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Medium-Term Review: 1994-2000

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The Medium-Term Review: 1994-2000

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The editors remain solely responsible for the way in which the model was used and for the content of this publication.

Summary

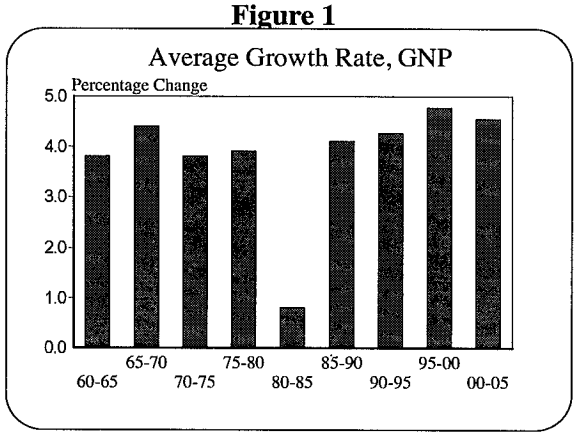
Main Features

The Irish economy is in a strong position to benefit from the impending European recovery. In this *Review* our Central Forecast suggests that Ireland will experience a period of rapid growth over the next 5 years and that there will also be a significant growth in employment.

The relative success of the Irish economy over the last 3 years at a time of European recession reflects its competitive strength. Over the next 3 years the growth in output, measured by GNP, is likely to be very rapid (Table 1) representing some catching up on the lost opportunities of the early 1990s.

The average growth rate of GNP for the first half of the 1990s is likely to be just over 4 per cent, broadly in line with the trend growth rate in the past (see Figure 1). The second half of the decade is likely to see GNP growing at just under 5 per cent a year with some reversion to past trends in the following 5 year period.

Figure 1



A striking feature of the next five years will be an investment boom which will increase the productive potential of the economy. Private consumption should also grow quite rapidly. The combination of these two factors will see domestic demand rising more rapidly than in the past decade. This change in the composition of demand will be favourable to employment growth.

The result of this period of relatively rapid growth will be that Ireland, which in 1990 had a GDP per head of around 72 per cent of the EU average will, by the year 2000, be around 83 per cent of the EU average. This would represent a much greater narrowing of the gap in living standards than occurred over the previous 30 years from 1960-90.

The rate of inflation is forecast to remain just under 2.5 per cent a year over the period 1990-2005.

Throughout the slowdown in the early 1990s employment growth continued, albeit at an attenuated rate. With a return to rapid growth over the next few years we envisage a substantial increase in total employment. For the rest of the decade employment growth should comfortably exceed 1 per cent every year, averaging around 1.7 per cent in the second half of the decade. The reasons for the expected better employment response are discussed in Chapter 2.

The rapid rise in the labour force, however, means that this growth in employment will not

Table 1: Central Forecast, Major Aggregates

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
					%				*Average Growth Rate, %*		
GNP	2.4	4.3	6.9	5.7	4.6	4.8	4.7	4.5	4.1	4.9	4.6
Gross National Disposable Income + Capital Transfers (National Resources)	2.9	3.4	5.3	5.1	4.5	4.3	4.2	2.3	3.1	4.0	4.3
Consumption Deflator	2.0	3.0	2.6	2.3	2.3	2.4	2.4	2.4	2.5	2.3	2.3
Employment, April	0.6	1.0	2.2	2.3	2.0	1.5	1.5	1.2	0.8	1.7	0.9
Balance of Payments, % of GNP	6.1	5.8	3.8	3.2	2.3	2.3	2.5	1.6			
Debt GDP Ratio, %	90.4	86.9	81.0	75.9	71.2	66.7	62.1	58.6			
Exchequer Borrowing, % of GNP	2.5	1.9	2.1	1.4	0.9	0.5	-0.1	0.6			
	Unemployment Rate, per cent of Labour Force										
Live Register basis	21.6	21.4	20.6	19.8	19.1	18.7	18.2	17.9			
Labour Force basis	17.0	16.9	16.1	15.3	14.6	14.2	13.7	13.4			

be sufficient to absorb all labour market entrants. The combined effects of employment growth, the increase in the labour force, and net emigration will mean that the unemployment rate, on a labour force basis, will fall slowly from its current high level to around 13.4 per cent in 2000. This will still leave Ireland with one of the highest unemployment rates in the EU.

The rapid rate of growth in the coming years, if realised, will see some reduction in the balance of payments surplus. However, it is likely to remain positive at the end of the decade.

Finally, the combination of substantial growth in the economy with the assumed stance of fiscal policy sees the Exchequer maintaining a small borrowing requirement out to the end of the decade. The debt GDP ratio falls steadily so that by 2000 it could be below 60 per cent. This improvement would see Ireland meeting all the Maastricht criteria by the end of the decade.

Driving Forces

There are a number of factors driving this strong recovery:

Recovery from Recession: The last 3 years have seen the Irish economy growing below trend due to the European recession and the related high level of interest rates. Following the normal pattern, we expect economic growth to accelerate as the European economy enters its recovery phase.

Competitiveness: Our Central Forecast envisages a small but steady improvement in labour cost competitiveness over the rest of the decade. One factor in this improvement is the likely fall in the tax burden in Ireland while it is rising in our main trading partners. This provides a stark contrast with the early 1980s and, if realised, will provide a much more favourable environment for employment growth in the medium term.

Real interest rates, which had risen to exceptional levels in the late 1980s and early 1990s, have fallen considerably over the last year. While still high by the standards of the 1960s and the 1970s they are now back to a level where it is profitable to invest in fixed assets. This will significantly improve the competitive position of the economy, especially that of Irish owned firms.

The falling cost of capital and the stabilisation in labour cost competitiveness is also reflected in an improvement in the cost of other services,

such as energy, which are an essential input into the tradable sector.

Demographic Change: Irish society is likely to undergo a radical change over the next 10 years as the full effects of demographic changes work their way through the population. Many of these changes are already inevitable given the pattern of births, deaths and emigration over the last 20 years. The key features of these changes are: a drastic reduction in the number of children; a rapid fall from 2000 onwards in the net entry into the labour force; a major increase in the proportion of the population in working age groups; a substantial reduction in the dependency ratio, even if unemployment were to continue above the EU norm; increased participation in education and the improving skills and education of the workforce.

There will be a rapid reduction in the proportion of the population in dependant age groups over the next 10 years which will tend to reduce the demand for certain public services. As the proportion of the population at work rises so too will income per head making an important contribution to the convergence in living standards between Ireland and the EU.

Policy Implications

The Central Forecast suggests a period of substantial progress in improving living standards over the next decade. Ireland will have the capacity, if it has the will, to address its most basic problem, that of unemployment. However, solutions will not be found if the economy is left on auto-pilot and they will depend as much on changing attitudes among those at work as on government policy.

The key to sustainable growth lies in increasing the efficiency and productivity of the supply side of the economy. This involves maintaining labour cost competitiveness if dependence or high levels of unemployment are to be avoided.

The demographic changes under way will require major changes in public policy in the field of education and social welfare. They will also have important implications for the private sector through their effects on changing patterns of demand.

For the public finances the next 5 years provide a window of opportunity. Tax reform and some limited increase in the volume of expenditure are all consistent with a major reduction in the debt/GNP ratio. Even if the EU Structural Funds are scaled down from 2000 onwards there should be no disruption in public investment.

The prospect that a major increase in living standards for the bulk of the population may be achieved over the next 5 to 10 years, while simultaneously the number of long-term unemployed shows little change, is a major issue for public policy. It seems clear that even if the rate of job creation were substantially greater than we forecast it would still have little effect on the numbers of long-term unemployed who have few marketable skills and a low level of education.

At the most basic level, policy should target the potential early school leavers to ensure that they leave school with adequate skills and education. Special measures aimed at the existing stock of long-term unemployed are also needed to help them obtain the skills necessary to participate actively in the labour market.

CHAPTER 1

Introduction

The art of soothsaying has a long and sorry history. If the height of success in the soothsaying stakes is considered to be Cassandra[1] it indeed makes an unattractive career. However, unlike Cassandra, we make no pretensions to certainty in this *Review*, nor do we foretell doom and gloom. Our more mundane purpose is to present our best estimate of how the Irish economy is likely to develop over the rest of the decade. The picture which we paint in this *Review* is one of steady progress in most areas of economic life with the notable exception of unemployment.

We present a single Central Forecast for the period 1994-2000. To allow readers gauge the possible margins of error in our Central Forecast we provide details in an extensive set of "what if" experiments. These include simulations to examine the impact on the economy of changes in interest rates, the terms of trade, and factors affecting participation in the labour force. While these do not constitute a DIY forecast kit they illustrate the sensitivity of our analysis to small changes in assumptions.

This *Review* has an additional purpose which is to explore how the Irish economy works and to identify important medium and long-term issues for policy makers. Too often our eyes are focused on current problems and the immediate future and we can miss the opportunity to mould the course of our development. The companion *Economic Perspectives* volume explores a range of issues of significance in the medium term. In this *Review* we highlight the implications for the economy of the major demographic changes which are under way. We also consider the competitiveness of the economy in a wider context. The Central Forecast suggests that Irish living standards will converge quite rapidly on the EU norm with implications for economic policy. Finally, the ever present weight of numbers of the long-term unemployed will continue to pose the major challenge to economic policy over the rest of the decade.

In Chapter 2 we take up the issue of why the growth of the last 10 years did not produce more gains in employment. This analysis sets the backdrop for the rest of the *Review* highlighting certain key factors which explained the slow growth in employment in the past but which are likely to be less significant over the rest of the 1990s.

Chapter 3 sets out our background assumptions on the external environment facing the economy to the end of the decade. It also analyses some of the demographic changes already underway which will have a major impact on the economy over the coming decade. Finally we spell out the assumptions we have made concerning domestic monetary and fiscal policy.

The Central Forecast is explained in detail in Chapter 4. It covers the period 1994 to 2000. In

[1] The mythical character Cassandra was fated to see her invariably correct forecasts of doom and gloom ignored.

addition, we give some summary measures for the following 5 year period to 2005. This Chapter gives details of a range of experiments where we have tested the sensitivity of our forecast to changing assumptions.

The Central Forecast implies a fairly rapid convergence in living standards between Ireland and the EU over the next 5 or 10 years. Chapter 5 examines this process. It considers how domestic policy can best be directed to promote the development of the economy and it discusses some key strategic issues which will be faced over the rest of the decade.

In this *Review* we use the UK National Institute of Economic and Social Research NiGEM world model to explore different scenarios for the world economy. For the Irish economy we use our own Medium Term Model to help develop the framework of our Central Forecast and also to explore the sensitivity of that forecast to changing assumptions about the external environment and about how key sectors of the Irish economy itself behave.

The "Form"

It is instructive for both authors and readers to consider our track record on medium-term forecasting to see where our forecasts have proved robust and what events have overtaken our initial assumptions. This examination

- exposes our fallibility;
- it shows how the quality of future forecasts can be improved;
- it helps us understand the likely margin of error in the Central Forecast in this *Review*.

Table 1.1: *Medium-Term Review* Forecasts, average growth rate

	Forecast Period	*MTR Forecast*	*Latest Estimate/ Forecast*
		%	
Review 1986	1985-90	3.0	3.9
Review 1987	1987-92	2.6	4.6
Review 1989	1988-94	4.9	4.5
Review 1991	1991-96	3.7	4.5

Table 1.1 shows the forecast average rate of GNP growth for the period covered by the last four *Reviews.* In three of the four cases we have underestimated the average growth rate over the period. This is interesting in that in the case of the first two *Reviews* the forecast was considered very optimistic at the time of publication. The average absolute error is around 1 percentage point per annum.

Table 1.2 examines the forecasting record on a year by year basis. This highlights the fact that it is very difficult to predict precise turning points in the economic cycle. We may have a reasonably good track record in forecasting the average rate of growth in the medium term but we are not as effective in predicting when it will actually occur. In the last *Review* we expected that the European recovery would occur two years before it now seems likely to appear. However, over the relevant forecast period 1991-1996 economic

Table 1.2 Comparison of Forecasts for GNP Growth Rate

	1986	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
Review 1986	2.5	3.3	3.5	3.0	3.0	-	-	-	-	-			
Review 1987	-	-	-0.4	3.0	3.3	3.7	3.6	-	-	-			
Review 1989	-	-	-	4.0	7.1	5.6	4.6	4.8	3.2	-			
Review 1991	-	-	-	-	-	2.2	3.7	4.3	3.3	3.6	3.7		
Review 1994	-	-	-	-	-	-	-	2.3	4.0	7.0	5.6	4.4	4.6
Latest CSO Estimate	-0.8	4.5	2.1	5.3	9.6	4.3	3.8	-	-	-	-	-	-

growth may actually be higher than we originally expected as the recession did not bring about a permanent loss of growth, rather it resulted in its deferral. As a result, in this the fifth *Medium Term Review* we have placed as much emphasis on the forecasts for average growth in GNP over the forecast period as we have on the year by year predictions.

CHAPTER 2

Where Did All The Growth Go?

John Fitz Gerald and Patrick Honohan

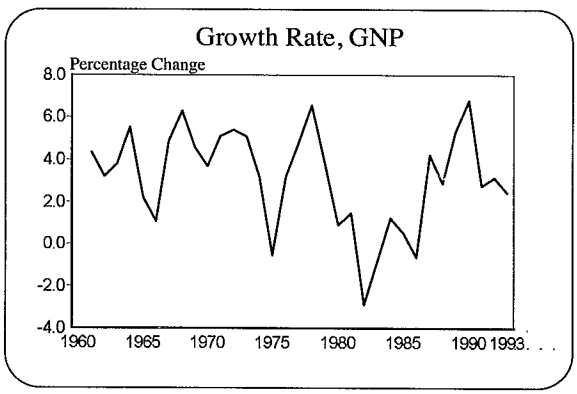
2.1 Introduction

The recovery over the last number of years has placed the Irish economy among the top performers in several international league charts. Sustained growth, low inflation, a strong international balance of payments and a consolidation of the fiscal position are the most noteworthy positive features. These successes are undeniable, yet unemployment is still near its record level and, for many, growth does not seem to feel as good as it should.

In this Chapter we examine the apparent discrepancy between the usual measures of growth and perceived economic welfare over the past decade. Because the economic recovery has not been a balanced one, some of the aggregate statistics can tend to mislead. Much of the additional output has been absorbed in slowing and then reversing the growth in foreign debt, rather than being available for personal consumption and other elements of domestic demand. This in turn has limited the employment content of growth. A gradual deterioration in the terms of trade since 1989 has also reduced the spending power of the additional output.

The rate of growth of the Irish economy, measured in the conventional way by GNP, has been rapid since 1986, reversing the stagnation of the previous half-decade and defying the international recession. Over the last 5 years the rate of growth in GNP has been among the highest in the industrial world. In 1990 alone, GNP growth was measured at 8.2 per cent, and the average growth between 1987 and 1992 was 4.6 per cent. As shown in Figure 2.1 the recent performance of the Irish economy, while representing a major improvement compared to the first half of the 1980s, has been broadly in line with the average experience of the 1960s and 1970s. Over the last 30 years, with the exception of the 1980-85 period, the Irish economy has grown at an average rate of around 4 per cent a year.

Figure 2.1



It was the first half of the 1980s that was the exception, not the subsequent recovery. What is different about the post-1986 recovery is that it has not overheated the economy. The last period of rapid growth, ending in 1981, bequeathed a record external deficit (over 14 per cent of GNP) and inflation approaching 20 per cent. In contrast, the Irish economy in 1994 is running a large

balance of payments surplus combined with a low inflation rate.

Yet some commentators complain about economic conditions and suggest that the measured rebound in Ireland's economic fortunes is some kind of statistical mirage. Somehow, it has been argued, the bits of the economy that really matter have been neglected in the main measures used, and bits that do not matter much have been given undue prominence. In what follows, we consider the pattern of the economy's performance over the past decade or so in order to evaluate this position.

There are several difficulties of interpretation with Irish economic statistics because of the unusual productive structure, the exceptional demographic developments and the extraordinary turnaround in the fiscal accounts. When the implication of these factors is taken into account much can be explained.

Our conclusion is that the recovery in growth is not illusory - though it has been less strong than some widely used indicators would suggest. The growth does not feel so good because much of its fruits have gone to halt and even reverse the rise in national indebtedness, as well as to restore company profitability. Household income has not risen as rapidly as GNP. Furthermore, the net growth in jobs has been no better in this recovery than in the past, and the last few years have been associated with very depressed employment conditions in the UK, choking off the degree to which emigration is available as an alternative. As a result, unemployment dipped only briefly before returning to record levels.

Irish economic performance over the past 20 years has been a dizzying roller-coaster. Drastic fiscal contraction in the 1980s, first with tax increases and later, more successfully, with spending reductions, turned the economy's finances around from a position of near-bankruptcy. The cost was a devastating shake-out of traditional manufacturing and service employment, a surge in unemployment and large emigration.

