2003 Volume	% Change in 2003 Value	2003 €m
Housing	9,541	2.2	7.5	10,258	1.0	5.1	10,785
Other Building	8,509	-1.0	1.0	8,592	1.5	4.5	8,983
Building and Construction	18,050	0.7	4.4	18,850	1.2	4.9	19,768
Machinery & Equipment	8,620	-1.0	-1.5	8,491	3.0	5.6	8,965
Total	26,670	0.1	2.5	27,341	1.8	5.1	28,733

With interest rates continuing to remain low and the prospect of some recovery in international economic growth it seems likely that this will bring about some recovery in private sector investment in 2003. The public finances are likely to constrain public sector investment although some

expansion of this element is still anticipated. Thus, building and construction investment is forecast to grow by 1.2 per cent in volume terms in 2003. On the basis of forecast growth in investment in plant and machinery of 3.0 per cent next year, overall investment is expected to expand by 1.8 per cent next year. However, the price deflator for total investment is expected to remain moderate at 3.3 per cent, giving rise to a value increase of 5.1 per cent in 2003.

Consumption

The National Accounts contain a higher growth rate for personal consumption than previously indicated. Consumption is now estimated to have amounted to €55 billion in 2001, a value increase of 9.6 per cent. On the basis of a price deflator of 4.2 per cent volume growth in personal consumption for 2001 is now estimated at 5.1 per cent. According to the Quarterly National Accounts, the value of personal consumption rose by 8.5 per cent in the first quarter for 2002. The volume of personal consumption is estimated to have risen by 3.6 per cent implying a consumption deflator of 4.7 per cent.

Figures for 2002 indicate that the volume of retail sales growth has been slow throughout the eight months to August 2002. In volume terms the total retail sales index grew by just 0.6 per cent. Excluding the more volatile motor sales results in only a slightly higher volume growth rate of 1.4 per cent. Given the uncertainty about the economic outlook it seems unlikely that there will be any rebound in consumer spending in the latter half of this year. The IIB Bank/ESRI monthly Consumer Sentiment Index shows that consumer sentiment has declined in recent months (see Box A). While there is not a direct link between the index and consumer spending it does suggest that personal consumption growth will be lower in the short term. Thus, total personal consumption is forecast to rise by 3.3 per cent in volume and 7.7 per cent in value, implying a personal consumption deflator of 4.3 per cent. .

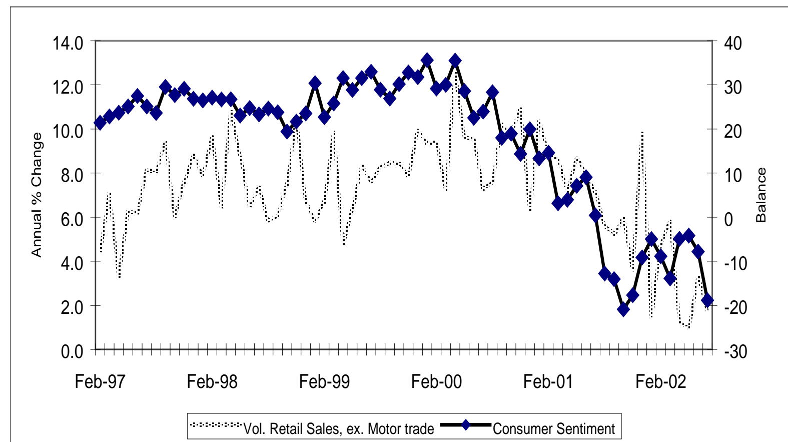
A number of competing pressures on consumer expenditure growth are expected next year. Continuing uncertainty with regard to the labour market will reduce consumer spending while the special savings scheme will continue to take money out of the economy. However, further, albeit moderate, growth is anticipated in incomes and employment. Therefore, on balance a marginally higher rate of increase in the volume of personal consumption is forecast for 2003 at 3.5 per cent. Based on a more moderate rate of increase in the consumer expenditure deflator than in 2002 the value increase in personal consumption is projected to slow to 7.5 per cent.

Box A: The IIB Bank/ESRI Consumer Sentiment Index

Given the lag that exists in the production of some official statistics economic forecasters rely on other information sources such as anecdotal evidence and survey results. In the US two measures of consumer confidence receive much attention, both domestically within the US but also internationally – the University of Michigan Index of Consumer Sentiment and the Conference Board Consumer Confidence Index. Such indicators have a broader use than solely as an input to model based forecasts. They provide some measure of consumer sentiment and thus are an additional piece of information that may be used by those analysing, or interested in, the health of the economy.

Consumer spending is an important element of economic growth. The *National Income and Expenditure Accounts 2000* show that in 2000 the value of personal consumption accounted for 49 per cent of GDP in Ireland. In general the different indices, whether measuring business or consumer confidence are produced in a similar manner. Usually the indices are based on responses to a number of questions. The indicator is calculated from the balance of responses i.e. positive responses less negative responses to a series of key questions regarding the overall economy, the labour market, the households' financial situation and purchasing plans.

Figure A1: Confidence Indicator and Retail Sales



Source: IIB Bank/ESRI.

Consumer sentiment is shown to be at its peak in April 2000. Thereafter, the monthly balance follows a downward trend and moves into negative territory after August 2001. The decline in Irish consumer confidence starts somewhat earlier than might be expected given the strength of the economy at the time. Official figures indicate that 2000 was a year of very strong economic and personal consumption growth. However, during 2000 the European Central Bank raised interest rates and inflation rose dramatically. It may also be that sentiment was adversely influenced by an increasing focus on the costs associated with the exceptionally rapid growth of the previous years such as traffic congestion, higher inflation, and concerns about the property market. Consumer confidence in Europe also declined around this time. In contrast to Ireland consumer confidence in Europe, having initially declined remained broadly

stable until around the end of Quarter 1, 2001 when consumer confidence again began to fall.

Consumer sentiment weakened again in October 2002. The overall Consumer Sentiment Index was at 65.9 in October. This compares to a figure of 70.3 in September. The corresponding figure for October 2001 was 81.1. The three month moving average decreased to 69.8 from the 74 recorded in September and compares with a value of 81.1 in October 2001. The decline in confidence of Irish consumers mirrors sharp declines in consumer confidence in both the US and UK. It should be remembered that this index measures change in consumer sentiment not consumer spending. A decline in spending of a similar scale to the drop seen in sentiment is not anticipated. However, the decline in consumer sentiment does suggest that consumers are more cautious about the future and so may signal a period of slower growth in personal consumption.

TABLE 5: Consumption Indicators

	Annual Percentage Change						
	1997	1998	1999	2000	2001	2002 Forecast	2003 Forecast
Consumption Value							
Personal Consumption	10.2	11.9	12.6	13.5	9.6	7.7	7.5
Retail Sales Index, Value	9.0	9.5	11.4	16.3	5.9	9.5	9.6
Divergence	1.2	2.4	1.2	-2.8	3.7	-1.8	-2.1
Consumption Volume							
Personal Consumption	7.4	7.8	9.0	9.0	5.1	3.3	3.5
Retail Sales Index, Volume	7.9	7.8	9.5	11.9	3.1	5.6	5.7
Divergence	-0.5	0.0	-0.5	-2.9	2.0	-2.3	-2.2
Consumer Prices							
Personal Consumption Deflator	2.6	3.8	3.3	4.1	4.2	4.3	3.8
Retail Sales Index Deflator	1.0	1.6	1.7	3.9	2.7	3.7	3.7
Consumer Price Index	1.5	2.4	1.6	4.5	5.6	4.7	4.0

The main revision contained in the annual National Accounts was to the growth of government consumption. Having previously reported volume growth for 2001 of 5.6 per cent, this was revised sharply to 10.8 per cent, following more complete data on spending by local government. According to the Quarterly National Accounts, Government consumption in the first quarter of 2002 increased by 5.3 per cent in volume and by 12.3 per cent in value, resulting in a public expenditure deflator of 6.6 per cent. Given the rise in public sector employment in the first half of the year and the spending trends in the monthly exchequer returns an annual growth rate of 5.5 per cent is forecast in volume terms for 2002. With cost pressures increasing the deflator to 8.3 per cent a value increase of 14.2 per cent is forecast for this year. On the assumption that public expenditure growth is in line with expectations, a more moderate volume growth rate of 3.8 per cent is forecast for next year and in value terms the growth rate is forecast to slow to 8.9 per cent. The price deflator for government consumption is forecast to moderate but remain high at 4.9 per cent in 2003.

Final Demand

On the basis of official figures, final demand increased in 2001 by 5.6 per cent in volume and by 10.7 per cent in value. This reflects real growth of 4.4 per cent in domestic demand and 6.7 per cent in the volume of exports. Both domestic demand and exports are expected to grow by a slower rate this year. In volume terms, domestic demand, excluding stocks, is forecast to increase by 2.8 per cent, while exports of goods and services are forecast to grow by 4.9 per cent. Thus total final demand in 2002 is projected to increase by 3.8 per cent in volume and by 7.8 per cent in value. The rate of growth in final demand is forecast to increase in 2003 to 4.7 per cent in volume terms and 8 per cent in value, based on improved growth in both domestic demand and exports of goods and services.