In the early 1980s the nation was living well beyond its means. Now the reverse is true. Collectively we are repaying debt or accumulating foreign assets at a rate higher than nearly any other industrial country. The picture has thus been very far from what we might hope for, namely: balanced growth in Ireland, with a stable fiscal picture, balance of payments at a long-term sustainable level and steady employment growth. Still, despite the severity of the European recession, the position of the last year or so begins to show signs of an approach towards such an equilibrium. The massive unemployment rate, the remarkably large current account payments surplus and the still-too-high level of government indebtedness point the way to the direction in which correction is needed.

Changes in the composition of output and incomes, and in the relative prices of different components, have resulted in wide divergences between different aggregate measures of economic performance. Section 2.2 spells out the differences and how they have been evolving. These measurement issues are important and can not be neglected in any account of recent Irish economic conditions.

Section 2.3 examines the production side of the economy, exploring where the output growth has come from and the degree to which employment growth has accompanied output growth. Migration moderates the link between employment growth and unemployment: we describe developments on that front too.

Section 2.4 looks at spending and savings patterns in the economy paying special attention to the international balance of payments. Monetary

Table 2.1: Economic Growth, per cent

	GDP Unadjusted	*GNP Unadjusted*	*GNP Adjusted for Terms of Trade*	*GNDI (Gross National Disposable Income)*	*National Resources (GNDI plus Capital Transfers)*
1984	4.3	1.8	1.0	1.6	1.0
1985	3.2	1.1	1.5	2.4	2.7
1986	0.3	-0.7	2.1	2.6	2.5
1987	4.5	4.3	3.9	3.4	3.2
1988	4.1	2.5	2.1	2.0	2.4
1989	6.3	5.3	5.8	5.6	5.6
1990	9.0	8.2	4.4	6.0	6.7
1991	2.6	3.5	1.1	2.0	2.7
1992	4.9	3.5	2.2	0.7	1.0
1993	3.0	2.4	2.6	2.7	2.9

GNDI = GNP adjusted for terms of trade plus current transfers from abroad;
National Resources = GNDI plus capital transfers from abroad.

and exchange rate matters are brought into the picture.

Finally, Section 2.5 attempts to provide a concise conceptual framework in which the overall position of the current state of economy, with a payments surplus and a jobs deficit, may be understood and interpreted.

2.2 Income is Growing More Slowly than Output

In most countries, the commonly used aggregate economic indicators move closely together, so it does not often matter which of these one uses to evaluate developments. Because of the structural characteristics of our economy, that is not the case in Ireland. Changes in the outflow of interest and dividends to non-residents, in the purchasing power of Irish output, and in the flow of transfers from the EU are all very important for Ireland. Therefore, neither GDP nor GNP tells the whole story. The purchasing power of the resources available to Ireland is better measured by other indicators.

The indicator of standard of living most commonly used abroad is GDP, but this is not very suitable for Ireland, because it includes the profits of foreign-owned companies and because it also fails to exclude payments of debt interest abroad. These two items are very large in Ireland and their share in GDP has changed markedly over the years. As a result, growth in GNP is the most commonly used measure of standard of living in Ireland[1]. This measure is better because it excludes repatriated profits of foreign multinationals and interest paid to foreigners on the government debt, two important factors which have affected the growth in living standards over the last 15 years. In particular, the profits, swollen by transfer pricing, grew rapidly in the

[1] Estimates of the real growth in GNP are themselves subject to some uncertainty. The CSO provides two alternative figures, based on output and expenditure statistics respectively. While the two figures should conceptually be equal, problems in collecting appropriate price data result in discrepancies (which appear to be particularly severe in relation to agricultural intervention). The expenditure-based growth rates have been higher on average over the years. The discrepancy between the two growth rates has averaged 0.5 per cent per annum over the past decades, but seems to have been getting wider - between 1990 and 1992 the cumulative discrepancy was 5.6 per cent. Here we follow the usual convention by taking the average of the two.

1980s to reach a peak of 12 per cent of GNP in 1989.

However, movements in GNP do not take account of two other factors which can influence the standard of living to an appreciable extent. These are changes in the terms of trade and changes in the level of transfers received from the EU. Table 2.1 shows the relevant adjustments in the last decade.

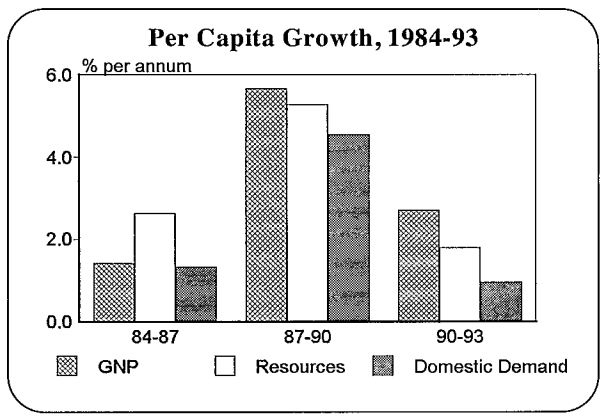
The adjustment for the terms of trade is necessary to take account of the fact that the purchasing power of the goods we produce may change over time. In 1986, for example, the price of our exports rose much more rapidly than did the price of imports because of the major fall in oil prices that year. That meant that the proceeds from sales of our exports purchased much more imports than they had in 1985, allowing a higher standard of living. Thus GNP, adjusted for the terms of trade, rose by 2.1 per cent whereas the unadjusted figure showed a fall of 0.7 per cent.

Since 1986 the terms of trade adjustment has generally been negative. In 1990 nearly half of the very large increase in output had to go to pay the substantial increase in the relative price of imports so that the terms of trade adjustment brought GNP growth from 8.2 per cent down to 4.4 per cent. The trend disimprovement in the terms of trade is attributable to two factors: the downward pressure on agricultural prices resulting from excess output of CAP products and the importance of high technology exports, discussed later.

The adverse effects of the disimprovement in the terms of trade have been partly offset by the increase in EU transfers over the period. This increase has been due both to the expansion of the Structural Funds and to the increase in transfers under the CAP which partly compensated for the lower prices. Gross National Disposable Income (GNDI), shown in the fourth column of Table 2.1, is a measure which takes account of both terms of trade and the current transfers. Transfers which are treated as being capital in nature are not included in GNDI, but Table 2.1 also shows the growth in a wider concept, which we call National Resources, defined as GNDI plus capital transfers. The average benefit from the transfers (even including the capital transfers) has been smaller than the loss due to the adjustment for the terms of trade.

Data for the past decade fall into three sub-periods, as shown in Figure 2.2, which presents annual average growth rates of per capita GNP and National Resources. (It also shows final domestic demand to which we return below.) During 1984-87, per capita National Resources rose much more rapidly than GNP, mainly reflecting terms of trade improvement.

Figure 2.2



During the boom of 1987-90, the increase in EU transfers ensured that growth in National Resources held up reasonably well despite deteriorating terms of trade. In contrast, the most recent period, 1990-93, has experienced a much lower rate of growth of per capita National Resources (1.7 per cent) than of per capita GNP (2.6 per cent). During this period the fact that EU transfers began to plateau[2] meant that they could

[2] While transfers from the EU Structural Funds rose rapidly there was a fall in transfers under the CAP.

Box 2.1: Agricultural Intervention and the National Accounts

The existence of a wide discrepancy between EU and third country export prices for Ireland's major agricultural products provides yet another complicating factor for the National Accounts to the extent that a varying proportion of agricultural output is exported to third countries. Accounting for the activities of the Agricultural Intervention Agency provides the biggest headache. The Agency buys in produce at a high price and sells it at a low price. The often sizeable difference is covered by transfers from the EU, but the accounting treatment of the losses and transfers is inevitably somewhat arbitrary.

For most macroeconomic purposes, it would be convenient to treat the Agency as being offshore, thus imagining the produce as having been exported for an EU-related price as soon as it is sold into intervention. But (in accordance with approved international standards) the National Accounts do not follow that convention. Accordingly, the timing of sales out of intervention stocks alters the year-to-year pattern of measured GDP growth. Furthermore, because the Accounts are based on current transactions, capital gains or losses of the Agency, reflecting price changes, can influence measured GDP in a way that would not arise if it were offshore. It is worth noting that GNDI seems to be insulated from most of these problems because it includes both the value of production and of the relevant EU transfers.

These accounting issues present other pitfalls for the incautious user in such items as the share of the distribution sector in GDP (because the Agency is included in that sector), and the magnitude of Public Authorities' subsidies (because the delayed arrival of EU compensatory transfers trigger an imputed Government subsidy to the Agency in the Accounts).

not offset the sharp terms of trade deterioration. So the slowdown since 1990 has been much more severe in National Resources than in GNP. As National Resources is a better measure of economic welfare than GNP, this goes some way to explaining why GNP growth has not felt as good as it might.

2.3 Jobless Growth?

This section looks at production and employment over the past decade. Three aspects of the disappointing performance of employment growth, especially considering the growth in output, are highlighted.[3] First, internationalisation of the economy, in particular of the manufacturing sector, which has made the interpretation of the data difficult. Second, a delayed response to changes in competitiveness which militated against employment growth, especially in the first half of the 1980s. Third, the pattern of output growth, skewed as it has been to export demand, which has been relatively unfavourable for employment.

Internationalisation of Irish industry

Spearheading Ireland's recovery during the late 1980s was a boom in the production of manufactures for export. Indeed, growth in manufacturing output had been sustained during most of the early 1980s. Some of the firms involved in this production boom are Irish-owned, but disproportionately the growth has come from foreign-owned firms who now account for about 55 per cent of gross manufacturing output, and 45 per cent of manufacturing employment in the country. While the output figures are distorted by transfer pricing, and although the relative growth in foreign firms has recently slowed or stopped, these percentages are by far the highest in Europe and make Irish manufacturing quite unique. In addition, recent years have seen increasing internationalisation of the comparatively few large Irish-based manufacturing concerns in the form both of much increased foreign investment and of

[3] We thus take up a discussion already initiated by the recent NESC report: *The Association Between Economic Growth and Employment Growth in Ireland*, Report No. 94, December 1992.

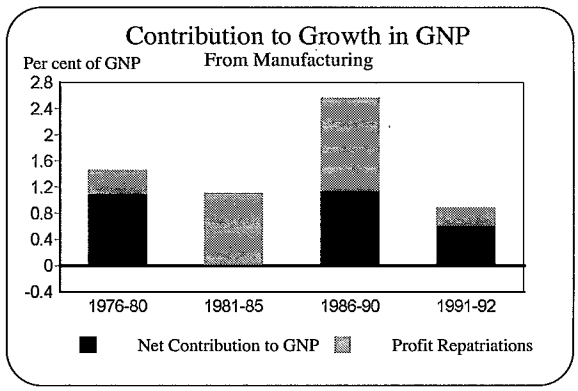
the arrival of new foreign owners or equity partners. (A similar pattern has been exhibited by large non-manufacturing companies also.)

The high and growing importance of foreign-owned firms has many consequences, some of which we return to in the following section. Here we would stress the fact that the pattern of their production, investment and pricing decisions has often been strongly influenced by the Irish tax regime which has been very generous to manufacturing profits. In many cases, it is that portion of their international activities which can be regarded as highly profitable that multi-national corporations have chosen to locate in Ireland.

To illustrate, we may note that much of recent industrial growth has taken place in just a handful of sectors where the share of wages in net output is barely 10 per cent (the three digit sectors covering pharmaceuticals, data processing equipment, software reproduction, and miscellaneous foods). Despite their purchase of services from domestic firms, most of the remainder of net output consists of profits attributed to, or of services bought in from, the parent company. By 1990, these few sectors accounted for 27 per cent of manufacturing value added (up from 11 per cent a decade before) but for only 10 per cent of manufacturing employment. Many other sectors also display a low ratio of domestic input to their measured net output - i.e. even after taking account of the substantial imported inputs.

Growth in the activity of such firms is invariably associated with growth in profit remittances abroad.[4] The net contribution of these sectors to GNP is much lower than their contribution to measured output (including GDP). In Figure 2.3 we show the growth in manufacturing output as a percentage contribution to GNP since the mid-1970s. The gross contribution from the sector peaked at around 2.5 percentage points in the 1986-90 period. However, when profit repatriations are taken into account the net contribution was less than 1.2 percentage points.

Figure 2.3



We must also be careful not to be misled by measured volume changes in some of these sectors which are affected by rapidly changing product technology. The product life-cycles of some of the most important and rapidly growing manufacturing sectors are very short, and unit prices tend to fall rapidly. This is clearly an issue in electronics and data processing sectors, and it has the implication that the purchasing power of a given volume of exports tends to decline over time. Since this pattern of declining prices does not affect most imports, rapid growth in aggregate export volumes will not pay for an equivalent growth in import volumes. As discussed earlier, this is one of the reasons why, in aggregate, import prices have recently tended to increase faster than export prices, resulting in a deterioration of the terms of trade and implying that the real purchasing power of GNP grows more slowly than does its production volume.

Note that we are not denying the importance of these modern, foreign-owned sectors: even after adjusting for the profit and other outflows they are major contributors to employment both

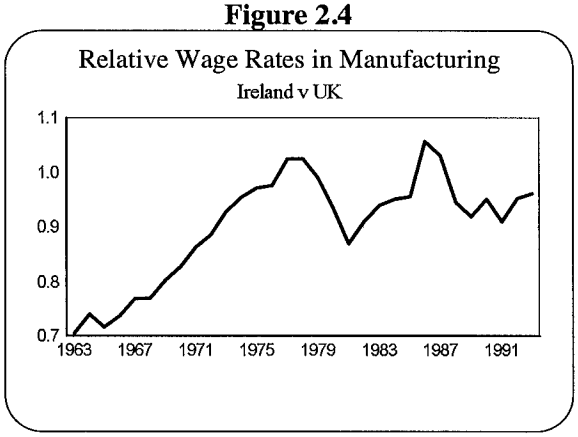
[4] See O'Malley E. and S. Scott, 1994 "Profit Outflows Revisited" in *Economic Perspectives for the Medium Term,* Dublin: The Economic and Social research Institute .

directly and through their purchases of local services. (The four sectors mentioned above employ over 20,000 - up more than 50 per cent in a decade). But they greatly contribute to confusion in interpreting national economic statistics. The arrival and expansion of firms with a wage share as low as 10 per cent inevitably contributes to an expansion of measured output disproportionate to the employment growth, thereby contributing to an impression of "jobless growth".

Labour Cost Competitiveness

Traditional manufacturing sector firms were hard hit by the domestic spending squeeze resulting from the fiscal contraction from 1981 on. The degree to which such firms closed and employment declined was unexpectedly severe. It revealed how dependent these firms were on domestic markets, and the extent to which they were unable to find profitable markets abroad when domestic demand shrank. In retrospect it seems likely that many of these firms became vulnerable some years before as trade with the UK and then with the EU became liberalised.

Figure 2.4



As shown in Figure 2.4, Irish labour costs were substantially below UK levels in 1960. However, over the subsequent 20 years the position changed drastically so that by 1980 Irish labour costs were similar to those prevailing in the UK.[5] This represented a very considerable loss of labour cost competitiveness over the 20 years.

Without protection many traditional manufacturing firms were uncompetitive by 1980 and only vigorous growth in domestic demand in the late 1970s allowed them to stay in business as long as they did. When hit by a major world recession including a severe recession in the UK, and by the fiscal adjustment in Ireland in the early 1980s, many firms were forced to close. This had a serious effect on employment in traditional manufacturing.

Between 1986 and 1989 the competitive position of Irish firms *vis- à-vis* the UK improved significantly, and despite year-to-year variations since 1990, they have broadly retained this gain. Combined with a less depressed domestic market, this has enabled employment in traditional industries to stabilise and even increase slightly during the recovery period from 1987 to 1990.

As it always has, the sobriquet "jobless" growth applies with more force to the pattern of development of agriculture and agri-business. Agricultural output has remained strong despite adverse external conditions and has contributed significantly to GNP growth in the past few years. But, after a pause in the late 1980s, the reduction in farm employment has resumed and over many years now has been averaging between 4,000 and 5,000 workers per annum.

In agri-business development has been dominated by the evolution of a handful of large firms, formed through merger and acquisition, and they are making great strides in penetrating foreign markets with the development of sophisticated products and skilful marketing. Output in the food sector has grown quite strongly but employment has at best stagnated in the last few years and accounts for only 18 per cent of the total in manufacturing, down from 20 per cent at the

[5] For employees the position was not quite as favourable due to the differing tax regimes.