Imports

Official figures show that the volume of imports of goods and services rose by 6.1 per cent and by 9.9 per cent in value in 2001. Balance of Payments statistics show growth in the value of merchandise imports of 2.9 per cent in 2001, while the value of service imports grew substantially by nearly 21 per cent. For the first six months of 2002 the Balance of Payments show that the value of merchandise import growth remains very slow at just 0.3 per cent and service imports grew by 5.8 per cent in value. Slow growth in investment and production will reduce growth in merchandise imports and with subdued levels of domestic activity forecast for this year, it seems unlikely that service import growth will reach the recorded estimate for last year. Growth in imports of total goods and services is expected to be 4.0 per cent in volume terms this year. Allowing a lower import deflator of 2.2 per cent this implies a value increase of 6.3 per cent in 2002.

Based on our forecast that there is some improvement in economic activity in 2003 we anticipate that import volume growth will also improve. Visible imports are projected to grow by 4.7 per cent in volume and by 8.4 per cent in value, implying an import price deflator of 3.6 per cent. Some increase in tourist expenditure abroad and imports of other services is also anticipated. Thus, growth of total imports in volume terms is forecast at 5.8 per cent and 9.5 per cent in value terms. These forecasts suggest a higher import price deflator in 2003 of 3.6 per cent.

TABLE 6: Imports of Goods and Services

Preliminary

	2000 €m	% Change in 2001 Volume	% Change in 2001 Value	2001 €m
Capital Goods	8,071	-10.1	-7.1	7,502
Consumer Goods	11,478	3.8	7.0	12,286
Intermediate Goods:				
Agriculture	894	2.2	5.5	943
Other	33,215	0.5	3.3	34,328
Other Goods	2,164	-4.3	-2.1	2,119
Total Visible	**55,823**	**-0.5**	**2.4**	**57,178**
Adjustments	-3,034	-11.5	-5.0	-2,884
Merchandise Imports	**52,789**	**0.1**	**2.9**	**54,294**
Tourism	2,750	11.4	16.9	3,216
Other Services	31,315	15.6	21.3	37,981
Imports of Goods and Services	**86,854**	**6.1**	**9.9**	**95,491**

Forecasts

	2001 €m	% Change in 2002 Volume	% Change in 2002 Value	2002 €m	% Change in 2003 Volume	% Change in 2003 Value	2003 €m
Capital Goods	7,502	1.0	2.5	7,690	5.3	8.7	8,357
Consumer Goods	12,286	3.2	4.5	12,844	4.7	8.9	13,985
Intermediate Goods:							
Agriculture	943	3.0	4.1	982	5.1	7.7	1,058
Other	34,328	3.0	4.9	35,994	4.6	8.4	39,005
Other Goods	2,119	3.2	5.1	2,226	3.7	6.3	2,366
Total Visible	**57,178**	**2.8**	**4.5**	**59,737**	**4.7**	**8.4**	**64,772**
Adjustments	-2,884	-5.0	-5.0	-2,739	15.0	15.0	-3,150
Merchandise Imports	**54,294**	**3.2**	**5.0**	**56,997**	**4.2**	**8.1**	**61,622**
Tourism	3,216	4.7	8.2	3,478	5.0	8.7	3,780
Other Services	37,981	5.0	8.0	41,037	8.0	11.6	45,782
Imports of Goods And Services	**95,491**	**4.0**	**6.3**	**101,512**	**5.8**	**9.5**	**111,184**

Balance of Payments

Balance of Payments statistics for the second quarter 2002 contain major revisions to earlier published results arising from updated figures for merchandise trade and from revised company returns for services, profits and investment transactions. The effect of these revisions is to change the previously reported deficit of €615 million in 2000 to a small surplus of €53 million and to reduce the reported deficit in 2001 from €1,145 million to a deficit of €345 million.

On the basis of our export and import forecasts, the visible trade balance this year will increase by about 16.6 per cent, although growth will slow next year to 10 per cent. With both the merchandise trade balance and the deficit on service trade expected to grow, the surplus on trade in goods and services should increase by 20.3 per cent this year. With growth in the deficit on service trade expanding faster than merchandise trade the trade surplus in goods and services is forecast to show much more moderate growth in 2003 of just 4.4 per cent.

The low levels of activity forecast for the international and domestic economy are expected to be reflected in the credit and debit flows that constitute the balance of payments, as is evident from Table 7. On the basis of these forecasts the rise in net factor flows are expected to slow to 16.1 per cent in 2002 and slow again in 2003 to 11.1 per cent. Net current transfers are expected to continue their decline. Thus, the current account of the balance of payments is expected to show a small surplus this year of just €51 million. However, a substantial deficit is forecast for 2003 of €1.8 billion, equivalent to 1.6 per cent of GNP. The turnaround in the current account balance is, in part at least, a reflection of the much slower anticipated growth in the trade balance.

TABLE 7: Balance of Payments

	2000 €m	Change %	2001 €m	Change %	2002 €m	Change %	2003 €m
Visible Trade Balance	27,957	26.4	35,346	16.6	41,223	10.0	45,330
Adjustments	176		-1,089		-2,123		-2,497
Merchandise Trade Balance	**28,133**	**21.8**	**34,257**	**14.1**	**39,101**	**9.5**	**42,833**
Service Trade Balance	-14,098	23.3	-17,380	8.2	-18,804	15.1	-21,644
Trade Balance in Goods and Services	**14,035**	**20.3**	**16,877**	**20.3**	**20,296**	**4.4**	**21,188**
Total Debit Flows	-45,065	5.7	-47,633	6.9	-50,934	5.8	-53,876
Total Credit Flows	30,089	-0.4	29,956	1.5	30,416	2.2	31,073
Net Factor Flows	**-14,976**	**18.0**	**-17,677**	**16.1**	**-20,517**	**11.1**	**-22,803**
Net Current Transfers	**994**	**-54.3**	**455**	**-40.2**	**272**	**-172.8**	**-198**
Balance on Current Account	**53**		**-345**		**51**		**-1,812**
Capital Transfers	1,206	-44.2	673	-7.5	622	-14.5	532
Effective Current Balance	**1,259**		**328**		**673**		**-1,280**

Gross National Product

Despite the revisions to the official estimates of GNP already discussed, the revised estimates for the volume growth of GNP at 4.6 per cent in 2001 were not substantially different from preliminary figures already released. The revisions do change the contribution to growth from the different

elements with the government sector now making a far greater contribution. Reflecting the changes to the official estimates the terms of trade adjustment are now more favourable than previously estimated, leaving the official estimate of gross national disposable income (GNDI) at 4.2 per cent, compared to 3.7 per cent previously.

The terms of trade adjustment is expected to show a further improvement in 2002. Combined with a reduction in the level of net current transfers, this is forecast to result in an increase of 3.7 per cent in GNDI compared with a forecast increase of 4 per cent in real GDP and 2.5 per cent in real GNP. An anticipated decline in the terms of trade and broadly unchanged net transfers in 2003 are projected to further reduce growth in real GNDI, which is forecast to increase by 2.1 per cent in 2003, while real GDP grows by 4.2 per cent and real GNP by 3.3 per cent.

Agriculture

The agricultural sector performed moderately well in 2001, despite the negative impact of the foot and mouth scare and the subsequent measures to prevent the spread of the disease. The total value of agricultural output increased by 3.3 per cent over the year, driven by an 8.2 per cent increase in the value of milk. The value of livestock products was roughly unchanged over last year, although this masks a sharp fall in the value of cattle, which was offset by substantial increases in the output value of sheep and pigs. The decline in the value of cattle was mainly due to the impact of the second BSE crisis, since then the recovery in per capita consumption of beef across the EU to levels observed prior to the crisis has been faster than most commentators expected. Intermediate consumption grew by 4.5 per cent, largely caused by higher fertiliser and animal feed prices, and net subsidies increased by 6.6 per cent in 2001. Consequently, agricultural incomes grew by 4.2 per cent in nominal terms.

A fall in margins for all the main agricultural enterprises is likely in 2002 owing to unfavourable weather conditions, falling output prices and rising input prices. Data on agricultural prices show that the output price index fell in July by 6.5 per cent compared with the previous year, driven by decreases in sheep, cows for slaughter, store cattle, finished cattle, pigs and milk. The decline is most marked in the output price of sheep and pigs, which fell by 21.7 per cent and 11.8 per cent respectively on an annual basis. The fall in the output value of sheep is attributable to high prices in 2001 because of the banning of UK exports of lamb during the foot and mouth outbreak. The return of UK lamb exports to EU markets has led and is continuing to lead to declining Irish and EU price levels. The agricultural input price index increased by 0.8 per cent in July on an annual basis. Veterinary expenses and feeding stuffs increased by 4.6 per cent and 1.3 per cent respectively, while energy and fertilisers fell by 3.7 per cent and 2.6 per cent respectively.

We expect gross agricultural output to contract by 2.1 per cent in volume terms in 2002. Growth is expected to return to the sector in 2003, with gross agricultural output forecast to increase by 2.3 per cent.

Industry

Preliminary estimates from the CSO indicate that the volume of production in industry, including building, grew by 7.5 per cent in 2001, which is a

significant reduction compared to growth of 13.3 per cent in 2000. The Quarterly National Accounts suggest that growth in the industrial sector in 2001 slowed considerably over the course of the year. Industrial output increased by 18.7 per cent in the first half of the year on an annual basis, before falling by 1.1 per cent in the second half of the year. The poor performance in the second half of the year may be explained by the decline in industrial production in the US and the euro area as manufacturing industries worldwide tend to be more integrated than in other sectors.

Activity in the industrial sector has improved this year and industrial output expanded by 3.2 per cent in the first quarter of the year. Although growth is expected to continue for the remainder of the year it may flatten out towards the end. Recent survey data suggest that this is starting to happen. The NCB Purchasing Managers' Index signalled a contraction in the manufacturing sector in October, when the indicator fell to 48.8, its lowest level since December 2001. The survey indicates that lower domestic and foreign demand contributed to a decline in new orders and weak output growth. The forward-looking components of the IBEC-ESRI Monthly Industrial Survey also indicate that industrial output is likely to slow down for the remainder of the year. We are forecasting gross output in industry to increase by 4.0 per cent this year. However, as the global recovery has slowed and is weaker than anticipated, we forecast gross output in industry to increase by 4.3 per cent next year, a downward revision from the previous *Commentary*.

Services

The volume of GDP in the services sector increased by nearly 7.2 per cent in 2001 compared to 9.7 per cent in 2000. As the economy slowed in the latter part of 2001, the broad services sector declined sharply. A strong recovery in the sector in the first quarter of 2002 is apparent on the basis of the survey evidence contained in the NCB Monthly Report on Services. Activity in the sector seems to have held up well over the middle of the year as business activity measures continued to increase, albeit moderately. There are problems for the sector from sharp increases in input costs and charges, which are becoming a cause of concern.

As already outlined in this *Commentary*, personal consumption growth is expected to be lower in 2002. The adjustment of expectations to slower growth in incomes and rising unemployment is also expected to have an impact on the services sector. The slowdown in domestic demand growth should be reflected in a somewhat lower rise in service output this year. An increase of 4.3 per cent in the volume of GDP in services is therefore forecast for 2002.

Given our forecasts for personal consumption and personal disposable income growth, the demand for services in the Irish economy is likely to be robust throughout 2003. With overall economic activity expected to recover from the second half of this year, we are forecasting average growth in the volume of services output of 3.8 per cent for 2003 as a whole.

Employment

The latest Quarterly National Household Survey (QNHS) for the second quarter of 2002 shows that employment in the Irish economy grew by 2.0 per cent on an annual basis. This compares with the 2.9 per cent growth recorded for the whole of 2001 and 4.7 per cent for 2000. In absolute terms this represents an increase of 33,400 persons to 1.75 million persons employed in the second quarter of 2002. The number of women at work increased by over 30,000 whereas the male workforce increased by just over 3,000. On a quarter on quarter basis employment grew marginally in the second quarter of 2002 by 0.3 per cent.

Most of the employment increase was accounted for by the education, health and public administration and defence sectors, which consist predominantly of public sector workers. The industrial sector on the other hand saw a decline in its numbers employed. According to the QNHS the numbers employed in other production industries in the second quarter of 2002 was down 2.5 per cent in the quarter and 4.7 per cent in the year. Supplementary data from the Industrial Employment release for March 2002 also shows a decline of employment in this sector, of 2 per cent in the quarter and 3.8 per cent in the year. The manufacture of electrical equipment recorded the biggest decrease in employment in the year.

The labour force increased by 2.5 per cent in the year to reach 1.83 million people. This comprised an increase of 32,900 females and 12,300 males. Females now account for almost 42 per cent of the labour force compared with 36 per cent a decade ago. Demographic factors including migration are estimated to have added 41,800 persons to the labour force over the year, with the balance of 3,400 being due to changes in labour force participation.

The latest QNHS indicates that the unemployment rate was 4.2 per cent in the second quarter of 2002 compared with 4.4 per cent in the first quarter of 2002 and 3.9 per cent for the whole of 2001. In absolute terms there were 77,200 unemployed in the second quarter of 2002, a decrease of 2,800 from the previous quarter and an increase of 11,800 on an annual basis. Males accounted for most of the annual increase in unemployment.

The latest Live Register Analysis for September 2002 indicates that the register rose by 14.8 per cent on an annual basis. Somewhat surprisingly the seasonally adjusted monthly change was a decline of 2,400 given the rather bleak perceptions about economic and labour market conditions derived from survey sources. The standardised unemployment rate in September was 4.3 per cent, down from the previous month and reversing a near unbroken upward trend since the start of 2001.

It is forecast that total employment will average 1.767 million persons this year rising to 1.792 million next year. In percentage terms this implies that employment growth will average 1.4 per cent in both 2002 and 2003. Employment in the industrial and services sectors is expected to slow to just 0.5 and 2.0 per cent respectively in 2003. The overall decline in employment growth from recent years reflects the slowdown in the economy as well as in some part the slowing of labour force growth. Labour force growth is forecast to slow from an average of 2.0 in 2002 to 1.8 per cent in 2003. This means the labour force will grow from 1.850 million this year to 1.883 million next year.

The unemployment rate is forecast to average 4.5 per cent this year before rising next year to average 4.8 per cent. It is expected that unemployment will increase in the first half of 2003 before declining slightly as the economy recovers thereafter. This means that the average total of numbers unemployed will rise from an average of 83,000 this year to 91,000 next year. This constitutes a 10 per cent increase in numbers unemployed. Numbers on the Live Register are expected to rise from an average of 164,000 to 178,000 in 2002 and 2003 respectively.

TABLE 8: Employment and Unemployment*

	Annual Averages '000			
	2000	**2001**	**2002**	**2003**
Agriculture	130	124	123	122
Industry	488	505	492	495
Services	1,075	1,114	1,152	1,176
Total at Work	**1,692**	**1,742**	**1,767**	**1,792**
Unemployed	76	71	83	91
Labour Force	**1,768**	**1,813**	**1,850**	**1,883**
Unemployment Rate %	4.3	3.9	4.5	4.8
Live Register	156	142	164	178

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

Incomes

The record levels of growth in the Irish economy both in terms of output and employment has had a significant positive impact on the growth in incomes over the last decade. In line with the slowdown in economic activity over the year, incomes are expected to grow much more slowly, if at all, than in the recent past. The great uncertainty about the timing of economic recovery means that income growth forecast for next year may be subject to considerable margins of error. This is particularly the case for non-wage income growth that is linked with the volatility experienced in the equity markets over the last year.

Agricultural incomes are estimated to have grown by 6.3 per cent in 2001 despite the considerable difficulties encountered with the foot and mouth scare. This was largely a result of increases in output value across most sectors, although the strength of global demand and the continued weakness of the euro certainly provided a boost to agricultural exports. However, income growth is likely to be significantly weaker this year, we are forecasting a fall in agricultural incomes of 3.5 per cent for 2002. We expect agricultural incomes to recover throughout 2003, and our forecast is for growth of 1.9 per cent next year.

Our forecasts for wage growth have been revised downwards from the last *Commentary*, reflecting the continuing uncertainty about the strength and timing of an economic recovery internationally. The growth in hourly earnings is expected to be 8.1 per cent in 2002, moderating to 5.7 per cent in 2003. The modest slackening in the demand for labour means that wage growth is likely to decline. The wage rates are consistent with labour maintaining it share of national output given our forecast for employment growth. If the slowdown is sharper than we anticipate, this could result in a decrease in employment with the excess supply of labour putting greater downward pressure on wages. We are predicting growth in the non-

agricultural wage bill of 9.9 per cent in 2002, weakening to 7.3 per cent in 2003. These are sizeable increases in the context of a slowing economy and reflect the near full-employment situation that existed up until the latter part of 2002. With some increase in unemployment expected next year, the increase in the non-agricultural wage bill will grow more moderately.

TABLE 9: Personal Disposable Income

Preliminary

	2000	Change		2001
	€m	%	€m	€m
Agriculture, etc.	3,157	5.0	158	3,315
Non-Agricultural Wages,	41,433	13.1	5,424	46,857
Other Non-Agricultural Income	15,554	1.7	271	15,824
Total Income Received	**60,144**	**9.7**	**5,853**	**65,996**
Current Transfers	10,041	13.0	1,304	11,345
Gross Personal Income	**70,185**	**10.2**	**7,156**	**77,341**
Direct Personal Taxes	13,746	6.2	851	14,597
Personal Disposable Income	**56,439**	**11.2**	**6,306**	**62,744**
Consumption	50,330	9.6	4,814	55,144
Personal Savings	6,109	24.4	1,492	7,601
Savings Ratio	10.8			12.1

Forecasts

	2001	Change		2002	Change		2003
	€m	%	€m	€m	%	€m	€m
Agriculture, etc.	3,315	-3.5	-115	3,200	1.9	60	3,260
Non-Agricultural Wages,	46,857	9.9	4,620	51,477	7.3	3,778	55,256
Other Non-Agricultural Income	15,824	-5.4	-856	14,969	4.2	632	15,601
Total Income Received	**65,996**	**5.5**	**3,650**	**69,646**	**6.4**	**4,470**	**74,116**
Current Transfers	11,345	17.6	2,002	13,347	12.4	1,655	15,002
Gross Personal Income	**77,341**	**7.3**	**5,652**	**82,993**	**7.4**	**6,125**	**89,119**
Direct Personal Taxes	14,597	-1.4	-197	14,400	8.5	1,226	15,626
Personal Disposable Income	**62,744**	**9.3**	**5,849**	**68,594**	**7.1**	**4,899**	**73,493**
Consumption	55,144	7.7	4,269	59,413	7.5	4,441	63,853
Personal Savings	7,601	20.8	1,580	9,181	5.0	458	9,639
Savings Ratio	12.1			13.4			13.1

The growth in net factor income continues to very strong despite the slow down in international markets and the deterioration of our competitive position through a combination of rising labour costs and an appreciation of the euro. Some slowdown from the 18.0 per cent growth in 2001 would be anticipated, but we expect that the growth rate of net factor payments will be 16.1 per cent in 2002 and 11.1 per cent in 2003.