Box 2.2: The Irish Financial Services Centre

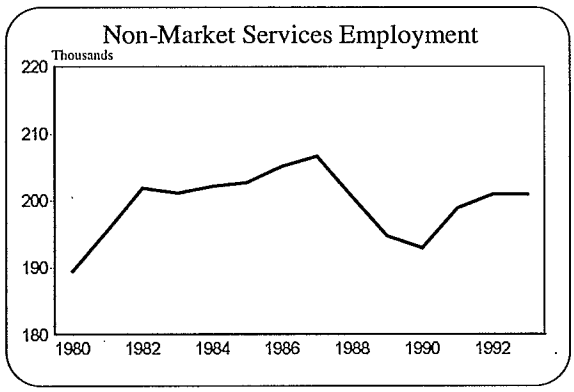
The Irish Financial Services Centre (IFSC) in Dublin, has made some net contribution to service sector employment (with 1400 jobs in place) since its establishment in 1987. But its influence on other macroeconomic aggregates has been more substantial even though its trading activities are not fully incorporated into the National Accounts. As with manufacturing, the type of activity attracted to the Centre has been strongly influenced by the tax concessions applying. Profit-intensive activities, such as fund management, have been prominent. It is understood that gross Corporation Tax receipts from the Centre exceeded £90 million in 1993. (Transfer pricing from onshore financial services may account for some of this.) Furthermore deposits placed by IFSC firms with the domestic banking system are thought to be quite considerable, and sufficiently large to limit the usefulness of money stock figures as an indicator of domestic savings. It may be that some profits generated by the manufacturing sector are invested in the IFSC; to the extent that they are not repatriated, this could result in GNP being overstated.

beginning of the 1980s. Labour-saving technological change combined with limitations on the supply of domestic raw materials remain long-term dampeners on the employment performance of this sector.

Pattern of Demand and Services Employment

It is in the service sector that output growth has generated the greatest expansion in employment over the last 15 years, notwithstanding cutbacks in public service employment in the second half of the 1980s (Figure 2.5).

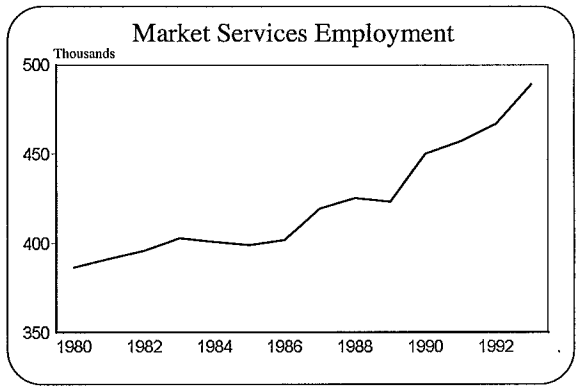
Figure 2.5



Between 1980 and 1993 employment in services grew by 113,000. It is thanks to the additional jobs in market services sector (Figure 2.6) in the past 15 years that total employment has been able to approach its previous (1980) peak again, despite the sharp declines in industry and agriculture.

Growth in services employment is, of course, a world-wide phenomenon with determinants as diverse as the trend to increased specialisation and out-sourcing of business services, to the growth of information technology and the labour-saving nature of technological change in other sectors.

Figure 2.6



The growth in services employment over the last 15 years has been considerably less than might have been expected if the pattern of demand growth in the economy over the same period had not been so skewed towards exports and away from domestic demand. Indeed many other countries have experienced a much more rapid growth in service employment. International comparisons suggest that in the last few years it is the relative shortfall in the growth in service jobs which is responsible for Ireland's disappointing employment performance. Since 1986 Ireland is one of the very few European countries which has avoided a significant decline in industrial

employment but, despite the vigorous growth in tourist numbers, service sector employment has grown at well below the average international rate.

The fact is that domestic demand has grown much more slowly than GNP in recent years (cf. Figure 2.2). The causes of this slow growth are discussed in the next section, but it is clear that it has had a dampening effect overall on job-growth as domestic demand tends to be more labour intensive than export demand.[6] This shift in the pattern of demand, rather than any structural change in the ability of the economy to generate jobs has been at the heart of the slow employment growth.

Labour Market

Altogether, the number of jobs provided was far from being enough to employ the potential net increase to the labour force without migration. After all, the population reached its highest level for a century in the mid-1980s, reflecting return migration in the 1970s and a baby boom which peaked in 1980[7]. Rapid population growth and sluggish job creation resulted at first in a sharp rise in unemployment, but soon, as always in the past, large-scale net emigration got under way. Indeed, it was the weak state of the UK labour market (traditionally the most important destination) in the early 1980s that delayed and, to some extent, limited the emigration. When unemployment began to fall in Britain in 1987 emigration was sufficiently large to make a significant dent in Irish unemployment, despite the absence of aggregate job growth until mid-1989. A renewed rise in UK unemployment in late 1990 began to choke off the emigration option, and resulted in unemployment surging here too. Up to 1 in 10 of those who registered for the first time as unemployed at some stage during 1992 had come from outside the Republic, presumably most of them from the UK.

The labour force survey and the administrative "live register" tell rather different stories about the extent of the upswing in unemployment.[8] The former indicates that unemployment has only returned to its 1987 peak; the latter would put 1993 unemployment at over 45,000 persons higher than in 1987 with the increase being substantially greater for women than for men. The labour force survey is subject to sampling errors but may provide a more consistent picture of the phenomenon of unemployment, as registration for benefit or assistance can be influenced by other factors.

The discussion in this Section indicates that, in summary, output figures must be treated with care because of the peculiar characteristics of the foreign-owned sector. Growth in the purchasing power of private sector output attributable to residents has been much slower than that of the total private contribution to GDP. Taking these qualifications into account, it is easy to explain why recent output growth has appeared much less job-intensive than in the past. As in the past, however, employment growth has fallen well short of what would be needed to prevent unemployment and emigration from increasing. That it has been unemployment that has borne a greater part of the deficiency of jobs on this occasion is attributable to poor job prospects in Britain.

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6 See Barry F.and J. Bradley, 1991, "On the Causes of Ireland's Unemployment", *The Economic and Social Review*, Volume 22, No. 4.

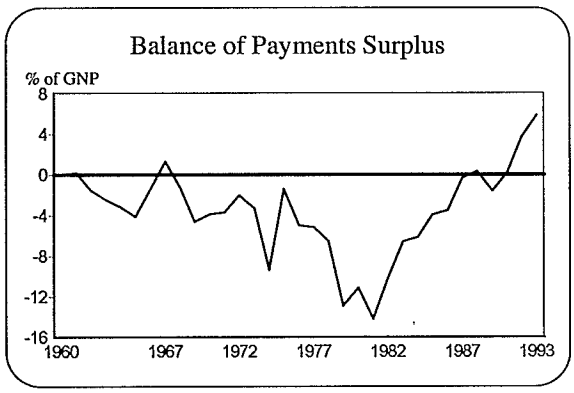
7 As discussed in Chapter 3, the subsequent sharp fall in the birth rate will soon have striking consequences for pressure on public spending as well as for the labour market.

8 See Sexton J.J.and P. O'Connell, 1994 "Labour Market Developments in Ireland, 1971-1993" in *Economic Perspectives for the Medium-Term,* Dublin: The Economic and Social Research Institute.

2.4 The Surplus Economy: Use of Resources

In this section we move away from issues of production and employment to the resources available to the economy and their use. As already mentioned, national production generates an important part of the resources available to the economy, but it is augmented by transfers from abroad, especially from the EU. For many years, domestic spending, or "absorption", through consumption and investment exceeded available resources, implying a deficit on the balance of payments. Corresponding to this deficit was a very large increase in the net foreign indebtedness of the economy, and an increased acquisition of domestic assets by non-residents.

Figure 2.7



As shown in Figure 2.7, the current account of the balance of payments was in deficit for every year from 1967 to 1987, and again in 1989. But since then there has been a growing surplus, as available resources have exceeded spending. The balance of payments surplus, running at about 6 per cent of GNP in both 1992 and 1993, has been accompanied by a virtual cessation of Government net borrowing from non-residents, and an accumulation of foreign assets by financial institutions and the domestic private sector.

Five main factors were at work in this turnaround. First, a tighter fiscal policy; second, a relatively favourable external environment in terms of demand, exchange rate developments and international interest rates especially between 1987 and 1990; third increased transfers from the EU; fourth, a reduction in the propensity of business to invest domestically out of earnings; and fifth wage restraint in the private sector. These factors are not unrelated. The favourable international demand environment and the wage restraint helped boost economic activity, profits and tax revenue. The lower interest rates helped the public finances directly, and allowed Government borrowing to be brought under control without increasing the tax share in GNP from 1984 on. It also improved the competitiveness of the domestic private sector. The increase in EU transfers was also a help to the budget, as well as directly increasing available national resources.

The sequence of events is quite clear. Three periods can be distinguished.

- From 1981 (when national saving was at its lowest and the balance of payments deficit at its highest) to 1987 there was a sharp fall in national investment, from about 30 per cent of GNP to 18 per cent. A significant part of this reduction took place in areas where the rate of return was low. Government, household and business sector investment all fell. There was a much smaller increase in national saving, concentrated in 1982, mainly reflecting increased household saving. The result was a sharp decline in the current account deficit of the balance of payments from almost 14 per cent of GNP to approximate balance in 1987.
- Between 1987 and 1990 international payments remained in balance, but this was the result of offsetting factors. Pulling in the direction of surplus was a sharp fall in Government borrowing combined with some increase in business saving and a substantial increase in EU transfers. This was largely offset by a reduction in household saving of

the same magnitude. The offsetting behaviour of household saving, especially in 1988 and 1989, was an important factor, combined with the 1987-89 export boom, in preventing the fiscal contraction from resulting in depressed aggregate demand, as it had in the first half of the decade. There was also some recovery of private sector investment, mainly in 1989 and 1990.

- From 1991 on the balance of payments surplus expanded substantially as personal sector saving increased, and investment fell as a percentage of GNP in the face of high real interest rates and a recession in the rest of the world. The Government's accounts were broadly stable in this period. A contributory factor to this stability was the rapid growth in EU transfers under the CSF which were paid to the Government. (In contrast, EU transfers to the agricultural sector under the CAP actually fall.)

An important corollary of this pattern of increased net saving in the economy is that domestic demand increased much more slowly than did GNP (cf. Figure 2.2). As already mentioned, this shift in the pattern of demand goes some way to explaining the disappointing employment performance. The sustained sluggishness of investment demand stands out. Investment in machinery and equipment is lower now in volume than it was in 1978. Even if some of the investment of the late 1970s was wasteful, the long-term adequacy of current levels must be questioned.

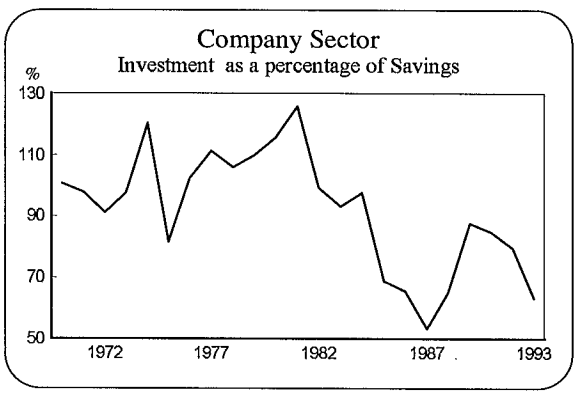
Monetary Factors

Among the factors influencing the time path of these spending patterns were developments in price and wage inflation and in monetary and exchange rate conditions.

Irish interest rates have been strongly influenced by movements in foreign interest rates, especially German rates. In addition there has been a series of speculative surges over the years, of which the 1992-93 currency crisis was the most severe example. Since 1989 Irish interest rates have generally been close to German levels, but before then there was a lengthy period of gradual convergence (interrupted by the speculative surges). In the post-1989 period German interest rates themselves were exceptionally high as a result of unification.

Interest rate movements affect the economy not only through their impact on the timing of investment decisions, and generally on the profitability of investment, but also through their impact on the Exchequer accounts. The latter effect is probably the more important, as interest payments on the National Debt reached as much as 11 per cent of GNP in 1985. While the generally lower nominal interest rates of recent years have helped consolidate the fiscal contraction, the effects of German unification, through raising German interest rates, have slowed the process.

Figure 2.8



For the Government sector, with its very high indebtedness, the high real interest rates have meant that tax rates have had to be maintained well above the level they would otherwise have been without German unification. This, in turn, has affected wage bargaining resulting in higher wage rates and lower competitiveness than would otherwise have been the case with consequential

Box 2.3: German Unification and Interest Rates

The unification of Germany at the end of 1989 and the resultant boom in the German economy caused a rise in the German inflation rate. To counteract the inflation the Bundesbank raised German interest rates. Other economies in Europe did not suffer from the same inflationary pressures while seeing their nominal interest rates rising in line with German rates. The result was a very substantial increase in real interest rates. Here we examine the effects on the Irish economy of a 2 percentage point rise in interest rates as a result of German unification.

The change in interest rates affects the economy through a number of channels. Of these the most important in the medium term is the public finances. Because of the high debt/GNP ratio a rise in interest rates of 2 percentage points directly increases Government expenditure by up to 2 percentage points of GNP. If the Government prevents the borrowing requirement from rising tax rates would have to rise above the level they would otherwise have been (or other expenditure fall).

Table: *Cumulative Effects of Higher Interest Rates*

	GNP	*Employment*
Year	*%*	*(000)*
1	-2.8	-18.1
2	-3.5	-23.4
3	-3.6	-25.0
4	-3.9	-30.9

In the simulation we have assumed that, were it not for the high interest rates, direct tax rates would have fallen. This, in turn, would have resulted in lower wage increases and improved competitiveness. As shown in the attached Table, after 4 years the result of this shock, operating through a number of channels, was to hold GNP almost 4 percentage points below the level it would otherwise have been and to reduce employment by around 30,000. In the light of these results, the growth and employment performance of the economy since 1989 is surprisingly robust.

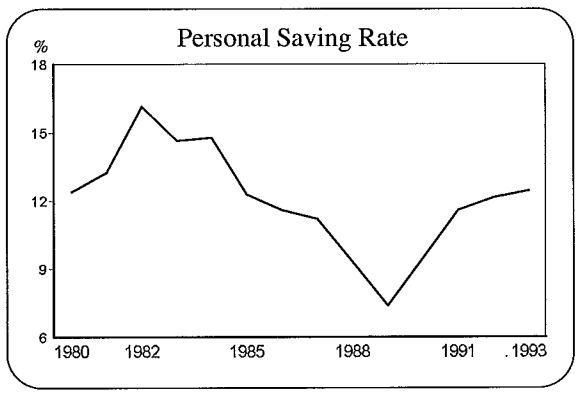
If the rise in interest rates attributable to German unification had not occurred in 1989 the economy could have developed very differently. This simulation highlights the potential importance of changes in interest rates in determining the future course of the Irish economy. Even at their current level, real interest rates remain quite high and they will continue to restrain investment and to encourage a relatively high rate of savings in the economy in the future.

effects on output and employment in the tradable sector.

High interest rates have also reduced the relative attraction for enterprises of investment directly in productive assets, considering the rates of return available from riskless financial assets. This has contributed to the low share of company savings being invested in fixed assets in Ireland, with the remainder being used to repay debt or invest abroad (Figure 2.8).

For the household sector the high interest rates may have contributed to a rise in the savings rate (Figure 2.9) and to a fall in investment, especially in private housing.

Figure 2.9



Exchange rate policy has a potentially large role in influencing interest rates, as well as wage and price inflation, though it is not the only influence (wage bargaining procedures are also important, and can themselves influence the implementation of exchange rate policy). Thus, adherence to the

EMS never implied an absolutely fixed exchange rate against the DM but allowed for realignments. A negative aspect of realignments in the EMS was the fact that their potential existence made for interest risk premia which were much higher than was needed to compensate for the actual depreciation of the Irish pound against the DM.[9]

Taking a long view, the realignment option in the EMS has been used fairly flexibly by Ireland, the 1992-93 crisis being by far the most protracted and severe. The Irish pound was devalued against the DM eight times in a decade and a half, preventing the emergence of severe overvaluation. Still there has been quite a degree of fluctuation in the wage competitiveness of the Irish economy.

The importance of labour cost competitiveness was illustrated by the experience of 1987-88, when the strength of sterling and of the US dollar, combined with a vigorous demand expansion in the UK and elsewhere in Europe, provided the basis for a strong export (and tourism) expansion which underpinned the recovery of the late 1980s. Since August 1993 the currency is free to move in a much wider band against the DM (+/- 15 per cent), potentially reinforcing its importance in influencing competitiveness.[10]

2.5 Getting the Balance Right

Previous sections have highlighted the distinction between various measures of aggregate economic performance. Even apart from the unique labour mobility, Ireland is unusual in the degree to which its economy generates (i) profits of foreign-owned firms (ii) net interest payments to non-residents (iii) the impact of sharp movements in (and a trend tendency to decline of) the terms of trade (iv) transfers from abroad, both current and capital and (v) shifts over time in Government and business saving. This makes it especially important in Ireland to consider more than one aggregate indicator of economic performance. The discussion in Section 2 indicates that when these factors are taken into account using Gross National Disposable Income, it is clear that growth has been strong, but not by as much as appears at first sight. That is why it may not have "felt" as good as the data seemed to suggest. The composition of growth also meant that the return, in terms of increased employment, was disappointing.