Other non-agricultural incomes are estimated to have increased by only 1.7 per cent in 2001, before falling by 5.4 per cent in 2002 reflecting the fall in personal income from reduced profits and slower growth in rents. The decline is the result of the sharp downturn in economic activity, particularly corporate profits. While there is still great uncertainty for equity markets to recover, we forecast a 4.2 per cent growth in other non-

agricultural incomes in 2003. Given the uncertain economic climate means that personal savings as a share of disposable income will increase. The savings ratio is likely to be around 13 per cent both this year and next.

Consumer Prices

Despite some moderation in the rate of inflation during the summer months, the rate has increased again during autumn to leave the annual average increase in the Consumer Price Index (CPI) over the first nine months of the year at 4.8 per cent. As measured by the EU Harmonised Index of Consumer Prices, inflation in Ireland has consistently been the highest in Europe and is generally twice the average prevailing in the EU and euro area. A breakdown of price inflation by broad commodity group indicates that throughout much of 2002 it has been domestic service sector inflation that has underpinned the increase in prices. With no evidence of price pressures easing in the domestic economy at present there is little to suggest a substantial moderation in inflation in the final three months of this year. Thus, an annual average inflation rate of 4.7 per cent is estimated for 2002.

The assumption that the euro will continue to gradually appreciate in the course of 2003 should put some downward pressure on inflation. While the current weak environment has served to postpone interest rate increases for the moment it is expected that there will be some modest interest rate rises in the course of 2003 increasing the mortgage costs component of the CPI. Some moderation in domestic cost pressures due to slower activity levels and more moderate wage growth is expected towards the latter half of next year. Thus the consumer price index as a whole is forecast to increase by an annual rate of 4 per cent in 2003. This rate could be higher, if the government intends raising the indirect and excise taxes as a potential source of additional revenue in the forthcoming Budget While a moderation in inflation is forecast, the rate remains well above what we have forecast for the EU next year.

TABLE 10: Consumer Price Index – Recent Trend and Forecast

	Quarterly Trend								Annual			
	2000		2001				2002		2000	2001	2002	2003
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2				
Index Nov. 1996=100												
Housing	111	114.2	117.8	118.4	114.7	112.6	114.5	116.3	99.6	116.0	117.0	123.8
Other	113.5	113.5	116	116.6	117.8	119.2	122.1	122.3	111.6	116.1	121.9	126.4
Total CPI	113.3	113.5	116.1	116.8	117.6	118.8	121.5	122.0	110.6	116.0	121.5	126.3
Annual % Change												
Housing	28.0	26.2	22.7	14.5	3.3	-0.2	-0.8	0.3	8.8	16.5	0.9	5.76
Other	5.6	3.8	4.2	3.7	3.8	5.0	5.3	4.8	5.4	4	5	3.7
Total CPI	7.0	5.3	5.4	4.6	3.8	4.7	4.7	4.5	5.6	4.9	4.7	4
Quarterly % Change												
Housing	7.4	2.9	3.2	0.5	-3.1	-0.1	1.7	1.6				
Other	1.0		2.2	0.5	1.0	1.1	2.5	0.1				
Total CPI	1.4	0.2	2.3	0.6	0.7	1.0	2.3	0.4				

Public Finances

In line with the trend internationally over the last year, the Irish public finances have declined considerably. Strong growth in the economy had led to large exchequer surpluses and as a consequence the burden of national

debt has fallen dramatically. The public finances are set to move into deficit this year given that public expenditure growth has continued to dramatically outpace tax revenue growth throughout 2002. The consequences for the public finances of overshooting expenditure growth are exacerbated by shortfalls in tax revenue. Overall tax revenue will grow considerably below the budgetary target with the shortfall being most pronounced in income tax receipts. The anticipated tax shortfall has been revised to €1.3 billion, reflecting a combination of lower income taxes and corporation taxes rising by less than anticipated. The discrepancy with the budgetary target for income tax receipts is only partly due to government payments to Special Saving Investment Accounts (SSIA). These SSIA payments are deducted from the published income tax receipts and are estimated to cost the Exchequer in excess of €500 million annually from 2003 onwards. The cost to the Exchequer this year will be less because significant proportions of the SSIA accounts were only opened in April.

Our public finance estimates for 2002 set out in Table 11 are based on the assumption of diminished growth of both capital and current expenditure in the second half of the year. It is estimated that the general government balance in 2002 will show a deficit of €1,220 million or 1.0 per cent of GDP. There are a number of once-off payments into the Exchequer from the broader government sector in 2002 that boost the Exchequer balance.. These include a transfer from the Social Insurance Fund of €635 million, the use of funds from the Capital Services Redemption Account equal to €500 million and receipts from the privatisation of ACC Bank of €153 million. Furthermore, it is estimated that the contribution from the Central Bank arising from the euro changeover will be in the region of €610 million. The contribution to the EU Budget is estimated to be around €280 million less than anticipated in 2002. The combination of factors means that the Exchequer deficit is likely to be €1,174 million in 2002.

The general government balance is forecast to be in deficit by €1,584 million in 2003 with the Exchequer deficit at €3,724 million. This forecast is based on a recovery in tax revenue growth accompanied by further cuts in the growth of current and capital expenditure. A major consideration for the public finances emanates from the Report of the Public Service Benchmarking Body. Our forecasts, as outlined in Table 11 do not explicitly factor in the likely costs that full implementation of this Report would involve for the public finances. This cost would constitute just over €1.1 billion on the public sector pay bill if implemented in full from 2003 onwards. If we make the assumption that the proposal is implemented in full from 2003 onwards, the public finance position as we have set out would, in the absence of countervailing measures, deteriorate further. The net impact on the public finances would be of the order of €700 million in 2003. The impact on the public finances may be even more significant than this when account is taken of the knock-on impact from pressures for indexation of public sector pensions and social welfare payments to the higher rates of public sector pay.

Looking forward to Budget 2003, we reiterate our recommendations as set out in the ESRI/FFS Budget Perspectives volume in October. Budget 2003 may be the first budget in nearly a decade when there will be diminished public expectation of reductions in taxation and substantial increases in public expenditure. The slowdown in the domestic economy

over the last year and the uncertainties with regard to the international outlook reinforce the traditional call for a prudent approach to fiscal policy setting for Budget 2003.

The difficulties in forecasting government revenues arising from factors other than economic growth uncertainty appear to have increased in recent years. Coinciding with a spate of both significant tax changes and substantial budgetary system alterations, such as the moves to tax credits; to individualisation of allowances; and to a calendar tax year; it has been difficult to decipher the underlying relationship between economic activity and tax revenue. From a forecasting perspective, a budget that consolidates these moves without adding further innovations would be a sensible approach at this juncture, allowing analysts to determine more clearly the revenue consequences of any future tax changes.

As we have argued in previous years, the appropriate response for fiscal policy would be a broadly neutral stance given that monetary conditions remain quite loose. A neutral stance in terms of distribution would involve indexing of the tax and expenditure items to ensure that there is no change in real terms when price and wage changes have been accounted for. We would estimate that full indexation would cost around €1 billion in Budget 2003. Our recommendation for Budget 2003, given the uncertainties for economic growth and tax buoyancy effects, is for a minimalist approach involving indexation of tax bands and welfare payments to prices and wages in an attempt to deliver a neutral budgetary stance.

TABLE 11: Public Finances

	2001	% Change	2002	% Change	2003
Current Revenue	28,738	8.8	31,269	2.8	32,131
Current Expenditure	24,012	13.0	27,140	9.2	29,650
Current Surplus	**4,726**	-12.6	**4,129**	-39.9	**2,481**
Capital Receipts	1,944	-25.9	1,441	-9.8	1,300
Capital Expenditure	6,020	12.0	6,745	11.3	7,505
Capital Borrowing	**4,076**	30.1	**5,304**	17.0	**6,205**
Exchequer Balance	**650**		**-1,175**		**-3,724**
as % of GNP	0.7		-1.1		-3.4
General Government Balance	**1,776**		**1,220**		**-1,584**
as % of GDP	1.6		-1.0		-1.2
Gross Debt as % of GDP	**36.4**		**34.0**		**34.0**

General Assessment

The National Income and Expenditure annual results for 2001 estimate that real GDP growth was 5.7 per cent and real GNP growth was 4.6 per cent. Revisions to earlier years show that in 2000 real GNP growth at 10.7 per cent was higher than real GDP growth at 10 per cent. This was a reversal of a long-standing trend for GDP growth to exceed that for GNP. The revision also highlights that while 2000 was the highest growth rate in GNP terms, the record growth rate for real GDP at 11.1 per cent was in 1999. The outturn for growth in 2001 suggests that the Irish economy reverted towards its sustainable potential growth rates of around 5 per cent. This, however, masks the substantial deceleration experienced throughout 2001,

as growth fell from double-digit rates to near standstill in line with the trend internationally.

Indications are that economic growth resumed during the first half of 2002, driven mainly by growth in the traded sectors of the economy while domestically oriented sectors were more sluggish. We estimate that real GDP growth will be 4.0 per cent in 2002 and 2.5 per cent in real GNP terms. The uncertainty during the summer months in the international economy would seem to have impacted upon the Irish economy in the third quarter. Confidence indicators for both industry and consumers reflect this uncertainty though there are mixed signals from other indicators. The housing market would seem to be growing strongly, both in terms of completions and prices. The anticipated rise in the unemployment rate has occurred but it is much more modest than the level of notified redundancies would have suggested.

The second quarter returns for the Quarterly National Household Survey show that while employment increased by 1.9 per cent year on year, the unemployment rate rose to 4.2 per cent from 3.7 per cent a year earlier. The public sectors of Education, Health, Public Administration and Defence accounted for 30,500 of the net increase of 33,500, though there was a substantial fall in industrial employment at over 13,400. The labour market response may be indicative of firms hoarding workers in anticipation of an increased pick-up in activity. Having experienced difficulties in recruitment in recent years, employers may be inclined to hoard their staff during downturns that are considered temporary. The substantial decline in hours worked in the manufacturing sector of the economy throughout 2002 may be evidence of this phenomenon.

The continued delay in the anticipated recovery in the international economy is likely to diminish the impact of labour hoarding over the latter part of 2002 and into 2003. We anticipate that unemployment will rise above 5 per cent during 2003 to average 4.8 per cent for the year. The public sector having accounted for the bulk of the increase in employment in the first half of 2002 will not be in a position to repeat this contribution given the constraints on the public finances.

The rise in the unemployment rate may help temper wage expectations into next year but our forecast is still quite benign given the exposure of the Irish economy to significant competitive losses. Our forecast for output growth in 2003 is 4.2 per cent in real GDP and 3.3 per cent in real GNP terms. If these growth rates are achieved, though still below our estimates of potential growth, it would constitute a "soft landing" for the Irish economy from the runaway growth rates experienced in recent years. However, there remains substantial risks to these growth prospects. Irish competitiveness will be eroded dramatically if domestic inflation rates and wages growth continued to be the highest within the euro area. The anticipated international recovery may not emerge as quickly or as strongly as assumed and the €/$ exchange rate could also change with adverse impact for competitiveness.

The sanguine view of higher Irish inflation in the first three years of EMU participation was that it reflected a convergence to higher European price levels justified by higher productivity in the traded sector of the economy. It is becoming increasingly apparent that Irish prices have rapidly converged and are headed to being among the highest in the EU. A realistic view of Irish productivity potential must dispel any complacency about our

rising cost structures given the importance of Ireland remaining an effective export platform.

The acceptance of the Nice Treaty in the Irish referendum in October 2002 has facilitated the European Union's ambitious plan to proceed with its "Big Bang" enlargement. The expectation is that ten countries will be able to conclude negotiations to join the EU in 2004 with a further three already in the pipeline over the coming decade. The significance of Europe expanding eastwards to fit its historical and cultural boundaries is immense, as are the likely economic consequences.

The EU since its inception has experienced four successful enlargements, rising from the original six members to the current fifteen as it expanded west, south and north. The proposed enlargement eastward is altogether more ambitious than anything that has gone before in terms of scale and diversity. The envisaged enlargement involving thirteen countries would be a near doubling of the membership whilst increasing the geographical area covered by over a third and raising the population by over a quarter with the addition of 100 million people.

In the first instance, the economic base of the EU would be expected to rise by less than a tenth as the acceding economies join, since they currently represent only about 6 per cent of the GDP of the EU-15. One immediate consequence given that aspirant member states have considerably lower rates of output per head than the incumbent members is that the long held benchmark for Irish economic policy – "the European average" – will be a decidedly less ambitious goal for the foreseeable future.

The benefits of enlargement can be anticipated to be relatively larger for the acceding countries. Given their lower starting base, they would be expected to grow a lot faster than the core facilitating their convergence to the higher living standards of the west. Convergence, however, is not inevitable. All the new members will look to Ireland's progress in the last decade as a transition to emulate.

A study for the European Commission in 2001 estimated that enlargement could increase the economic activity of the acceding countries by between 1.3 and 2.1 percentage points annually. The anticipated impact from the same study for existing members is that enlargement would provide a one-off cumulative rise of 0.7 percentage points to the level of economic activity. Economically then enlargement should prove to a positive sum game with potentially more winners than losers. Nonetheless, losers will inevitably emerge.

The enlargement will lead to changes in the patterns of economic activity across the EU and to churning within industries both in terms of their location and scale. The lesson from previous enlargements is that while countries tend to converge toward similar levels of income per head, significant divergences in regions emerge with some thriving and others in decline. For Ireland, by now a successful regional economy, future EU enlargement can simultaneously be both an opportunity and a threat, particularly to the economic model built around foreign direct investment (FDI).

The potential economic benefits of an expanded single market covering over 500 million people are considerable for an economy like ours whose living standards depend upon being an effective exports platform. This expanded EU market is likely to attract increased inward foreign direct investment from non-EU sources. The destination for a substantial

proportion of this investment will be the new member states but Ireland has the opportunity to move up the value chain by configuring itself to attract the quality end of this expanding FDI market. By its nature this form of high value added FDI might not generate as large an amount of direct employment as hitherto. This puts greater emphasis on indigenous industry expanding their markets into the new regions of the east.

Concerning the budgetary consequences of enlargement, the framework decided by the European Council includes a modest amount for transfers, at less than 10 per cent, for the period up to 2006. The other significant impact of enlargement is on the labour market and migratory flows. The European Commission suggested that only about 335,000 people would move to the EU-15 countries from Central and Eastern Europe even if there were free movement of workers immediately on accession, which there is not. Given the lack of proximity, Ireland is unlikely to have a "flood" of unskilled migration from central Europe. Those who do move are more likely to be well educated with valuable skills that would be a boon for Ireland.

Experience indicates that Irish growth performance can be quite volatile around its sustainable potential level, a feature common to small open regional economies. The difficulty is in identifying mechanisms to smooth adjustment to inevitable economic shocks. As we have argued in previous Commentaries, the relationship between fiscal and incomes policies, as cemented in the social partnership agreements, needs modification. As the initial negotiations for a successor to the Programme for Prosperity and Fairness (PPF) get under way it is opportune to redress the perceived shortcomings in the social partnership model as it has operated over the last decade and a half.

The formula of *ex ante* agreed wage rate increases reinforced by direct personal taxation reductions can no longer be a viable option given the constraints upon the public finances. We have argued in the *Commentary* that the Irish economy should try to find a modified form of centralised wage bargaining which would be effective within monetary union. The objective would be to dampen any overshooting in wages that would lead to sharp competitiveness losses (which could be very sharp at times of rapid currency appreciation).

Two flaws in the current model seem apparent. The first is the inability to reflect different *ex post* outcomes for output in the agreed wage terms. The second is the lack of any short-term demand management supports offered to domestic policy-makers by the current wage bargaining structures. Our suggestion to overcome these flaws focused on the introduction of flexibility mechanisms. These involve the use of adjustable wages terms to reflect outcomes and deferred compensation options to help demand management.

Progress along these lines would require a significant shift in the wage bargaining process. The notion of wages being dependent upon achieved outcomes reflects the gain-sharing schemes in operation in many private sector firms but would take it to an economy-wide level. The difficulty with such an innovation in the social partnership process lies with the doubts that both workers and employers may perceive about the symmetry of sharing the gain after an upswing and absorbing the pain in the downturns. Credibility about the ability of either party in the wage bargain to pre-commit and deliver is at the heart of this difficulty.

The role of the government in the process can be to address the credibility problem by acting as a guarantor in future agreements. In order to reaffirm its capacity to reach a new social partnership agreement, the government in its own role as employer has an outstanding commitment from the previous wage deal to address the findings of the Benchmarking report. Payment of the 8.9 per cent average recommended award would have a full year cost of €1.1 billion in 2003. In addition, the government agreed to pay 25 per cent of the award backdated to December 2001. The consequence is that the backdated element in itself would cost over €550 million in 2003. The impact of "clearing the decks" before entering a new agreement would put significant additional strain on the public finances before any new round of wage terms could be agreed.

The deferred compensation element may also present its own credibility problems. In order to overcome the "pay now, live later" perception of deferred compensation, workers may need to be provided with clear incentives to save additional income. The incentive in the form of preferential tax treatment of savings or top-up contributions at the end of some specified period must be credible for the employee to have certainty in allocating their income through this channel.

The forthcoming Budget 2003 will need to consolidate the public finances by bringing expenditure growth under control. The difficulties in forecasting government revenues arising from factors other than uncertainty about economic growth have increased in recent years, which is a possible reflection of both the substantial tax rate changes and significant administrative changes undertaken. In this regard it may be appropriate to allow time to analyse the economic impact of the modifications already in train before further substantial budgetary changes are undertaken in Budget 2003.