An economy with a large balance of payments surplus and high unemployment is unusual and not in a balanced or equilibrium state. One simple analytical framework within which one can think about the condition of the economy and how it has evolved in the medium term is provided by an adaptation of a diagram introduced by Harrod and Swan many years ago. The diagram derives from a model of the economy which is driven in the short-run by autonomous investment and Government spending decisions, and in which the wage rate is fixed by negotiation - rather than automatically adjusting to eliminate unemployment. The model does not capture many important features of the Irish economy - especially the openness of the labour market to migration - but it does suggest an interpretation of some major trends. The model predicts two key relationships between the two variables, autonomous spending and wages.

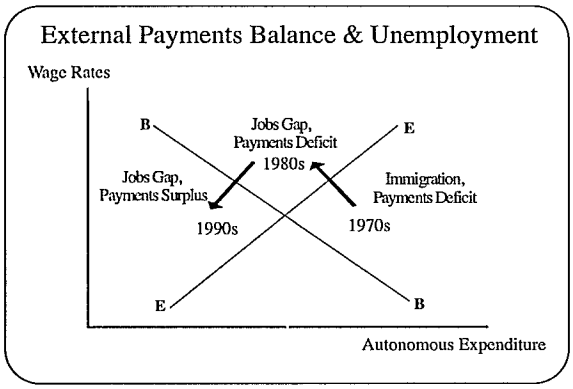
One relationship is represented by the combinations of wage and spending which will keep the economy close to full employment - or in the Irish context will eliminate the need for emigration. This is a positively-sloped relation: the higher the wages, the more spending would be

[9] See Honohan, P. 1992 *An Examination of Irish Currency Policy* Dublin :The Economic and Social Research Institute, Policy Research Series No. 18.

[10] Indeed, for several months the currency appears to have settled at around 95-96p sterling.

required to keep full employment. We plot it as EE in Figure 2.10. Combinations of wage and spending in the zone above EE and to the left involve unemployment and probably emigration.

Figure 2.10



The second relation represents the combinations of wage and spending which will yield balance of payments equilibrium. This is a negatively-sloped curve (plotted as BB): more spending will suck in imports, and that will have to be offset by greater international competitiveness. Combinations of wage and spending above BB and to the right are points of balance of payments deficit.

Policies that achieve wage restraint move the economy down the diagram, policies that encourage more domestic spending (public plus private) move the economy to the right. The diagram conceals much, such as the role of expectations and the accumulation of indebtedness.

The arrows are included to present an interpretation of Ireland's broad economic fortunes over the past two decades. The late 1970s saw return migration on a large scale, and this was associated with balance of payments deficit. Through the 1980s net immigration stopped and was then replaced by rising unemployment and large scale emigration. By 1993 a structural balance of payments surplus had emerged and we seemed to be clearly in the left hand quadrant.

This situation could persist for a long time: downward pressure on real wages is not strong, and as long as business finds it more profitable to invest in financial assets or to invest abroad the payments surplus could continue. But it may shrink from any of a number of sources:

- A reduction in personal saving would result in increased demand - helping employment.
- A shift to a more expansionary fiscal policy (Government dissaving) could have the same effect.
- More private investment to expand productive capacity would have a similar demand effect as well as affording supply side benefits.

The fact that the personal sector has been accumulating savings and that the Government debt ratio has been falling could make either of the first two scenarios fairly likely. But both of these would tend to dampen the prospects for long-term growth. Furthermore, the dangers of too expansionary a fiscal policy need hardly be stressed given the experience of the last two decades.

Ideally, therefore, the economy should move closer to the intersection point through more domestic investment. This would offer sustained growth as well as a better balance in the labour market. To achieve this outcome will evidently require a combination of a sustained improvement in the perceived profitability of new productive investment in Ireland and lower interest rates. In the longer term, if investment takes place in profitable projects increasing the productive capacity, it will increase the surplus by shifting the EE schedule upwards. This, in turn, would permit a sustained higher rate of growth in output and employment.

2.6 Conclusion

The impact of the turnaround in Irish growth performance has not yet been fully felt by the personal sector. For one thing, output growth during the last decade has not been fully matched by a comparable growth in the purchasing power of available national resources. More important, a growing share of available resources has been channelled to improving the balance of payments at the expense of consumption and investment. This effect was part and parcel of the successful efforts since the early 1980s to stabilise the fiscal and international payments situation. This correction will not be needed in the years ahead although, of course, a reversion to irresponsible fiscal management must be avoided.

Future growth is likely to be transmitted more fully to household welfare. In addition, an increasing share of output growth will be available to satisfy domestic demand, and it will thus have a higher employment content.

CHAPTER 3

Background Assumptions

3.1 Introduction

This Chapter sets out the context both international and domestic within which we have prepared our medium-term forecast for the Irish economy. There are three crucial sets of assumptions that underlie our central forecast.

- The international economic environment
- Domestic demographic developments
- Domestic Government policy.

The international economy is of particular importance to Ireland given its status as a small and very open economy. Furthermore membership of the EU and the EMS places constraints on our freedom to pursue independent monetary, fiscal or trade policies. Section 3. 2 assesses the external environment in which the Irish economy will operate for the rest of the decade.

It begins with a description of the general current economic situation. The unification of Germany and its aftermath has dominated developments in Europe since 1989 and dictated monetary policy for most other European countries through the Exchange Rate Mechanism of the EMS. With Germany and Japan still close to the nadir of their recessions they are unlikely to make a major contribution to world growth before the middle of 1995. In the meantime, we believe the US economy holds the key to world trends.

The sustained expansion of the US economy over the medium term and the implications for foreign direct investment are of particular relevance to Ireland. We therefore focus first on reviewing the current recovery of the US economy and its prospects in the medium term.

We turn next to the Far East, and Japan in particular. We question whether the high rates of growth that characterised the Japanese economy in the 1970s and 1980s will continue through the 1990s.

We then consider the prospects for Europe and the outlook for the German and UK economies in the medium term. In the final part of this section, we detail our assumptions on interest and exchange rates, world trade and the likely stance of fiscal policy over the remainder of the decade .

Section 3.3 focuses on the likely demographic changes in Ireland over the next 10 years. Already the falling birth rate has begun to have an effect. However, over the forecast period there will be a radical transformation of Irish society as a result of the demographic changes which are already under way.

In this Section we present our assumptions on the birth rate, participation in the educational system, and participation in the labour force. Between them these variables will play an important role in determining developments in unemployment, migration, and the public finances.

Section 3.4 presents our assumptions concerning domestic government policy and, in so far as it affects Ireland, EU policy. On monetary policy we assume that the Irish exchange rate will maintain a broadly unchanged rate *vis-à-vis* the DM over the next 5 years and that interest rate policy will be framed in this context.

In developing our assumptions on fiscal policy we take into account likely developments outside Ireland as well as the implications of the demographic changes, discussed in Section 3.3. We assume that fiscal policy will take the opportunity presented by steady growth to further reduce the burden of debt and to improve the long-term competitiveness of the economy.

The probable advent of new EU members in Central Europe early in the next decade and the substantial improvement in Ireland's position within the EU makes it likely that Structural Fund receipts will be reduced from the year 2000. We assume that Government policy over the next 6 years will be cast in the light of this possibility. This means that by 1999 the exchequer borrowing requirement should be eliminated. The full implications of these assumptions are discussed in Section 3.4.

3.2 The International Outlook

In preparing our forecasts for the world economy we drew on a number of different sources.[1] In particular we used the NIESR February forecast as a basis for our medium-term forecast for the major world economies. This forecast was modified to take account of additional information available to us from a range of other sources. In carrying out these modifications and in examining the sensitivity of our forecast to alternative assumptions we used the NIESR Global Econometric Model (NiGEM).[2]

As 1994 begins, economic activity in the industrialised countries continues to suffer from the recession that has lasted since early 1990. While recovery is now underway in those countries that were the first to slip into recession, the US, Canada, Australia, the UK and Scandinavia, the majority of countries in Europe and Japan remain mired in recession. Although the persisting weakness appears less serious than slumps in previous cycles it has proved to be of unusually long duration.

There are a number of reasons for this, most notably the ramifications for Europe of German unification. Unification resulted in an expansionary fiscal policy in Germany which, in turn, caused a tight monetary policy to be adopted by the Bundesbank in response to rising inflationary pressures. The reluctance of other European countries to devalue within the EMS added to the upward pressure on interest rates at a time when a more expansionary monetary policy might have been more appropriate to their circumstances.

Governments' inability to move on monetary policy was not eased by freedom in fiscal policy. The large fiscal deficits faced by many countries closed off this possibility for manoeuvre out of the recession. The high real interest rates combined with the tight fiscal policy have helped prolong the recession. Furthermore, in some countries public finance deficits rose, due to the recession, despite cutbacks in spending.

Weak international economic activity also played a part in delaying an upswing. The cyclical mismatch between the US and UK, on the one

1 Among the sources used were: the National Institute for Economic and Social Research (NIESR) *Quarterly* for February 1994, the OECD *Economic Outlook,* December 1993, The London Business School *International Economic Outlook* December 1993, the *European Economy*, Supplement A, "Economic Forecast 1993-1995", December 1993.

2 We would like to thank the NIESR for permission to use the NiGEM model.

hand, and Europe and Japan, on the other, prevented either from providing the necessary stimulus. Recovery in the US was hesitant, partly as a result of a poor European export market. Likewise severe competition among already hard pressed European export producers did little in the way of stimulating economic activity in the recession ridden economies of Europe.

The US

While the US recovery is now securely underway it has been characterised by an extraordinary series of hiccups. A short lived upturn in the Summer of 1991 petered out into a decline of 0.7 per cent in GDP for the year as a whole, the first annual decline since 1982. While the first half of 1992 witnessed virtual stagnation, figures for the final quarter revealed the fastest real economic growth for 5 years. Expansion slowed again in the early months of 1993 and fears of a double dip recession began to surface. Such pessimism proved unwarranted as 1993 followed a similar pattern to 1992 with the second half of the year providing most of the annual growth. Preliminary figures show that GDP accelerated significantly in the final quarter of 1993, at an annual rate of over 7 per cent, with an increase of 2.9 per cent for the year as a whole. Real GDP growth is expected to be slightly higher at over 3 per cent in 1994. A more rapid acceleration in growth is unlikely due to the still weak external environment and the probable appreciation of the dollar.

While this recovery has not been remarkable by historical standards (the upswing from the 1982 recession witnessed growth rates of 5 and 6 per cent), it is impressive in the circumstances of the weak international environment and restrained public finances. The main indicators suggest that conditions are favourable for a sustained expansion of the economy and, moreover, the structural changes that took place in the US economy since the mid-1980s leave it poised for continued growth in the medium term.

Inflationary pressures are low and are expected to remain so. The relaxed monetary policy pursued over the past 18 months is not expected to be significantly tightened in the immediate future. The private sector debt overhang which restrained the recovery is easing. To date consumption has lagged behind investment in stimulating the recovery because of caution on the part of households.

Unemployment, after a rather protracted lag, has begun to fall with strong employment growth in the services sector. In the industrial sector companies have so far responded to growing demand by adjusting working hours but a recovery in manufacturing employment is expected soon. The unemployment rate of 6.8 per cent for 1993 is expected to fall somewhat to under 6.5 per cent in 1994. For the remainder of the decade the rate of unemployment is expected to average just over 6 per cent.

The US economy is now in the position to reap the benefits of the corporate restructuring of the 1980s and early 1990s which saw a reduction in the private sector debt overhang and major technical change, in particular the wide application of computer technology.[3] With the completion of this restructuring in the short run the sustained increase in output should have a parallel effect on employment while the increase in productivity growth implies faster long-run growth for both employment and output.

Compared to the 1980s, the budget position in the US is significantly improved. There was

[3] A main area of technological change in the 1980s was the absorption of computers into the workplace. Increased foreign competition pushed firms into increasing their computer technology. Computers introduced in the early 1980s only reached their potential in the latter part of the decade with the subsequent reduction in the low skilled white collar work force.

further progress in 1993, aided by the low interest rates and reduced defence expenditure. The prospects for deficit reduction in the medium term are also good given the implementation of the Administration's fiscal package last August.

Monetary policy is expected to tighten gradually over 1994 with its influence becoming contractionary over the course of 1995, thus slowing the economy toward its potential long-run growth rate.

The present widening of the trade deficit is primarily due to the cyclical mismatch between the US and its major trading partners. As such it is not causing undue concern. By the second half of 1995 recovery should be well underway in all the major economies. The cyclical disparity which has characterised the global economy will recede as the G7 economies should be expanding together for the first time since 1987.

Table 3.1: Forecast for US

	1993	*1994*	*1995*	*1996*	*1997-2000*
Real GDP, %	2.9	3.1	3.0	2.7	2.6
Inflation, %	2.9	2.8	3.5	3.5	3.8
Unemployment, % of Labour Force	6.8	6.5	6.2	6.2	6.3
Treasury-Bill, %	3.2	3.7	4.6	5.6	6.0

The US dollar is expected to resume its upward trend in the light of the domestic environment. While the forecast appreciation will reduce competitiveness, this should be offset by both the aforementioned business restructuring and the expected relatively low growth of US labour costs.

The prospects for the medium term, therefore, are for a sustained expansion of the US economy with a growth rate averaging a minimum of 2.5 per cent throughout the 1990s.

Japan and East Asia

Japan's problems appear to run deeper than the current recession, already more protracted than anticipated. In sharp contrast to most European countries, Japan has attempted to combat the recession Keynesian style with a series of public expenditure programmes. So far they have prevented a slip into deeper recession but have been unable to bring about an upturn. This intractability is mainly due to the special nature of the Japanese recession. In general, previous downturns were a result of external shocks. This time the external shocks, the weak international environment and the sharp appreciation of the yen, come on top of persisting domestic imbalances.

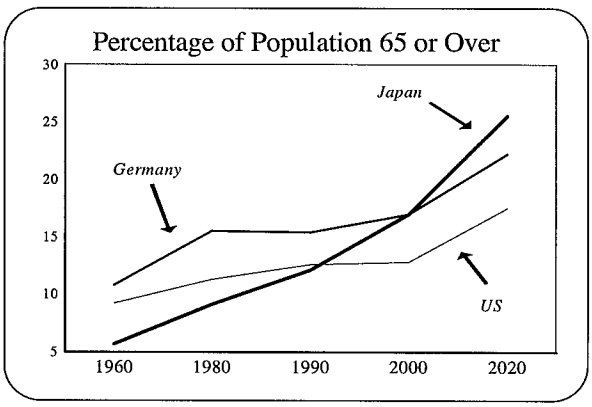
The problems caused by the overheating of the economy in the 1980s have not yet been resolved. Private investment expenditure is still affected. Asset prices are continuing to fall, the stock market has only begun to recover its losses and banks and other financial institutions are following cautious lending policies, partly because the fall in asset prices has impaired their liquidity. The response to the over hiring and excessive investment of the boom period has been to reduce investment and cut employment costs, with the latter striking consumption, which in turn has weakened output. Although progress has been made in corporate restructuring the enormous appreciation of the yen *vis-à-vis* the dollar, over 30 per cent between August 1992 and October 1993, has had negative implications for profitability and investment. Business confidence, already weak, sank further with the result that domestic investment has been again scaled back. There has also been a diversion of investment funds to overseas expansion, mainly in East Asia.

It is within this environment of domestic imbalances and external constraints that the Government has engaged in monetary and fiscal

stimuli. The response of credit demand to the sustained loose stance of monetary policy has been weak and increased attention has therefore been placed on fiscal policy.

The fiscal package introduced in September 1993 aimed not only at stimulating demand in the immediate future but at sustaining balanced growth in the medium term through a wide ranging set of structural reforms The reforms which are focused on four areas, new business, competition, imports and business costs, aim at promoting economic deregulation and passing the terms of trade benefits of yen appreciation to consumers.

Figure 3.1



Further proposed structural change comes in the form of the *Japan-United States Framework for a New Economic Partnership* which aims to achieve a substantial reduction in Japan's current account surplus over the medium term.[4] However, the implementation of these programmes has been delayed due to the present political turmoil and there remains the possibility of a trade war with the US. While we believe that this will probably be averted, tensions are likely to remain high.

Adverse demographic trends are another concern for the Japanese economy in the longer term (Figure 3.1). While at present the ageing population contributes substantially to the high household savings ratio, eventually it will call for a higher tax burden. How big a problem the ageing population poses for the economy depends on the effective investment of current savings especially in social and industrial infrastructure and on tax reform. It also means that the Japanese economy should continue to run a substantial balance of payments surplus in the medium term to prepare for the demographic crisis which now seems inevitable.

Table 3.2: Forecast for Japan

	1993	*1994*	*1995*	*1996*	*1997-2000*
Real GDP, %	0.1	0.4	2.5	2.8	3.0
Inflation, %	1.4	0.7	1.2	1.8	2.0
Interest Rate,%	3.0	2.0	2.4	2.9	4.5
Yen/$ Exchange	111.2	108.8	107.3	104.7	100.4

The recovery in economic activity in Japan is expected to be slow with 1994 showing, at best, very weak growth of around 0.4 per cent (Table 3.2). It should be stressed however that Japan's recession, unlike those in the West, is at a very low rate of unemployment. Furthermore the very low inflation and sound public finances permit the pursuit of expansionary fiscal policies.

In 1995 the economy should resume a more normal growth path. In the longer run, on the assumption that the present domestic imbalances are corrected and that the structural reforms are implemented, the Japanese economy can be expected to show continued balanced growth of just under 3.0 per cent throughout the remainder of the 1990s. While this rate of growth is low by Japanese historical standards, it is reasonable in the light of a currency which will probably remain somewhat overvalued.

[4] This programme obliges the Government to take measures which promote strong domestic led growth and allow increased market access for foreign goods and services. The effective implementation of these packages can be expected to complete the internationalisation of the economy.

Unlike Japan, the rest of South Asia has avoided recession. Indeed, global economic activity has been maintained by the strong growth in non-OECD countries, particularly in this region.

Rapid expansion has characterised the South East Asian economies during the 1980s and similar rates are expected through the 1990s. Real growth for the region, excluding China, is expected to average 6 per cent for the remainder of the decade. In China, where the past few years have witnessed growth rates of over 12 per cent, expansion is expected to moderate somewhat as anti-inflationary measures are implemented. However, China is expected to maintain a robust rate of growth of around 8 per cent through the mid-1990s.

Although rapid growth in exports underlies these high growth rates, inward investment is also high and together these economies provide a substantial market for the West. At present the so called Dynamic Asian Economies (Hong Kong, Korea, Malaysia, Singapore, Taiwan and Thailand) are the OECD's largest external trading partner. Throughout the last 10 years EU attention was focused on intensification of EU integration with the result that Japan dominated investment and trade links with the world's fastest growing economies. It appears that this neglect has probably ended with European exports and investment now growing rapidly.

The EU is expected to strengthen its links with the Dynamic Asian Economies both in trade and investment over the rest of the decade. Intra regional trade in East Asia, like intra EU trade, is very high. One of the reasons for the low intensity of trade between the two has been the prevalence of special trade barriers (CAP, Anti-Dumping duties, non-preferential trading agreements, etc.). The completion of the Uruguay Round with its further removal of trade barriers should clear some of the obstacles to intensifying trade between the two regions.

Europe

The burgeoning fiscal deficit in Germany and the consequential increase in inflationary pressures has posed major problems for the European economy over the last 3 years. To counter the effects of the fiscal expansion generated by unification the Bundesbank pursued a consistently tight monetary policy. The result has been high real interest rates which have prevailed across Europe since 1992 and which are partly responsible for the present subdued state of the European economy.

Given the unexpected duration and severity of the current recession, there is caution about short-term prospects. Expectations are for a moderate recovery in the major European economies over the course of 1994. While a faster pace of recovery can certainly not be ruled out, the current depressed state of consumer and business confidence, the need for many Governments to reduce their budget deficits, and the slow pace of reductions in interest rates suggest that a strong stimulus to growth in continental Europe will not be provided in the immediate future.

Forecasts for the medium term however suggest a more positive picture. Here we focus on the prospects for two economies of particular relevance to Ireland, Germany and the United Kingdom.

Germany

The general consensus is that the trough in German output occurred in 1993 and that economic activity has stabilised. Expansion in output, however, is not expected to begin until the middle of this year with an increase of only 0.8 per cent forecast for the year as a whole. Growth is expected to pick up in 1995 with an increase of 2.5 per cent in GDP. In 1996 an increase in GDP of 3.6 per cent is projected while for the remainder of the decade the

economy is forecast to grow at an average of 3 per cent. Inflation is expected to moderate somewhat in 1994 with an inflation rate of 3.5 per cent, down slightly from 3.6 for 1993. From 1996 on inflation is forecast at 2.2 per cent on average.

The easing in inflationary pressures should allow for a further relaxation in monetary policy. While interest rates are expected to be lower in 1994 and 1995 than in 1993, averaging around 5.4 per cent, the lower rates are expected to be relatively shortlived. Despite the containment of core inflation the need to finance a large Government deficit and to attract the necessary capital for reconstruction in east Germany implies that German monetary policy must remain relatively restrictive. After a further relaxation in policy in 1994 and 1995 a modest tightening can be expected thereafter and short-term interest rates should stabilise around 6 per cent over the forecast period.

Table 3.3: Forecast for Germany

	1993	*1994*	*1995*	*1996*	*1997-2000*
Real GDP, %	-1.9	0.8	2.5	3.6	3.0
Inflation, %	4.0	3.5	2.9	2.2	2.2
Unemployment, % of Labour Force	8.3	10.0	9.8	9.0	9.0
Short Interest Rate	7.3	5.3	5.6	6.0	6.0
DM/$ rate	1.65	1.74	1.76	1.77	1.80

The two biggest constraints on the German economy in the medium term are the public sector deficit and the loss in competitiveness. The likelihood of a strong recovery is reduced by both these factors. The planned reductions in social spending and unemployment benefits along with a public sector wage freeze should reduce the budget deficit in 1995.

Recession in Germany's main trading partners, coupled with the effective appreciation of the DM, has seriously eroded German competitiveness on EU markets. The depreciation of the DM against the yen and the dollar has eased but not offset this loss. Furthermore the high cost of German labour *vis-à-vis* its main competitors suggests that the struggle to regain competitiveness will extend over a number of years.

UK

The UK is the only major economy in Europe with a recovery well underway. The pace of the UK recovery and the rate of growth of that economy is of especial importance to Ireland, particularly in relation to trade and employment. Despite the considerable diversification in the pattern of Irish trade, exports to the UK still account for a third of the total while the importance of the UK economy as a market for Irish labour was highlighted again during this past recession.

Figure 3.2

Deteriorating conditions in the UK labour market in 1991 and 1992 were reflected in the temporary halt in net emigration flows from Ireland. There was in fact substantial gross immigration of people returning to Ireland to register as unemployed offset by others still leaving to find employment. The result was a sharp rise in the registered unemployed in Ireland. Conversely, as the recovery in the UK got underway in 1993 the increase in net emigration reflected the improvement in the UK labour market. As shown

in Figure 3.2, current forecasts are for a sustained improvement in UK unemployment throughout the 1990s.

The pace of recovery in the UK to date has exceeded expectations. GDP rose by 2 per cent in 1993 while for 1994 output is expected to expand around 2.7 per cent. Resumed growth has been accompanied by a faster than expected fall in unemployment and continued low rates of inflation.

Table 3.4: Forecast for UK

	1993	*1994*	*1995*	*1996*	*1997-2000*
Real GDP, %	2.0	2.7	2.6	2.2	2.2
Inflation, %	2.7	3.5	3.6	4.0	4.1
Unemployment, % of Labour Force	10.6	9.8	9.5	9.2	8.9
Short Interest Rate	5.9	5.3	5.9	6.2	6.5
£/$	1.51	1.49	1.47	1.46	1.44
£/DM	2.48	2.59	2.59	2.57	2.55

At present, the main risk to sustained recovery is the uncertainty surrounding the impact of a contractionary fiscal policy with substantially higher taxes coming into effect in the Spring of 1994. It is not clear yet whether this will provide a beneficial restraint on consumption, which should continue to grow moderately as the savings ratio falls, or whether it will halt or reverse real consumption growth, due to its effect on disposable incomes. There remains a real fear that the consumer led recovery may be put in jeopardy by the tightening fiscal policy. Whether this materialises is dependent on both the pace of recovery elsewhere, especially in Europe, and on the effect of lower interest rates on the savings ratio. If the European recovery gets underway as anticipated in 1994, the faster export growth should offset the contraction in consumer demand thus allowing the recovery to stay on course. If, on the other hand, recovery in continental Europe is weaker and more protracted than hoped for, the recovery could be retarded. The resulting weak domestic market could then be expected to discourage industrial investment on which medium- term progress depends.

Assuming the more optimistic of the scenarios described above, GDP in 1994 and 1995 is expected to rise on average by 2.6 per cent a year. From 1995 onwards the effects of the changes in fiscal policy, and a gradual tightening of monetary policy, are expected to reduce the medium term growth rate to around 2.2 per cent.

Despite the moderate growth forecast, unemployment should show some further improvement over the rest of the decade. The unemployment rate for 1994 is expected to fall to 9.8 per cent, down from 10.6 per cent for 1993 as a whole. Thereafter the unemployment rate should fall gradually to just below 9 per cent in the year 2000.

For the Central Forecast Sterling is assumed to depreciate by around 0.5 per cent a year compared to the DM over the rest of the decade. As a consequence, interest rates in the medium term are assumed to be about 0.5 per cent higher than German rates. The rate of inflation should be about 1 per cent above German rates, though still keeping at or below the Government ceiling of 4 per cent.

It should be noted that we have based our forecast on a relatively optimistic scenario for the UK economy. In the medium term the fiscal and current account imbalances remain and this could lead to a stronger market reaction in terms of interest rates, growth and exchange rates than assumed. In practice the progress of Sterling is likely to be less smooth than we have assumed. While temporary shocks can be absorbed by the Irish economy without serious disruption, a major change in policy in the UK could have implications for Ireland. The possibility of

Box 3.1: Eastern Europe

The severe contraction in output that has characterised the economies of Eastern Europe seems to be levelling off. Real GDP for 1993 for the main six economies is expected to stagnate after a 4.9 per cent decline in 1992. An increase in aggregate GDP of between 2 and 3 per cent is expected in both 1994 and 1995. On an individual country basis there is some divergence in these short-term prospects which have implications for the medium term. In the stronger economies, the Czech Republic, Hungary, Slovenia and Poland, the recovery of output has been associated with an improvement in structural features. In the weaker ones, the Slovak Republic, Romania and Bulgaria it is too early to gauge whether the stabilisation in output is firmly based and a forerunner to a general recovery.

In nearly all countries, growth prospects are constrained by large current account deficits and by the shortage of foreign exchange. Furthermore foreign direct investment which grew sharply between 1990-1992 is unlikely to grow significantly in the immediate future. However, by the end of the decade a combination of political stability and low labour costs could result in a significant diversion of investment from Western Europe. In addition, the prospect of EU membership for the more successful economies in transition after the year 2000 could lead to a rapid turnaround. The prospects for these economies are not of direct relevance to Ireland at present. However, by the end of the century they could pose a challenge as a location for direct foreign investment. This could have significant implications for the Irish

exchange rate shocks is discussed later in the *Review.*

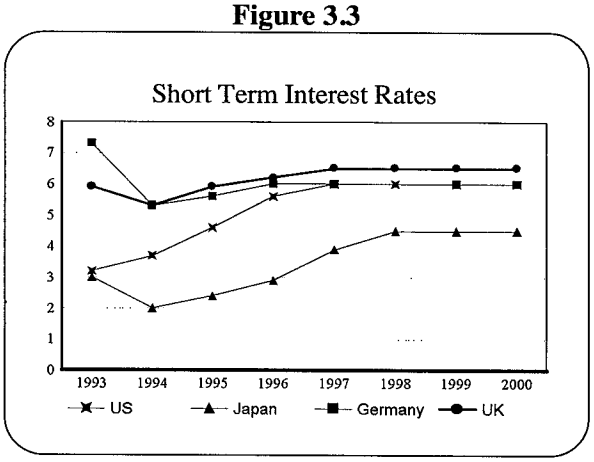
The Context for Ireland

The pace of recovery and expansion in Ireland over the coming years depends on a number of crucial factors: world trade growth, competitiveness, and the stance of monetary and fiscal policy in Europe. European economic policy in general is set to remain fairly tight over the remainder of the 1990s. Fiscal policy is already contractionary in most European countries and will remain so in the course of the next upswing. Monetary policy, which may be relaxed further in the short term, is expected to be tightened gradually from 1995 onwards.

Interest & Exchange Rates

The interaction of interest rates and exchange rates is a crucial factor in shaping the progress of the recovery in the medium term. Despite the considerable easing of monetary policy in Europe over the past 18 months, real interest rates remain high, given the severity of the recession. It is generally agreed that a further reduction in short-term rates is desirable to further the recovery process, particularly given continued weak domestic demand and low inflationary pressures outside Germany. However, the interest rate reductions that have already taken place have still to make their full impact on the EU economy. Further cuts are only expected to have a marginal impact on any recovery occurring in 1994.

Figure 3.3



The psychological impact, however, on depressed consumer and business confidence is

Box 3.2: Cut in Public Consumption

Several European Governments have had to cut expenditure in 1994 due to the poor state of their public finances. Using the NIESR NiGEM model we simulate a cut in the volume of public consumption of 2 per cent in 1994 in Germany, Italy and the United Kingdom to examine the wider economic effects of the change.

As shown in the Table, in 1994 the growth rate in the 3 countries would be reduced by between 0.22 and 0.35 percentage points. Other economies, including Ireland, would also be affected by the change.

As a result of the expenditure cuts inflationary pressures would be reduced. There would also be downward pressure on interest rates. World trade volume would fall by 0.19 per cent in 1994 and 0.09 per cent in 1995. Import volume would fall in all European economies. This would have a direct effect on the Irish economy.

Change in growth of GDP per cent

	1994	*1995*	*1996*	*1997*
Germany	-0.35	-0.07	0.07	0.08
Italy	-0.22	-0.21	-0.18	-0.18
UK	-0.26	-0.09	-0.01	0.06

also important and another reduction in German short-term interest rates in 1994 is likely. The rest of Europe is expected to follow suit. A cut in UK rates may also happen in 1994 in an attempt to offset the impact of the April tax increase.

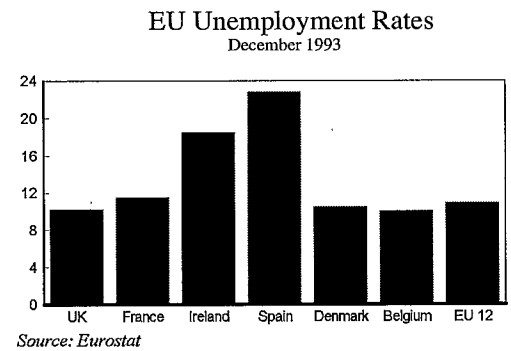
From 1995 onwards the overall level of world interest rates is expected to rise. As the Japanese economy recovers rates should rise gradually from their present low levels, though still remaining below European and US levels. US rates are assumed to rise further in 1995 and 1996 before settling at around 6 per cent for the latter half of the 1990s. Short-term interest rates for the major economies, other than Japan, are assumed to converge around 6 per cent in 1997 and to remain fairly stable for the rest of the decade.

With US interest rates on the rise and German rates still declining some further strengthening of the dollar against the DM is expected. Until the second half of the decade, when short-term rates are assumed to converge, US rates will remain below German rates although rising more rapidly. Thus a depreciation of the DM against the dollar of up to 5 per cent is expected over the period.

Public Finances

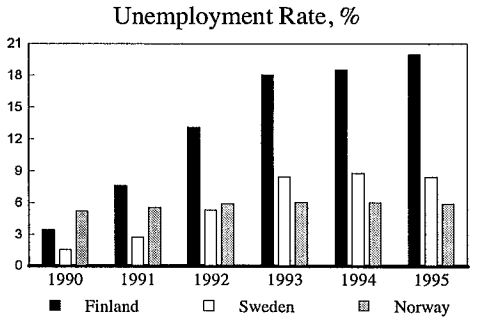
The large fiscal deficits faced by most of the major economies possibly poses the greatest risk to sustained recovery and to prospects for the medium term. The concern of European Governments with reducing budget deficits prevented the pursuit of a counter-cyclical fiscal policy during the current recession, while the recession itself aggravated the existing problems in public finances. In some countries, despite cutbacks in Government spending, deficits rose due to the high interest rates .

Figure 3.4



The gravity of the public finance situation in many countries is such that fiscal sustainability requires lowering, rather than simply halting the

Box 3.3: Scandinavian Labour Market



There has been an extremely rapid deterioration in the labour market situation in Scandinavian countries since 1989. Finland has seen the most dramatic deterioration with its unemployment rate rising from 4 per cent in 1990 to over 18 per cent in 1994. The most important factors behind this rise were the massive fall in output, itself a result of the collapse of Finland's export markets in the former Comecon countries, and the serious crisis in the financial system. The deterioration in public sector finances during the recession means that fiscal policy will remain restrictive over the next couple of years with the unemployment outlook remaining bleak. The unemployment rate is expected to rise to around 20 per cent in 1995. While it should not deteriorate any further, no appreciable improvement in the situation is foreseen before the end of the decade.