The appropriate response for fiscal policy would be a broadly neutral stance given that monetary conditions remain quite loose. A neutral stance in terms of distribution would involve indexing of the tax and expenditure items to ensure that there is no change in real terms when price and wage changes have been accounted for. We would estimate that full indexation would cost around €1 billion in Budget 2003.

As we have stressed before, the contemporary pressures on the public finances should not detract from the ambitious programme for national development. While the medium-term prospects for the economy remain good, there is a necessity to continue improving the economy's supply capacity. This will involve difficult choices between allocating scarce resources between current and capital expenditure. The adoption of fixed expenditure rules that allow borrowing only for clearly defined investment purposes may be the best way to proceed but this will necessarily require making hard choices in other areas in respect of reduced expenditure or increased taxation.

The Special Savings Incentive Accounts (SSIAs) scheme presents a significant dilemma for the Government in light of the deterioration in the public finances. On its initiation we considered the SSIA scheme to be a missed opportunity because it was not linked to the wage bargaining process. In addition, it was almost inevitable that a significant part of the response would be the redirection of existing savings, adding nothing to the desired aim of increasing savings and reducing existing demand pressures. The scheme has turned out to be very heavily subscribed with 1.17 million

accounts opened before the deadline in April 2002. Based on the level of contributions for the first year, which under the terms of the scheme are fixed, the public purse is exposed to over €500 million top-up contributions in full year costs. That cost may even rise if the account holders increasing their contributions do so in sufficient amount to outweigh the inevitable attrition from the scheme. The incentive structure of the scheme is such that increased contributions in the latter years are to be expected. Given the substantial costs to the public finances and the dramatic changes that have occurred in the economic context since the scheme's initiation, serious consideration should be given to capping the potential cost to the Exchequer.

As our physical economic horizon expands, the challenge for Ireland is to shape our economic model to embrace the expanded market. The competitiveness of the Irish economy can be buffeted by factors outside of our direct control such as large currency fluctuations. This makes it all the more necessary to control those competitiveness factors under domestic influence in the areas of wages, tax and productivity. Realism in terms of wage negotiation will be necessary on all sides if a new social partnership deal is worth having. Such a deal must be able to support future competitiveness and for that the wage terms need to be flexible enough to reflect the changing contexts. Failure to move the social partnership wage bargaining process in this direction will make a future deal both less achievable and, ultimately, less desirable.

SPECIAL ARTICLE

Why Does Ireland Still Do So Badly on the UN's Human Poverty Index?

Brian Nolan

WHY DOES IRELAND STILL DO SO BADLY ON THE UN'S HUMAN POVERTY INDEX?

*Brian Nolan**

1. Introduction

Each year, the publication of the *Human Development Report* by the United Nations Development Programme (UNDP) is marked by newspaper headlines and media attention in Ireland – most recently, on the publication of the 2002 Report (UNDP, 2002) during this summer. This attention is stimulated not so much by the wealth of information these reports present about the situation of the 80 per cent of the world's population living outside the highest-income countries, and the messages it seeks to convey about how to improve the situation of the poorest in particular. Instead it focuses more on Ireland's ranking among the high-income countries. In particular, it highlights the fact that on one headline measure of poverty Ireland is still second-last among seventeen rich countries, despite our recent unprecedented economic growth. Why does Ireland still do so badly, and how seriously do we take this ranking? This paper, in setting out to answer those questions, looks in some detail at how this summary poverty measure is constructed and what the results for Ireland reflect.

2. Measuring Development and Poverty

The *Human Development Report* has been produced annually since 1990, and since its inception the feature which has received most attention is the attempt to summarise and rank the level of development in each country by a single summary index, the Human Development Index (HDI). This has been enormously successful in garnering headlines, and has also worked to shift the focus somewhat from reliance on GNP per capita, which represents the key justification of the HDI from the UNDP's point of view. The underlying concept of development has itself come to be more clearly defined, by the UN among others, in terms of a process of enlarging people's choices by expanding human capabilities and functionings (heavily influenced by the work of Nobel-prize winner

*Very helpful comments were received from colleagues Tim Callan, Philip O'Connell, Brendan Whelan and Christopher T. Whelan.

Amartya Sen, e.g. Sen, 1997). The limitations of income per head as a measure of development in this sense have been amply rehearsed, in early editions of the *Human Development Report* and elsewhere. While the UNDP reports explicitly recognised that such a broad concept is not adequately captured by even a comprehensive set of indicators, it is argued that a single composite measure of human development can draw attention to the issues quite effectively. Not everyone accepts that this is the best approach, however, for reasons that will become clear.

The three elements entering into the Human Development Index are

- life expectancy,
- education, and
- income per capita,

with the way these are measured and combined having been refined on a number of occasions since the first report. The most recent report incorporates life expectancy at birth, educational attainment as reflected in the adult literacy rate and in combined primary, secondary and tertiary enrolment, and GDP per capita in Purchasing Power Parity terms.

From a local perspective, the fact that Ireland ranks in the top twenty out of 173 countries on the HDI is arguably the most important – and relatively neglected – result. However, our focus here is not on the HDI, but on another summary measure introduced in the 1997 Human Development Report called the Human Poverty Index (or HPI), with variants specifically designed for industrialised versus developing countries.

The rationale advanced for the Human Poverty Index is that it complements the HDI, but has a different focus. Whereas human development focuses on the advances made by all groups in a community or society, from rich to poor, it is also crucially important to see how the poor and deprived are faring. Lack of progress in improving their situation cannot be "washed away" by large advances made by the better-off (UNDP, 1997, p. 15). The HPI is thus intended to capture "human development from a deprivational perspective".

Poverty is recognised as multidimensional in character and diverse in content, with an emphasis once again on the capabilities perspective – poverty represents not merely an impoverished state but the lack of real opportunity. While acknowledging that human poverty includes many aspects that cannot be measured or are not being measured, the HPI is "an attempt to bring together in a composite index the different features of deprivation in the quality of life to arrive at an aggregate judgement on the extent of poverty in a community" (1997, p. 17). Since the nature of deprivation varies with the social and economic conditions of the community in question, different indicators are used for developing countries and for industrialised ones – labelled HPI-1 and HPI-2. Our interest here is in the latter.

The HPI-2 includes the same three elements incorporated into the HDI, under the headings "a long and healthy life", "knowledge", and "a decent standard of living", but measures them differently. It also includes a fourth element, labelled as "social exclusion". To understand Ireland's ranking, we need to see how each of these is actually measured. In constructing the Human Poverty Index,

- "A long and healthy life" is measured by the probability at birth of not surviving beyond age 60.

- "Knowledge" is measured by the percentage of adults lacking functional literacy skills.
- "A decent standard of living" is measured by the percentage of people living below a relative income poverty line set at 50 per cent of median income.
- "Social exclusion" is measured by the long-term (12 months or more) unemployment rate.

Serious questions have to be asked about the extent to which these measures – individually and in combination – are likely to successfully capture the underlying concepts. To bring this out, we turn now to the actual basis for the results for Ireland.

3. Understanding Ireland's Score on the Human Poverty Index

Results for the HPI-2 have been presented in recent Human Development Reports for a sub-set of OECD countries only. Ireland ranks 16th among the seventeen shown in the 2002 Report, with only the USA doing worse. What is perhaps most surprising is that this is consistent with the results for Ireland since the HPI was first produced: we have seen no improvement despite the unprecedented economic growth and rise in living standards from the mid-1990s. Why is this, and what are the implications?

The first point to be noted is that the countries with the data required for the index are also mostly among the richest in the OECD, whereas those with lower GNP per capita like Greece, Portugal, or the European transition economies are not at present included. Among those included, though, Ireland certainly does a good deal worse than it would on a simple per capita income ranking. Indeed, figures presented in the 2002 Report show that Ireland ranks fourth overall – among all 173 countries – on GDP per capita in purchasing power parity terms. While average GNP per capita is lower and would be expected to reflect average living standards more accurately – the difference between that and GDP being exceptionally large because of the scale of profit repatriations here – we still do much worse by the summary human poverty index than by average income. Indeed, the scale of economic growth since the early/mid-1990s has been such as to move Ireland up from 15th to 4th in terms of income per capita, but our ranking in terms of HPI has remained unaffected.

To understand why, it is worth reproducing in full from the most recent Human Development Report the values for the different elements of the HPI for Ireland and the other 16 OECD countries covered. This is done in Table 1, with countries ordered in terms of their HPI rank. We see that the Scandinavian countries and the Netherlands are at the top, while the UK, Ireland and the USA are at the bottom among the seventeen countries covered. The countries which do best on the summary HPI index have values well below average on all four of the elements, although Sweden does best in terms of life expectancy and functional illiteracy, Norway has the lowest long-term unemployment and Luxembourg and Finland have the lowest relative income poverty rates. But what about the bottom of the ranking: why does Ireland continue to do so poorly?

Table 1: Human Poverty Index and Constituent Elements, Ireland and 16 Other OECD Countries

Country	Human Poverty Index Value	% of Birth Cohort not Surviving to Age 60	% Age 16-65 Lacking Functional Literacy Skills	% of Labour Force Long-Term Unemployed	% Below 50% of Median Income
		1995-2000	1994-98	2000	1997-98
Sweden	6.7	8.0	7.5	1.4	6.6
Norway	7.5	9.1	8.5	0.2	6.9
Netherlands	8.5	9.2	10.5	0.9	8.1
Finland	8.8	11.3	10.4	2.4	5.1
Denmark	9.5	12.0	9.6	0.9	9.2
Germany	10.5	10.6	14.4	3.9	7.5
Luxembourg	10.8	11.4	..	0.6	3.9
France	11.1	11.4	..	3.8	8.0
Japan	11.2	8.2	..	1.2	11.8
Spain	11.3	10.3	..	6.0	10.1
Italy	12.2	9.1	..	6.5	14.2
Canada	12.3	9.5	16.6	0.8	12.8
Belgium	12.6	10.5	18.4	4.0	8.2
Australia	12.9	9.1	17.0	1.8	14.3
UK	15.1	9.9	21.8	1.5	13.4
Ireland	15.3 (16th)	10.4 (10th)	22.6 (17th)	5.6 (15th)	11.1 (11th)
USA	15.8	12.8	20.7	0.2	16.9
Average	12.0	9.5	14.8	2.4	9.9

Source: Human Development Report 2002, Human Development Indicators Table 4, p. 160.

Examining the values for the individual indicators in Table 1, Ireland does best on life expectancy, measured by the percentage living beyond sixty, where we rank 10th among the seventeen countries. On this indicator Ireland performs about as well as Belgium, Germany and Spain, better than Denmark, Finland and France though less well than for example Australia or the Netherlands. What is striking about this indicator, however, is that most of the countries covered actually fall into a rather narrow range. Apart from Sweden and Japan at one end of the scale, and the USA at the other, all the countries are clustered on values between 9 and 11.5 per cent. So while Ireland is certainly below average, it is comfortably within this narrow range. Since the increase in average income levels in Ireland has been so concentrated over a relatively short and very recent period, it is also not surprising that an indicator such as life expectancy, affected by conditions over a lengthy period, lags behind.

The indicator on which Ireland does next-best is the relative income poverty rate, where we rank 11th. Much of the emphasis in the Irish response to our poor overall performance has indeed been focused on this element – on whether the figure is fully up-to-date, reflecting recent spectacular economic growth, and whether it is the most appropriate measure of poverty. It is not entirely clear where the poverty rate figure for Ireland used in deriving the 2002 index comes from, but it does appear to be a few years out of date. This does not help to improve our ranking, though, because it turns out that the numbers falling below such relative income poverty lines rose rather than fell in the mid to late-1990s. An up-to-date figure for the percentage below 50 per cent of median income would actually be higher, about 13 per cent rather than the 11 per cent used by the UNDP (Nolan *et al.* 2002).

However, one would have to raise serious questions about whether this is in fact the best way to capture poverty, particularly in a period of very rapid economic growth such as Ireland has just experienced. This is an issue which has been discussed at length in a series of publications with ESRI colleagues monitoring and exploring the evolution of poverty in Ireland (see for example Layte, Nolan and Whelan, 2001; Layte *et al.,* 2001; Nolan *et al.,* 2002). There, we have complemented relative income poverty lines with a measure which also takes into account whether people are deprived of a set of basic necessities. What counts as basic necessities will be expected to change over time as living standards and expectations rise, but may not keep pace when that improvement is very rapid. This measure, which has come to be labelled "consistent poverty" (in that one has to be both on low income and experiencing basic deprivation to be identified as poor), has been adopted by the Irish government in setting the global poverty reduction target in the official National Anti-Poverty Strategy (NAPS). Substantial declines in consistent poverty, reflecting falling numbers reporting deprivation due to lack of resources, have been seen since 1994.

On its own the consistent poverty measure does not tell the whole story, but that is if anything even more true of relative income poverty rates. In the series of publications already mentioned, we have argued that one needs to look at trends in both measures to get a rounded picture. Relative income poverty certainly tells us something very important about underlying structures, but with deprivation falling so markedly in Ireland it is hard to accept that rising numbers falling below a relative poverty line during the 1990s represent an unambiguous increase in poverty. The measure employed in the UNDP report to capture "a decent standard of living" takes no account whatsoever of the very pronounced declines in deprivation levels which accompanied Ireland's economic boom. This is another reason why no improvement has been registered by the HPI index.

Turning to long-term unemployment, Ireland does very badly on the figures shown: only two countries (namely Spain and Italy) have a higher long-term unemployment rate than Ireland's 5.6 per cent. However, this Irish figure is clearly incorrect. While long-term unemployment was indeed that high in the early to mid-1990s, it then declined dramatically in the second half of the 1990s during the years of very rapid income and employment growth. In fact, the figure of 5.6 per cent seems to be the total unemployment rate for Ireland,[1] whereas the actual rate of long-term unemployment in 1999 was about half that figure. Subsequently long-term unemployment continued to fall, and by 2001 was down to about 1.2 per cent – which would have ranked Ireland at 7th rather than 15th among the countries covered. So the UNDP report entirely misses perhaps the single most important area of socio-economic progress produced by Ireland's economic boom.

The rate of functional illiteracy among adults in Ireland employed in the Human Poverty Index (HPI) is the highest of any of the seventeen

[1] While the figures for the other countries are for the year 2000, a footnote to the Human Development Report table states that this Irish long-term unemployment rate is for 1999. The source cited by the Human Development Report for the long-term unemployment figures is an edition of OECD *Employment Outlook* which gives an overall unemployment rate for Ireland of 5.6 per cent in 1999.

countries covered by that index, at 23 per cent. Of the countries for which a corresponding figure is available, only the UK and the USA approach this level. The countries towards the top of the HPI ranking, by contrast, have measured functional illiteracy rates of 10 per cent or less. These figures come from the International Adult Literacy Survey (IALS), a multi-country and multi-language assessment of adult literacy, developing scales of literacy performance to allow literacy among people with a wide range of abilities to be compared across cultures and languages. The first survey was conducted in 1994 in seven countries, with further rounds of data collection in other OECD countries in subsequent years based on national representative samples. Literacy was defined as measuring whether a person is able to understand and employ printed information in daily life, at home, at work and in the community. Five literacy levels were used to rank literacy along three scales – prose, document, and quantitative. In countries where more than one in five adults had only the lowest of the five levels of literacy (including the UK, the USA and Ireland), the results were a source of particular concern.

In any study of this kind, questions arise about the comparability of the results across countries. Concerns were expressed at an early stage of the IALS about the comparability and reliability of the data and methodological and operational differences between the various countries. Indeed, France withdrew from the reporting stage of the study and the European Commission instigated a study of the EU dimension of IALS (Carey, 2000). Cultural specificity, differences in survey procedures and criticisms of the statistical modelling techniques led Blum, Goldstein and Guerin-Pace (2001), for example, to argue for "extreme caution in interpreting results in the light of the weaknesses of the survey". In relation to the Irish results, Kellaghan (2001) has drawn attention to the arbitrariness of the scales, pointing out that if one lowered the cut-off point for the lowest level marginally (from 225 to 200), the percentage of Irish adults at that level would drop from 23 per cent to 12 per cent. It is also worth noting that the cut-off points were derived from US data and may not be equally appropriate for other countries.

The experience with the IALS has contributed to other initiatives, such as the Adult Literacy and Lifeskills (ALL) survey and a new Programme for International Student Assessment (PISA) launched by the OECD, surveying students' skills and knowledge at age 15 in 32 countries, including all the EU Member States. Irish students do well in PISA (Shiel *et al.,* 2001), conveying a very different comparative picture to that shown for the working-age population in the IALS. For the present, without attempting here to assess the strength of the criticisms of the IALS, it is clear that Ireland's particularly poor performance compared with other countries cannot be regarded as firmly established. This is not to minimise the scale and importance of functional illiteracy among Irish adults: it is simply to say that we cannot be confident that Ireland is so much worse than other rich countries in this respect.

This is brought out by looking at an alternative and widely-used measure of educational disadvantage, the numbers having completed only lower secondary education or less. About half the current working-age population in Ireland has not gone beyond the Junior/Intermediate Certificate or equivalent in terms of attainment. This is much higher than the corresponding figure for Denmark, Sweden, Germany and Canada, but

on the other hand it is significantly lower than Spain and Italy, which score much better than Ireland on the illiteracy rate. The proportion with only this level of education has of course been falling sharply over the past forty years or so in the Irish case, so it is much lower in the younger age cohorts. This is brought out by the fact that two-thirds of those aged between 25 and 34 have at least attained the Leaving Certificate, compared to only one-third of those aged between 55 and 64. So once again "knowledge" is a key area where, in terms of the current working-age population, we would indeed expect Ireland to be still lagging behind countries which have been both rich and investing heavily in education for longer. This does not, however, mean that we should take a ranking as "worst out of seventeen" on this dimension as well-established.