The rise in the Swedish unemployment rate has also been substantial though the full gravity of the situation has been disguised by a big increase in numbers on training schemes. Sweden witnessed a rise in the unemployment rate from 2.7 per cent in 1991 to over 8 per cent in 1993. The deep recession following the boom of the late 1980s resulted in a severe decline in overall output. Significant reductions in public employment, in addition to labour shedding in industry and construction, contributed to the sharp rise in unemployment. The recovery is not expected to be vigorous enough to reduce the labour market slack in the short run.

Of the three Scandinavian countries Norway suffered the least deterioration in its labour market largely due to the insulation provided by North Sea oil. The unemployment rate of 6 per cent in 1993 is expected to decline somewhat in 1994 as the recovery gets underway.

rise in, Government borrowing. This, in turn, implies either a reduction in Government expenditure or increased taxation at the point when countries are just entering the upswing stage of the business cycle. Assuming that most countries are still attempting to follow the Maastricht guidelines, their concerted efforts to achieve a reduction in their deficits will certainly slow both the process of recovery and potential growth thereafter. The relatively slow growth and high unemployment forecast for the latter half of the 1990s thus reflect the restrictive fiscal policy stance that the state of public finances dictate. In Box 3.2 we examine the effects of a more restrictive fiscal policy in the major EU members.

Unemployment

The problem of high unemployment is not confined to Ireland. Current unemployment rates across the EU show clearly that the sustained deterioration in the labour market is one of the major problems facing the European economy as a whole. Figure 3.4 illustrates that the Irish unemployment rate is no longer at the extreme in Europe. Indeed, calculated on a standard basis, Spanish unemployment far exceeds the Irish unemployment rate. The increase in the unemployment level over 1993 in almost all countries reflects the continuing recessionary state of continental Europe. As Box 3.3 shows, the deterioration in the labour market in Scandinavia has been particularly acute.

The outlook for unemployment towards the end of the decade shows some improvement but prospects over the short term remain bleak. As growth in Europe is expected to remain subdued in 1994, and moderate at best in 1995, plant and labour force utilisation will decrease further.

The rate of unemployment for the EU is expected to peak in 1994 at 12 per cent. As recovery begins there will be the inevitable timelag between expansion of production and its effect on the labour market. At the end of the current recession unemployment is likely to be higher than at the end of the previous one. The unemployment rate for the EU for the latter half of the decade is expected to be around 10 per cent.

The recently published European Commission White Paper *Growth, Competitiveness and Employment* addresses the unemployment problem faced by the Community and makes several policy recommendations[5]. However, we do not anticipate that it will have a major impact on the likely development of the economy over the forecast period.

World Trade

World trade growth is expected to benefit from the completion of the GATT negotiations. After suffering 2 years of weak growth, world trade growth is expected to accelerate to nearly 5.5 per cent in 1994 as growth in the US continues and Europe begins to recover. The continued robust expansion of the Asian economies, and China in particular, as well as the increased trade between Latin America and the US set the stage for growth in world trade to average 6 per cent in the medium term. An analysis of the implications of the GATT Uruguay Round agreement both for world trade in general and for the Irish economy in particular is provided in Matthews's paper in *Economic Perspectives in the Medium Term*.

3.3 Demographic Structure

Irish society is likely to undergo a radical change over the next 10 years as the full effects of demographic changes work their way through the population. Many of these changes are already inevitable given the pattern of births, deaths and emigration over the last 20 years. The key features of these changes are: a drastic reduction in the number of children; a rapid fall from 2000 onwards in the net entry into the labour force; a major increase in the proportion of the population in working age groups; a substantial reduction in the dependency ratio, even if unemployment were to continue above the EU norm.

The birth rate in Ireland in 1980 was well above the norm for most of Western Europe. Since then it has fallen fairly steadily (Figure 3.5). While the birth rate last year, which is estimated to have been 13.7 per 1000, is still above the EU average of 11.6, it has dropped very rapidly in recent years. It is today significantly below the birth rate in Scandinavia though still well above levels observed in Southern Europe (e.g. Greece, Spain and Italy).

The future path of the birth rate remains uncertain. The increasing prosperity and opportunities for skilled work will tend to reduce it further. On the other hand, it is possible that the recent fall may only represent a decision to postpone having children. For our Central Forecast we have assumed that the birth rate will continue to fall slowly over the next decade, as shown in Figure 3.5. This would still leave it above current Southern European levels, though given the high proportion of women between 18 and 40, this will probably still represent a low age specific birth rate by EU standards.

The result of the fall in the birth rate which has already taken place is that there has been a substantial reduction in the numbers of children entering the educational system from the mid-1980s onwards. However, as shown In Table 3.5, the latest reduction in the birth rate indicates

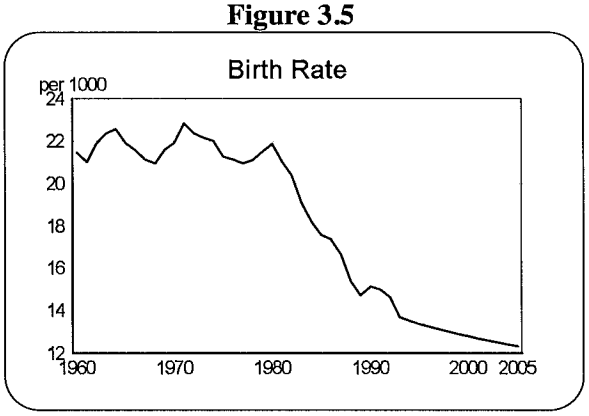
[5] The policies proposed and the implications of these for Ireland are assessed in Kennedy's paper "European Action on Unemployment" in *Economic Perspectives for the Medium Term.*

Table 3.5: Assumptions on Population, Thousands

Aged:	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2005*
Less than 15	941	924	904	882	856	831	807	786	766	749	680
15 to 24	602	621	638	653	663	668	665	656	643	629	541
25 to 64	1581	1596	1612	1629	1649	1670	1694	1719	1745	1769	1865
Over 65	403	406	407	409	411	414	415	418	419	422	440
Total	3526	3547	3562	3573	3579	3582	3582	3579	3574	3568	3526
					Memorandum Items:						
4 to 12	531	521	505	485	469	456	443	429	416	403	363
13 to 18	407	410	413	414	413	409	402	391	377	363	305

that the number of children under the age of 15 will fall dramatically over the next 10 years. The number of children in the primary school system will fall by over 2.5 per cent a year over the rest of the decade. Even the number of children in the second-level system will begin to decline next year and by 2005 their number will have been reduced by 25 per cent.

Figure 3.5

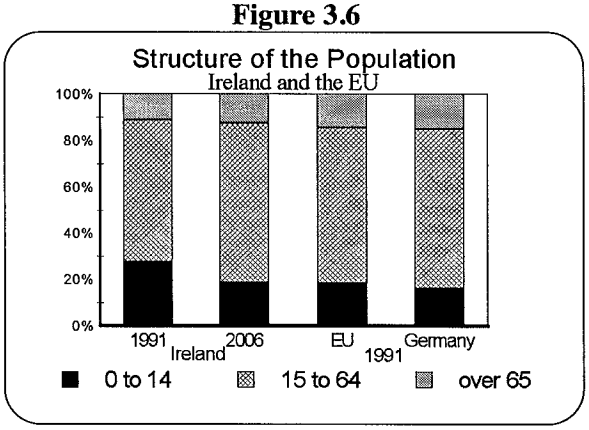


On the assumptions we have made concerning the birth rate, by 2005 there will be 23 per cent less children under 15 than there are today. If the birth rate were to fall much further over the rest of the 1990s the reduction could be even greater.

From 1960 to 1980 Ireland was exceptional in that a very high percentage of the population were dependants, in particular child dependants. This meant that while our GNP per worker has converged on the EU norm, GDP per head has risen more slowly. A reflection of the very high dependency ratio was the rapid increase over the last 20 years in transfers (and related taxes).

However, from being a society with a very high ratio of children to adults in the 1980s, as shown in Figure 3.6, Ireland will see a rapid transformation towards the EU norm over the next decade. Children under 15 accounted for 27 per cent of the population in 1991; by 2005 they will account for only 18 per cent. The numbers in the working age group 15 to 65 will rise from under 60 per cent of the population to almost 70 per cent over the same period.

Figure 3.6



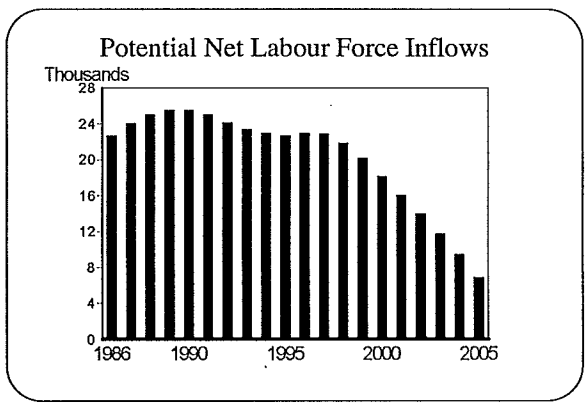
As shown in Figure 3.6 Ireland is also unusual in having a small proportion of the population over 65, just over 11 per cent in 1991. The proportion in the retired age groups will only rise gradually over the next 10 years making the contrast between Ireland and the rest of the EU even greater. As shown in Figure 3.1, by the year 2000 around 17 per cent of the German population will

Table 3.6: Labour Force Assumptions, Thousands

	1991	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2005*
Numbers in Education aged 15 to 24											
% of all Males	48.8	50.3	51.3	52.3	53.3	54.3	55.3	56.3	57.3	58.3	63.3
% of all Females	51.4	53.8	54.8	55.8	56.8	57.8	58.8	59.8	60.8	61.8	66.8
% of Cohort	50.1	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	65.0
Labour Force aged 15 to 24, % of those not in education											
Males	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females	92.3	92.5	92.7	92.9	93.1	93.3	93.5	93.7	93.9	94.1	95.1
Total	96.4	96.5	96.6	96.7	96.8	96.9	97.0	97.1	97.2	97.3	97.8
Labour Force aged 25 to 65, % of Cohort											
Males	93.4	93.3	93.2	93.1	93.0	92.9	92.8	92.7	92.6	92.5	92.0
Females	37.6	38.6	39.6	40.6	41.6	42.6	43.6	44.6	45.6	46.6	51.6
Total	65.5	65.9	66.4	66.8	67.3	67.7	68.2	68.6	69.1	69.5	71.8
Labour Force aged 15 to 65											
Males, % of cohort	81.6	80.9	80.4	79.9	79.5	79.2	79.0	78.9	78.9	78.9	79.3
Females, % of cohort	39.5	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.8	47.2
Total	1324	1340	1360	1379	1398	1416	1432	1447	1462	1475	1524
Total, % of cohort	60.7	60.4	60.4	60.4	60.5	60.6	60.7	60.9	61.2	61.5	63.3

be 65 or over (15 per cent for the UK) and this will rise to well over 20 per cent by the year 2020.

Figure 3.7



These changes in the structure of the population obviously have important implications for the growth in the labour force over the next decade. The fall in the numbers of births since 1980 will only begin to affect the entry into the labour force in the next decade. As shown in Figure 3.7, the potential net labour force inflow, which is currently running at between 20,000 and 25,000 a year will fall rapidly after 2000 to 7,000 a year by 2005.

However, the labour force will be affected by a number of other important factors. The proportion of those in the 15 to 24 age group who are in full-time education has risen dramatically over the last decade.[6] As shown in Table 3.6, by 1991 around 50 per cent of this age group were in education. The Department of Education currently plans a further substantial increase in educational participation. We have assumed that the participation rate rises by 1 percentage point a year over the next decade. Given the large numbers in the relevant age cohort, this results in a reduction in inflows into the labour force.

[6] See Sexton J.J. and P. O'Connell, 1994 "Labour Market Developments in Ireland, 1971-1993" in *Economic Perspectives for the Medium-Term.*

Working in the other direction is the trend rise in participation by women in the labour force. This is documented in Sexton and O'Connell. Currently participation by women in the labour force is abnormally low by EU standards and there is every reason to believe that it will continue to grow. However, it is difficult to predict how rapidly participation will rise given the radical changes occurring in the birth and the marriage rate. In preparing our Central Forecast, described in Chapter 4, we have assumed that participation rises slightly faster over the next decade than over the last, reflecting changing demographic structures and improved labour market conditions. As shown in Table 3.6, we have assumed that the proportion of women in the age group 25 to 64 who are in the labour force rises by one percentage point a year from the estimated 1994 level of around 41 per cent.

Over the past decade participation in the labour force by men in the 25 to 64 age group has fallen slowly. We have assumed that this trend continues into the next decade.

The final important factor affecting the labour force is migration. There is ample evidence to show that migration is affected by the changing economic environment, both in Ireland and in the UK. As a result we leave the discussion of our forecast for emigration to the next chapter. However, the labour force figures shown above take account of the migration figures underlying the Central Forecast.

3.4 Government Policy

Monetary Policy and the Exchange Rate

Over the last 18 months the stance of Irish monetary policy has had to undergo a radical transformation in the face of the changing external environment. The prospect of seeing a common currency by the end of the decade have dimmed. As a result, the principles determining Irish monetary policy are somewhat unclear.

In the past 10 years the major disturbances in the Irish exchange rate within the EMS have emanated from changes in the £ Sterling - DM rate. In the international background, described above, we have assumed that the £ Sterling depreciates by around 1 per cent a year *vis-à-vis* the DM due to more rapid inflation in the UK. We also make the technical assumption that the Irish £ maintains roughly its current parity with the DM, involving an appreciation against Sterling. On the basis of the background assumptions for the UK and the resulting forecast for Ireland in the next Chapter, this would be quite sustainable without putting any serious pressure on the competitiveness of Irish firms.

The course of independent exchange rates is never smooth and there remains the danger that disturbances affecting Sterling could affect the Irish economy. This remains one area of uncertainty concerning our forecast.

The corollary of our assumptions on exchange rates is that Irish interest rates should approximate German rates in the Medium Term (see Table 3.3) with a small margin of around 0.25 percentage points. This means that real interest rates will continue to be high compared to the experience of the Irish economy in the 1950s to the 1970s, though they will be significantly lower than the levels experienced over the last decade.

Fiscal policy and the EU

In previous *Medium-Term Reviews* we have adopted a technical assumption that average tax rates and the volume of public expenditure remain unchanged in the medium-term.[7] While we made limited modifications to this stance in

[7] This is characterised as a neutral budget where fiscal policy is providing no inflationary or deflationary stimulus to the economy.

the last *Review* it has provided a simple basis for forecasting the future. However, if we adopted this assumption as the basis for our forecast in Chapter 4 we would find the Exchequer moving into very substantial surplus and public expenditure as a share of GNP falling extremely rapidly in the medium term. Whether or not this scenario is desirable it is clearly unrealistic.

The choice of an appropriate objective for fiscal policy in the medium term is not straightforward. The Maastricht criteria do not provide an adequate guide. It is clear that the current burden of debt is still much too high and needs to be reduced so that the optimal strategy on the public finances will involve staying well within the Maastricht guidelines to continue the task of reducing the debt/GDP ratio.

The objective on fiscal policy must also take into account the substantial structural fund receipts from the EU as part of the Community Support Framework (CSF). In the period to 1999 they are assumed, on average, to remain roughly unchanged at their 1993 level; 1994 will see some fall on 1993 which will be made good in subsequent years. This time path is consistent with current information on the CSF for 1994-99.

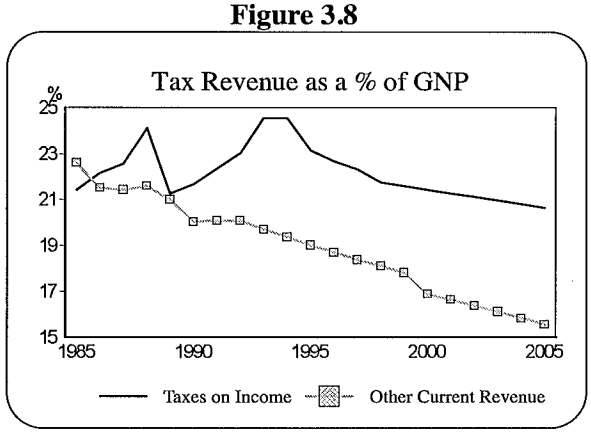
However, as discussed later, the next 5 years are likely to see a fairly rapid convergence of the Irish economy towards the EU norm. In addition, if Poland, Hungary, the Czech Republic, and Slovenia were to join the EU at the end of the decade Ireland's position would be significantly altered leaving our GDP per head well above the 75 per cent threshold used in determining eligibility for funds. As a result, we have assumed that, beginning in 2000, EU structural fund payments will be approximately halved.