Looking back at Table 1 shows another interesting feature in relation to the literacy element of the HPI: while all the seventeen countries covered have data on the other three elements, only twelve actually had data on literacy. Presumably because a measure covering only twelve countries would be regarded as much less interesting than one covering seventeen, the UNDP imputed a value for illiteracy in the missing five countries in deriving the HPI. The value imputed was simply the average across the twelve countries for which a figure was available, namely 15 per cent. It is worth noting that if Ireland had not participated in the IALS – or like France, simply disowned the results – and this average figure had been used in deriving our HPI value, Ireland would have ranked as 11th rather than 16th out of the seventeen countries. A cynical conclusion would be that the easiest way to improve Ireland's ranking would be not to participate in such international comparative data-gathering exercises. To understand why improving on this one element would have such a marked impact on Ireland's overall HPI ranking whereas reducing poverty or long-term unemployment would have little or no impact, we need to look at the way the summary index is derived from the four constituent elements.

4. Deriving the Summary Index

With the Human Poverty (HPI-2) index being based on the four elements of life expectancy, illiteracy, long-term unemployment and relative income poverty, we have seen that with the values used by the UNDP for these elements Ireland ranked 10th, 17th, 15th and 11th respectively. On the overall index, Ireland ranked 16th. Correcting the Irish long-term unemployment rate means that we rank 7th on that element rather than 15th. However, when the correct long-term unemployment rate of 1.2 per cent rather than 5.6 per cent is used in deriving the HPI index, this turns out to make no difference whatsoever to our overall ranking. This would have to make one wonder about the properties of the summary measure, so the precise method of constructing the summary index from its components obviously bears close inspection.

The HPI-2 index is constructed as

$$\text{HPI-2} = [1/4\ (P_1^{\alpha} + P_2^{\alpha} + P_3^{\alpha} + P_4^{\alpha})]^{1/\alpha}$$

where
P_1 = probability at birth of not surviving to age 60
P_2 = % of adults lacking functional literacy skills
P_3 = % below 50 per cent of median household disposable income
P_4 = % long-term unemployed (12 months or more)
and
$\alpha = 3$.
So the value for each element is cubed, those figures are added, and the cube root of the result is taken.

Two features of this procedure bear careful scrutiny. The first is the choice of value for "α". If it were set to 1, the index would be a simple average of its elements. The 2002 Report acknowledges that the value chosen for "α" has a major impact on the value of the HPI. It notes that as the value rises, greater weight is given to the element or dimension in which the country displays most deprivation or does least well. As the value rises towards infinity, the HPI will tend more and more towards the value for that dimension. It justifies the choice of 3 as giving "additional but not overwhelming weight to areas of most acute deprivation" (UNDP 2002, p. 254).

It does indeed give additional weight to the area of worst performance, but one could certainly argue about whether that weight is appropriate. This is particularly problematic when combined with the second feature of the index, that it simply adds up percentages across the different dimensions with no attempt to standardise them, most obviously for the fact that they have different average values. The mean value for functional illiteracy across the seventeen countries is 15 per cent, whereas the mean value for long-term unemployment is only 2.4 per cent. This means that the index would be much more heavily influenced by the former than the latter, even if a simple average across the dimensions was used. The mean for the other two dimensions is about 10 per cent, so these will have more impact than unemployment but less than illiteracy on the index. A country could halve its long-term unemployment rate from 4 per cent to 2 per cent, and this would have the same impact as reducing its illiteracy rate from 23 per cent to 21 per cent. When we then add to this the fact that the percentages are in fact weighted, that "a" is 3 not 1, then this effect is compounded: reducing illiteracy from 23 per cent to 21 per cent will then have a much *greater* impact than cutting long-term

unemployment from 4 per cent to 2 per cent. The greatest weight is in fact given to the dimension in which the country does least well in terms of *absolute* score, not the least well relative to the mean across the countries. This means that none of the countries receives a high weight for long-term unemployment, whereas those for literacy will be high even when the country is doing quite well relative to the mean in that dimension.

Having one element dominate in this way seems highly problematic, and particularly so when it happens to be the one where we have least confidence in the figures being used. It makes it very difficult indeed for Ireland to improve its overall score while it appears to be doing so poorly on the dimension which has most impact on the index. This explains why correcting the figure used in the Report for long-term unemployment, from 5.6 per cent to 1.2 per cent, has no impact whatsoever on our HPI ranking. To take another example, if we somehow managed to cut Ireland's relative income poverty rate in half, reducing it to the level of the best-performing countries in the OECD, then that would improve our overall HPI ranking by just one place – moving Ireland into 15th position, ahead of only the UK and the USA. So Ireland's performance on the UNDP measure has failed to improve during our economic boom not only because it focuses on a relative income measure of poverty and missed the dramatic decline in long-term unemployment, but also because the way it is constructed gives a quite disproportionate weight to one, poorly-measured, dimension.

At a minimum, some attempt to standardise the different elements in the index for their differing means (and variances) seems appropriate. This, and simply averaging across the four elements, would not dramatically improve Ireland's ranking, but we would then appear in a relatively poorly-performing cluster along with Spain, Italy, the UK and the USA. We are in that situation effectively because Ireland does poorly on three out of the four dimensions of the index, and does not do particularly well on any. The specific measures of "knowledge" and "decent standard of living" being used then still have serious inadequacies which have already been discussed. A more comprehensive set of indicators in those areas and in "health" would still show serious shortfalls compared with the best-performing countries, and indeed often compared with the average for the seventeen rich countries covered here. This reflects major structural deficiencies, which long-term social investment building on our newly-improved per capita income ranking will be required to address. The UNDP index as currently constructed will not, however, be a sensitive indicator of such social progress.

5. Conclusions

The Human Poverty Index produced by the UNDP in its annual Human Development Report, like its Human Development Index, aims to capture in a single summary measure a set of highly complex and multi-faceted phenomena. It seeks to measure life expectancy, knowledge, a decent standard of living, and social exclusion, and does so using four indicators. The hard questions facing any such summary index are whether these are the most appropriate indicators, whether they are being used and combined in the most satisfactory way, and indeed whether combining them into a single composite measure is a good idea in the first place.

One can raise serious questions on all these fronts about the HPI. Ireland has seen no improvement in its performance over the course of the recent economic boom, still ranking second-worst among the seventeen rich countries for which the overall index is presented. This index turns out to be disproportionately influenced by functional illiteracy among adults, which has been measured as being particularly high in Ireland. The reliability of this finding has been seriously questioned, and the index also fails to reflect sharply declining levels of unemployment and deprivation in Ireland over the 1990s.

While it has obvious attractions from the point of view of public impact, one has to question whether combining these – or other – different indicators of poverty into a composite index is in fact worthwhile. The absence of any conceptual underpinning to the weights applied to the different elements is the central problem. How do we value an extra year's life expectancy compared with a percentage point reduction in the illiteracy rate? Whose views should count in this valuation? In the absence of any basis on which to assign weights, simply presenting a range of indicators is surely more informative than imposing arbitrary weights and producing a summary index out of a black box.

If we just look at specific indicators and keep in mind the caveats about our ranking on illiteracy in particular, the picture that emerges is rather different. Rather than seeing Ireland as next-worst to the USA among seventeen rich countries in terms of poverty, a more robust conclusion would be that Ireland fares a good deal worse on a range of social indicators than in terms of average income level, where we now rank among the top handful of countries in the world. This points to major social deficits across a variety of areas of life, which only sustained social investment will enable us to close. In assessing progress towards that aim, it would be unwise to rely on the Human Poverty Index.

REFERENCES

CAREY, S. (ed.), 2000. *Measuring Adult Literacy – The International Adult Literacy Survey in European Context*, London: Office for National Statistics.

BLUM, A., H. GOLDSTEIN, and F. GUERIN-PACE, 2001, "An Analysis of International Comparisons of Adult Literacy", *Assessment in Education*, Vol. 8, pp. 225-246.

KELLAGHAN, T., 2001. "Reading Literacy Standards in Ireland", *Oideas*, Winter, pp. 7-20.

LAYTE, R., B. MAÎTRE, D. WATSON, C.T. WHELAN, J. WILLIAMS and B. CASEY, 2001. *Monitoring Poverty Trends and Exploring Poverty Dynamics in Ireland*, Policy Research Series, Paper No. 41, Dublin: The Economic and Social Research Institute.

LAYTE, R., B. NOLAN and C.T. WHELAN, 2001. "Reassessing Income and Deprivation Approaches to the Measurement of Poverty in Ireland", *The Economic and Social Review*, Vol. 32, No. 3, pp. 239-261.

NOLAN, B., B. GANNON, R. LAYTE, D. WATSON, C.T. WHELAN and J. WILLIAMS, 2002. *Monitoring Poverty Trends in Ireland: Results from the 2000 Living in Ireland Survey*, Policy Research Series, Paper No. 45, Dublin: The Economic and Social Research Institute.

SEN, A., 1997. *On Economic Inequality*, (with a new annex by J. Foster and A. Sen), Oxford: Clarendon Press.

SHIEL, G., J. COSGROVE, N. SOFRONIOU and A. KELLY, 2001. *Ready for Life? The Literacy Achievements of Irish 15-Year Olds with Comparative International Data,* Dublin: Educational Research Centre.

UNITED NATIONS DEVELOPMENT PROGRAMME, 1997. *Human Development Report 1997*, New York: UNDP.

UNITED NATIONS DEVELOPMENT PROGRAMME, 2002. *Human Development Report 2002*, New York: UNDP.