We assume that fiscal policy aims to keep the Exchequer borrowing requirement in the range 0 to 2 per cent of GNP in the long term. To take account of the assumed fall in EU receipts in 2000, the Exchequer should eliminate borrowing by the end of the current CSF. This would allow an orderly transition to the next phase of development from 2000 onwards where we would receive less support from the EU.

Within the broad guideline on borrowing we have made a set of assumptions on taxation and expenditure which take account of the demographic changes which were discussed above. We have assumed that some of the benefits of growth will be used to reduce rates of direct taxation and some of the benefits will be used to increase public services. However, the increase in public services will be slower than the rate of growth of the economy as a whole leading to a significant reduction in the overall tax burden and the share of expenditure in GNP.

In the case of taxation the carryover effects of the amnesty mean that next year, with unchanged tax rates, tax revenue will fall as a share of GNP. In addition, in the years 1996 to 1999 we have assumed that the share of personal income going on direct taxation falls by 0.7 percentage points a year. Direct taxation as a share of GNP is assumed to fall from 24.6 per cent in 1994 to 21.4 per cent in 2000 (See Figure 3.8). Other tax rates are assumed to be indexed to the rate of inflation.

Figure 3.8



There are four important factors which will exert a continuing influence on the growth in public

expenditure over the next decade causing changes in the volume of expenditure and in its share of GNP:

- Demographic trends
- The Structural Funds
- Demand for higher quality services
- Public Service Pay

The substantial reduction in child dependency over the next 10 years will affect public expenditure in a variety of ways. There should be savings on expenditure on child health services. It will affect child dependency payments in the social welfare system; in 1992 they amounted to around £500 million in a budget of £3400 million. The number of teachers required to maintain services will also fall. As against this, the increase in educational participation will necessitate some increase in teacher numbers in the higher levels of the educational system. It will also probably require some increase in buildings to cater for a major increase in student numbers.

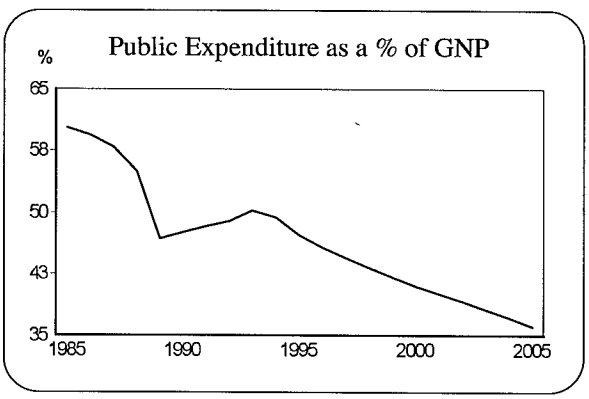
We have assumed that there is a reduction in primary teacher numbers while allowing some reallocation of resources within the primary sector to improve services for the most disadvantaged. The resources saved here go to help fund the increased costs arising from higher participation in education at second and third-level. Overall there is no volume change in educational expenditure over the forecast period, though this implies major reallocation of funds within the sector and an improvement in services.

The effect of the demographic changes would be to reduce the volume of expenditure on transfers by up to 0.5 per cent a year. However, we have assumed that with benefit rates (excluding educational transfers) normally linked to the rate of inflation, the saving on numbers of recipients will be used to permit a real increase of over 1.5 per cent a year in rates of benefit.

We have assumed a pattern of capital expenditure broadly in line with that outlined in the National Development Plan. We have included some additional infrastructural expenditure in education later in the decade and we assume that, even though CSF funds are almost halved in 2000, infrastructural investment continues at an unchanged rate. In this approach we follow the principle, set out in Fitz Gerald and Keegan (1993)[8] that public expenditure should only be undertaken where it represents good value for money and that the source of funding should be irrelevant to whether an investment project goes ahead.

Over the last decade there was almost no growth in public consumption. For the future we have assumed that rising standards of living will see a demand for some increase in the provision of public services. As a result, we have assumed that public consumption rises in volume by around 2.5 per cent a year over the 1990s with some slowdown in the following 5 years. This rate of growth will still be well below the rate of growth in the economy as a whole.

Figure 3.9



[8] Fitz Gerald J. and O. Keegan (eds).1993. *EC Structural Funds: The Community Support Framework - Evaluation and Recommendations*, Dublin: Stationery Office.

Finally, over the last 7 years the rate of growth of average earnings in the non-market sector has been much greater than the growth rate for earnings in the rest of the economy. This has posed a number of dangers for the economy. First of all it has increased the burden of the public sector squeezing out jobs in the private sector. Secondly it has put upward pressure on wage rates in the private sector. If this process were to continue it would seriously endanger the competitiveness of the economy. The recent pay agreement appears to give some hope that this process will be slowed and we have assumed that earnings in the private and public sectors rise at the same rate over the next decade.

As shown in Figure 3.9, the cumulative effect of these assumptions is that public expenditure as a percentage of GNP will fall from its current level of just over 49 per cent to around 41 per cent by the end of the decade. The fall will occur in spite of an increase in the volume of services. This is possible because the share of debt interest in GNP will fall rapidly during the decade and the other factors, already enumerated, which will result in slower growth in other areas of public expenditure, while still retaining or improving the quality of services.

CHAPTER 4

The Central Forecast

This Chapter sets out our Central Forecast for the Irish economy for the rest of the decade. It is based on the set of assumptions, described in the last Chapter, concerning the external environment, domestic economic policy and basic demographic trends. It represents our best assessment of the likely growth in economic activity over the next 6 years. We also give some indication, albeit at a much more summary level, of how the economy might be expected to develop over the period to 2005.

However, because of the many uncertainties concerning both the underlying assumptions and the likely behaviour of the Irish economy we also explore a number of options. These alternative scenarios serve to highlight the sensitivity of our forecast to changes in assumptions and it should give the reader a flavour of the possible margin of error which attaches to our Central Forecast.

In this Chapter we concentrate on medium-term issues basing our Central Forecast on the latest available assessment of the performance of the Irish economy in 1993 and the prospects for 1994 contained in the Winter 1993/4 *Quarterly Economic Commentary*. The forecast has been developed with the assistance of the ESRI's Medium-Term Model.[1] The model is used extensively to analyse the sensitivity of the Central Forecast to changes in assumptions concerning the external environment and the behaviour of the Irish economy.

The central forecast we present shows a picture of the Irish economy growing relatively rapidly over the forecast period with the recovery peaking in 1995. We are much less certain about the precise timing of the recovery than we are about the likely average growth rate in the medium term. It may well be the case that the recovery peaks in 1996 rather than 1995, or even that it will be stronger this year than we have anticipated. In addition, it is inevitable that the economic cycle will continue with booms and recessions for the foreseeable future. However, variations in the precise timing of the cycle would not greatly alter the average rate of growth to the end of the decade.

Section 4.1 of this Chapter presents a brief overview of the Central Forecast. Section 4.2 discusses some of the crucial factors which will drive the Irish economy in the medium term and it also considers how the Central Forecast could be affected by changes in the behaviour of major players in the economy. The key to the prospects for the economy in the medium term is the development of the supply side of the economy which is considered in Section 4.3. The likely development of income, expenditure, prices and the overall standard of living is discussed in Section 4.4. A feature of the forecast which is of

[1] A summary of the characteristics of the model is given in Bradley J. and J. Fitz Gerald, 1991 "The ESRI Medium-Term Economic Model" in *Medium-Term Review: 1991-1996* Dublin: The Economic and Social Research Institute.

particular interest is the prospect for the labour market, which is analysed in Section 4.5. The public finances and the balance of payments are considered in Section 4.6. Finally, Section 4.7 examines the monetary sector and Section 4.8 presents our conclusions and discusses how the Central Forecast may be affected by changes in key assumptions.

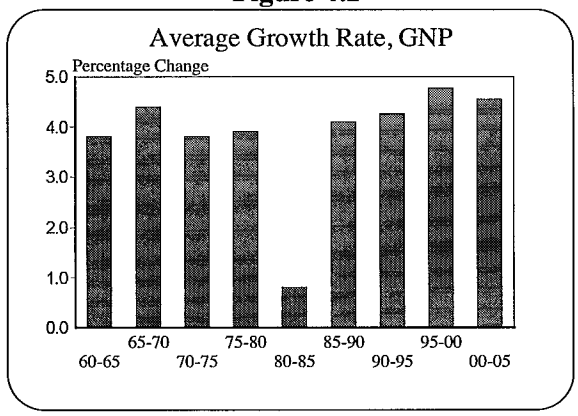
4.1 Overview

The Irish economy is in a strong position to benefit from the impending European recovery. In this *Review* our Central Forecast suggests that Ireland will experience a period of rapid growth over the next 5 years and that there will also be a significant growth in employment.

As discussed in Chapter 2, the relative success of the Irish economy over the last 3 years at a time of European recession reflects its competitive strength. Over the next 3 years the growth in output, measured by GNP, is likely to be very rapid (Table 4.1) representing some catching up on the lost opportunities of the early 1990s.

The average growth rate of GNP for the first half of the 1990s is likely to be just over 4 per cent, broadly in line with the trend growth rate in the past (see Figure 4.1). The second half of the decade is likely to see GNP growing at just under 5 per cent a year with some reversion to past trends in the following 5 year period.

Figure 4.1



As discussed in Chapter 2, Gross National Disposable Income (GNDI) plus capital transfers, which we refer to as National Resources, is a better measure of the change in living standards. As shown in Table 4.1 we envisage a much slower growth in this aggregate than in GNP. The difference between the two measures of welfare over the rest of the 1990s arises partly from the expected deterioration in the terms of trade. In addition, in 1995 we envisage a fall in EU transfers as a result of changes in the CAP and a fall in 2000 as the CSF funds are assumed to be scaled down. However, the precise timing of

Table 4.1: Central Forecast, Major Aggregates

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
					%				*Average Growth Rate, %*		
GNP	2.4	4.3	6.9	5.7	4.6	4.8	4.7	4.5	4.1	4.9	4.6
Gross National Disposable Income + Capital Transfers (National Resources)	2.9	3.4	5.3	5.1	4.5	4.3	4.2	2.3	3.1	4.0	4.3
Consumption Deflator	2.0	3.0	2.6	2.3	2.3	2.4	2.4	2.4	2.5	2.3	2.3
Employment, April	0.6	1.0	2.2	2.3	2.0	1.5	1.5	1.2	0.8	1.7	0.9
Balance of Payments, % of GNP	6.1	5.8	3.8	3.2	2.3	2.3	2.5	1.6			
Debt GDP Ratio, %	90.4	86.9	81.0	75.9	71.2	66.7	62.1	58.6			
Exchequer Borrowing, % of GNP	2.5	1.9	2.1	1.4	0.9	0.5	-0.1	0.6			
	Unemployment Rate, per cent of Labour Force										
Live Register basis	21.6	21.4	20.6	19.8	19.1	18.7	18.2	17.9			
Labour Force basis	17.0	16.9	16.1	15.3	14.6	14.2	13.7	13.4			

these changes remains uncertain and the effects could be spread out over a longer period.

The result of this relatively rapid period of growth will be that Ireland, which in 1990 had a GDP per head of around 72 per cent of the EU average will, by the year 2000, be around 83 per cent of the EU average. This would represent a much greater narrowing of the gap in living standards than occurred over the previous 30 years from 1960-90.

The rate of inflation is forecast to remain just under 2.5 per cent a year over the period 1990-2005.

Throughout the slowdown in the early 1990s employment growth continued, albeit at an attenuated rate. With a return to rapid growth over the next few years we envisage a substantial increase in total employment. For the rest of the decade employment growth should comfortably exceed 1 per cent every year, averaging around 1.7 per cent in the second half of the decade. The reasons for the expected better employment response have been discussed in Chapter 2.

However, the rapid rise in the labour force means that this growth in employment will not be sufficient to absorb all labour market entrants. The improving labour market situation in the rest of Europe, especially in the UK, will see a return to significant net emigration in the second half of the decade. The combined effects of employment and labour force growth, and net emigration will mean that the unemployment rate will fall slowly from its current high level to around 13.4 per cent in 2000. This will still leave Ireland with one of the highest unemployment rates in the EU.

The rapid rate of growth in the coming years, if realised, will see some reduction in the balance of payments surplus. However, the balance is likely to remain positive at the end of the decade, in spite of the rapid growth over the period.

Finally, the combination of substantial growth in the economy with the stance of fiscal policy described in the last Chapter sees the Exchequer maintaining a small borrowing requirement out to the end of the decade. Even the assumed halving of EU structural fund payments in 2000 can be absorbed without requiring a change in fiscal stance. The debt GDP ratio falls steadily so that by 2000 it could be below 60 per cent. This improvement would see Ireland meeting all the Maastricht criteria by the end of the decade.[2]

4.2 Driving Forces

There are a number of factors driving this strong recovery.

- The natural recovery from a recession.
- The competitive position of the economy.
- The changing structure of the population - falling dependency and rising human capital.

The last 3 years has seen the Irish economy growing below trend due to the European recession and the related high level of interest rates. This is reflected in the rise in the balance of payments surplus to exceptional levels. The normal pattern in the past is that the economy grows more rapidly in the upswing as spare capacity and resources are utilised. We expect this pattern to be repeated as the European economy enters its recovery phase.

A vital factor in determining the future growth of the Irish economy is its competitiveness on world markets, in particular labour cost

[2] It is also a requirement that the general Government deficit be below 3 per cent of GDP. Technically it is not necessary to actually reach the debt-GDP target; it is sufficient to reduce the ratio in a satisfactory manner towards the 60 per cent objective.

Table 4.2: Wage Rates, per cent change

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
					%				*Average Growth Rate, %*		
Average Annual Earnings:											
Industry	3.6	4.0	5.4	4.1	5.0	5.3	5.0	4.9	4.4	4.9	5.0
Non-Market - Public Admin.	7.2	4.0	5.4	4.1	5.0	5.3	5.0	4.9	5.0	4.9	5.0
Non-Agricultural	4.3	4.0	5.4	4.1	4.8	5.0	4.8	4.8	4.8	4.7	4.9

competitiveness. As discussed in Chapter 2, Ireland suffered a major loss of competitiveness *vis-à-vis* the UK over the period 1960 to 1980. In the 1970s and early 1980s it also lost competitiveness compared to other EU countries. However, since that date the position has stabilised.

There is some uncertainty as to the factors determining the rise in wage rates in Ireland. In the last *Review* we assumed that wage bargaining would proceed along the traditional lines of the 1960-85 period with real wage rates rising roughly in line with productivity. This implied a rapid rise in wage rates once the economy recovered and relatively slow growth in employment. However, the rate of increase in wage rates has proved more moderate than forecast.

It appears that a significant factor in wage bargaining over the last 10 years has been the need to maintain competitiveness with the UK and other trading partners. For the future we have assumed that wage bargaining behaviour will proceed much as it has in the last 5 or 10 years. However, there must remain uncertainty as to whether increasing prosperity could see a reversion to earlier patterns. Box 4.1 examines the implications of such a reversion to "the bad old ways".

On this basis we forecast wage rates rising at around 5 per cent a year over the rest of the decade (see Table 4.2). This is somewhat lower than the latest NIESR forecast for the UK which suggests that average earnings will grow at over

Box 4.1: "Bad Old Ways" Scenario

In this simulation we assumed that wage bargaining proceeded very much as it did in the 1960s and 1970s where unions sought an increase in real wages in line with productivity growth. This approach implies that labour will receive a constant share of value added. The equation used is the same equation as was used in the model in preparing the last *Review*. The results of the simulation are compared to the Central Forecast and the difference illustrates the effects of a reversion to "the bad old ways".

Table: Cumulative Change Compared to Central Forecast

	1997	*2000*	*2005*
Wage Rates, %	3.0	7.1	10.9
Total Employment (000)	-7.7	-13.6	-29.6
Unemployment (000)	7.1	9.8	12.8

The alternative wage equation suggests that wage rates would rise by around 1 per cent more each year than in the Central Forecast. As shown in the Table, by the year 2000 wage rates would be over 7 per cent above the Central Forecast; by 2005 they would be almost 11 per cent higher. The effect of the higher wage rates would be a major loss of competitiveness and total employment would be almost 13,600 lower in 2000 and 30,000 lower in 2005 than under the Central Forecast assumptions. The increase in unemployment is attenuated by increasing emigration. Even if the loss of competitiveness were to be halted in 2000 or 2005 the job losses would continue for quite a period afterwards because of the slow reaction of the economy to changes in competitiveness.

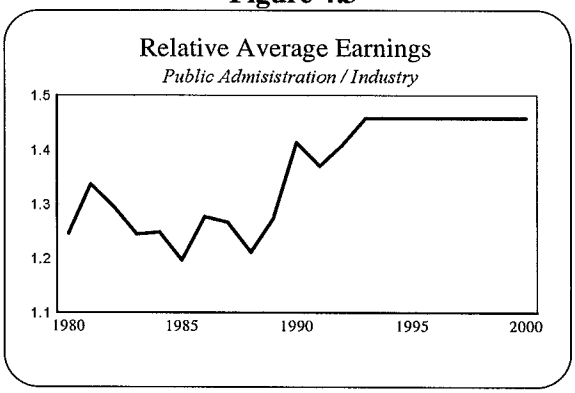
If the rate of increase in wages proves more moderate than we have forecast, at least in line with the *Programme for Competitiveness and Work*, employment growth could be greater than we have projected in the Central Forecast.

6 per cent a year from 1995 onwards, reflecting a somewhat weaker currency than the Irish pound and higher inflation. The gap is also widened by the fact that we are assuming that the tax wedge will fall in Ireland over the next 5 years whereas the UK's fiscal problems have necessitated an increase in taxation. This improvement is one of the indirect benefits of the falling burden of debt.

Figure 4.2

Figure 4.2 shows the likely impact of these trends on Irish competitiveness *vis-à-vis* the UK. Our Central Forecast envisages a steady but small improvement in labour cost competitiveness over the rest of the decade. This provides a stark contrast with the early 1980s and, if realised, will provide a much more favourable environment for employment growth in the medium term.

Figure 4.3



Over the last ten years a serious threat to competitiveness has been the extremely rapid rise in average earnings in the public sector compared to the private sector (Figure 4.3). This has potentially affected competitiveness in two ways: it has raised the cost of the public service, adding to the tax burden. It has also potentially affected pay rates in other sectors through a demonstration effect. However, as discussed in Box 4.2, the dangers of a demonstration effect may not have been as great as the average earnings figures would suggest. The rise in earnings also puts pressure on employment in the public service and it almost certainly resulted in public employment being lower to-day than it would with a more moderate earnings trajectory over the last 8 years.

Box 4.2: Public Sector Pay

Measuring the relative position of workers in different sectors is difficult because of the different conditions of service and the different regulations concerning payment of social insurance contributions. Much also depends on the initial starting position chosen.

Since the mid 1980s, as shown in Figure 4.3, average earnings in public administration have risen much more rapidly than earnings for industrial workers. However, when the growth in pay scales are matched with the wage rate figures for manufacturing the position seems less extreme. Part of the difference is due to the fact that most public servants are on incremental pay scales. As they progress automatically up the pay scales they receive increases and this raises average earnings when recruitment is curtailed, as in the late 1980s. The effect of increments has been to increase the rate of growth in the public sector pay bill relative to workers in industry by around 1 per cent a year over the period.

Some of the increase in the pay bill is also due to the changing composition of the public service workforce. Increasing computerisation and cut-backs in the 1980s probably reduced the proportion of staff in clerical grades, helping increase measured average earnings.

Figure 4.4

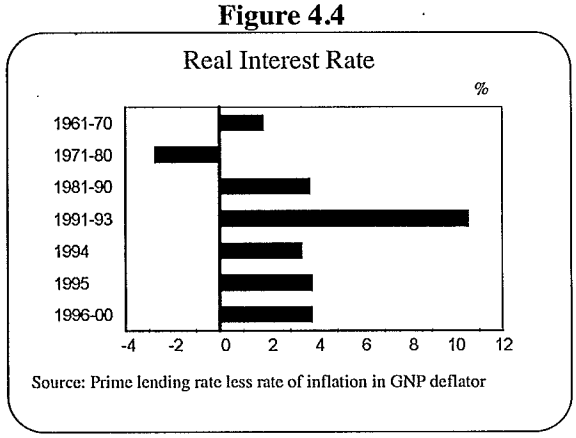
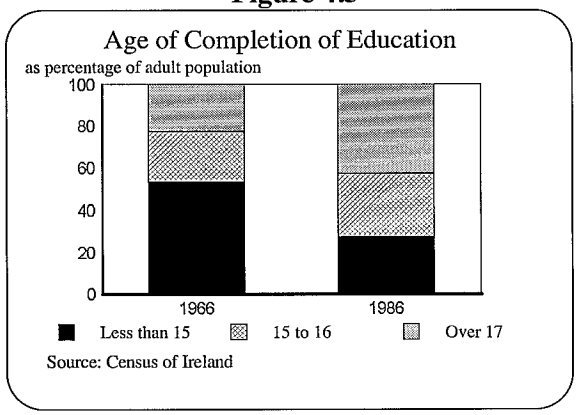


Figure 4.5



Real interest rates, which had risen to exceptional levels in the late 1980s and early 1990s, have fallen considerably over the last year (Figure 4.4). While still high by the standards of the 1960s and the 1970s they are now back to a level where it is profitable to invest in fixed assets. This will significantly improve the competitive position of the economy, especially that of Irish owned firms.

The falling cost of capital and the stabilisation in labour cost competitiveness is also reflected in an improvement in the cost of other services, such as energy, which are an essential input into the tradable sector.

In the long term two additional factors are working in favour of fairly rapid growth - the falling dependency ratio and the rising educational standard of the labour force.

In the previous Chapter we showed how there will be a rapid reduction in the proportion of the population in dependant age groups over the next 10 years. This will tend to reduce the demand for certain public services. As the proportion of the population at work rises so too will income per head.

Figure 4.5 gives an estimate of the proportion of the adult population who have completed either the Junior Certificate (leaving school at 15 or 16) or the Leaving Certificate (leaving education at 17 or older). In 1966 under 50 per cent of the adult population had progressed to second-level education whereas today the figure is over 75 per cent. This increase in the education and skills of the adult population has been essential in the restructuring of the economy in favour of high skilled high paid employment. However, the benefits of this change will take some considerable time before they are fully reflected in the productivity of the economy as a whole.

4.3 The Supply Side

The development of productive capacity in the economy is the key factor determining the long-run rate of growth. For the tradable sector the determinants of capacity are the growth in world demand and the competitiveness of the economy on world markets, where competitiveness is broadly defined to include all domestic costs. For the non-tradable sector domestic demand plays an important role in driving the increase in output, though the growth in domestic demand is itself constrained by the progress of the tradable sector.

Industry

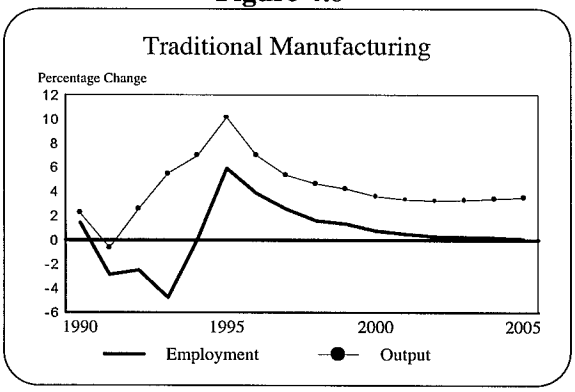
In examining the industrial sector we use a five way breakdown: traditional manufacturing, food processing, high technology manufacturing, utilities and building. The first three sectors constitute manufacturing industry and they produce goods which are traded on the world market. The latter two belong to the non-tradable sector where output is demand driven.

Output in the traditional manufacturing sector[3] is driven by world output and by changes in competitiveness. Research suggests that it is very sensitive to changes in the competitiveness of the economy where competitiveness is broadly defined to include both labour and capital costs. Output in the food processing sector is seriously constrained by the restrictions on agricultural production. The extent to which value is added to the raw agricultural produce depends on the sector's competitiveness. Output in the high technology sector is driven by the growth in world output, which affects the potential flow of mobile foreign investment, and by the low corporate tax rate which is a key factor in Ireland's competitiveness, determining whether the new investment takes place in Ireland.

The building sector is dependent on the level of demand from investment in the economy and the output of the utility sector is also driven by domestic demand for energy.

As discussed in Chapter 2, the traditional manufacturing sector saw a major deterioration in its labour cost competitiveness over the period 1960-80. This had serious consequences when the economy went into recession in the early 1980s. While labour cost competitiveness improved after 1986, with a consequential increase in output and employment, the very high real interest rates restrained output growth in this sector.[4] However, the position of the sector is now more favourable than it has been for many years with real interest rates reduced from their peak levels of the last 10 years and labour costs competitiveness stable or improving.

Figure 4.6



On the basis of a full recovery in the EU in 1995 we envisage a rapid increase in output in this sector (Figure 4.6). In the following years there should be continuing growth in the sector, though at a somewhat slower rate. The clothing sector is likely to remain under pressure throughout the period.

Given this pattern of output growth and the strong competitive position of the sector we expect quite rapid growth in employment in the sector over the next few years. However, as the effects of the rapid improvement in the competitive position of this sector wears off, output growth is likely to slow by the end of the decade and employment growth should cease. While this could prove pessimistic if policies to strengthen the sector prove successful, it is in line with its past performance.

The food processing sector has undergone radical reorganisation over the last decade. However, there is still spare capacity in the industry

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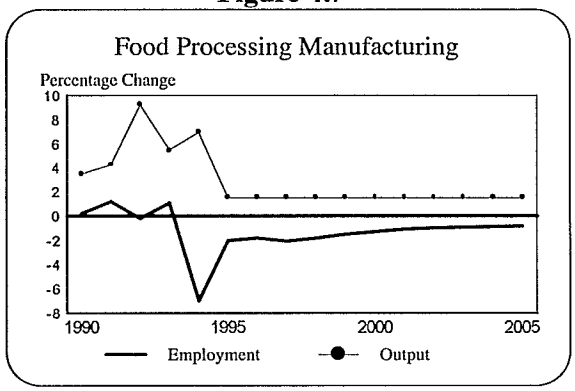
3 It includes clothing, footwear, furniture, paper and printing, non-metallic mineral products, other manufacturing

4 Capital and labour are complements in this sector; a fall in the price of either input increases competitiveness resulting in a reduction in imported inputs.

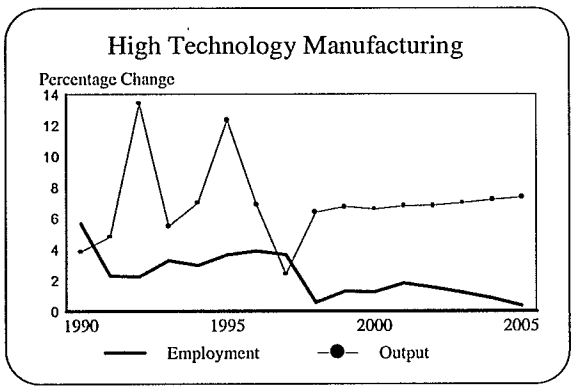
so that some further rationalisation can be anticipated.

Figure 4.7



In addition, the volume of agricultural output is expected to show only marginal growth over the next 5 years due to the restrictions imposed as part of the CAP reform. This means that the supply of material for processing is effectively fixed. Increased output in the industry can only come through increasing value added. To date this has not been very successful, partly due to the seasonal nature of agricultural output. As a result employment in the sector is expected to continue falling over the rest of the decade (Figure 4.7).

Figure 4.8

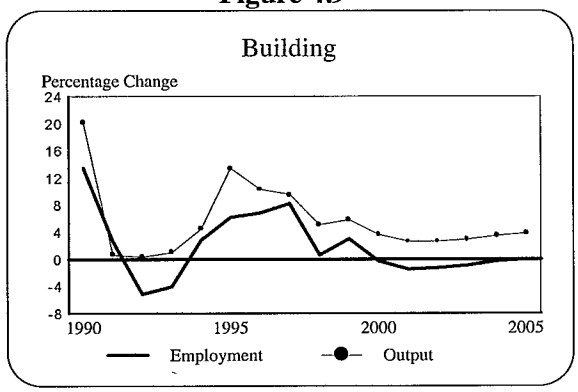


The high technology sector has seen extremely rapid growth over the last decade. Output rose on average by 15 per cent a year over the 1980s and employment rose on average by 3 per cent a year. Much of the development in the sector was fuelled by the attractive corporate tax regime. However, the supply of skilled labour at reasonable rates of pay was also a factor in the growth. Because of the nature of the industry it has been extremely profitable but most of these profits have been repatriated so that the impact of the growth on the Irish economy has been rather limited.

For the future it is anticipated that the contribution of the sector to economic growth will continue to be important though, less than in the 1980s. As shown in Figure 4.8 we expect growth to be very rapid over the next year as the industry reacts to the upturn in world activity, in particular to the sustained recovery in the US. Thereafter it should settle down to a fairly steady growth of around 6 per cent a year. Employment growth should range between 2 per cent and 4 per cent over the next 3 years. Thereafter the very high rate of productivity increase will see employment in the sector stabilising.

This forecast may seem a little pessimistic by the standards of the 1980s but it reflects the likelihood that there will be increased competition for mobile investment by the end of the decade as Central European countries develop their economies.

Figure 4.9



Output in the building industry is totally dependant on the growth in investment in the economy. As discussed later, the very substantial improvement in the environment for investment will see an investment boom at some stage over the next

Table 4.3: Output, GDP at Factor Cost, Constant Price per cent Changes

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
				%					*Average Growth Rate, %*		
Agriculture	-1.5	-1.0	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.2	1.2
Industry	4.6	6.4	8.0	6.7	4.8	5.0	5.1	4.7	6.0	5.2	4.7
Manufacturing	5.5	7.0	7.8	6.6	4.7	5.5	5.5	5.2	6.5	5.5	5.4
Utilities	1.0	4.0	8.8	5.1	3.4	4.8	4.8	4.7	4.9	4.6	4.9
Building	1.0	4.0	8.8	8.6	6.3	1.8	2.3	0.1	3.0	3.8	-2.2
Market Services	4.3	2.8	7.1	5.4	4.5	4.7	4.6	4.4	3.2	4.7	4.5
Distribution	4.3	2.8	7.8	5.4	4.0	4.2	4.1	3.8	3.2	4.3	3.9
Transport & Communications	4.3	2.8	5.0	4.0	3.3	3.4	3.3	3.2	2.7	3.4	3.2
Other Market Services	4.3	2.8	7.4	5.9	5.1	5.4	5.2	5.0	3.5	5.3	5.1
Non-Market Services	-0.2	2.0	3.1	3.1	2.2	2.2	2.2	2.2	1.6	2.4	1.2
Health & Education	2.3	2.0	3.5	3.4	2.0	2.0	2.0	2.0	2.2	2.3	0.5
Public Administration	-4.4	2.0	2.5	2.5	2.5	2.5	2.5	2.5	0.5	2.5	2.5
Adjustment for Fin. Services (-)	2.7	2.0	8.8	7.4	5.9	6.0	5.9	5.6	5.0	6.2	5.5
GDP at Factor Cost	3.3	4.0	6.4	5.3	4.0	4.2	4.2	4.0	4.0	4.3	4.0
Taxes on Expenditure	2.4	5.5	6.6	5.0	4.3	4.2	3.7	3.6	3.0	4.2	3.7
Subsidies	3.6	0.7	3.0	2.4	2.1	2.1	1.9	1.8	1.7	2.0	1.9
GDP at Market Prices	3.2	4.4	6.6	5.4	4.1	4.3	4.2	4.0	3.9	4.4	4.0
Net Factor Income	7.8	4.9	3.8	2.8	0.8	0.8	0.3	-0.3	4.0	0.9	-1.8
GNP at Market Prices	2.4	4.3	7.1	5.8	4.7	4.8	4.8	4.6	3.9	4.9	4.7

3 years. The timing of the boom will depend on the timing of the recovery in the European economy and on the even less predictable turnaround in household sentiment.

While we forecast a less explosive recovery in building than in the 1989-90 period, there should be a number of years of sustained growth of over 8 per cent a year (Figure 4.9). Because of the relatively labour intensive nature of the industry employment is expected to grow by between 5 per cent and 10 per cent a year for 2 or 3 years in a row.

The composition of growth in the next boom will be rather different than in the previous cycle. Whereas the last peak was fuelled by a very substantial increase in public investment, partly financed by increased EU funds, this upswing will stem from the rapid growth in private business investment and private housing. The continuing receipts from the EU Structural Funds will allow the continuation of public investment at its current level.

The development of utilities is driven by the demand for energy from the rest of the economy. After a lull in investment in the sector since the mid-1980s, due to excess capacity, investment has picked up in recent years as expansion takes place. The forecast rapid growth in the economy requires new investment over the next 5 years.

While output of the sector should rise in line with activity elsewhere in the economy (Table 4.3) employment is expected to fall. This reflects the current degree of overstaffing of the sector and the probability that increased competition will force increases in productivity. From the point of view of the competitiveness of the tradable sector it is important that productivity is increased to offset the increase in the output price of utilities which would otherwise be necessary.

Agriculture

The agriculture sector is highly constrained as a result of the reform of the CAP and the recent GATT deal. There are restrictions on the output of most of the major products of Irish agriculture. In addition, the continued oversupply of agricultural produce is likely to hold the rate of increase in prices below the general rate of inflation.

In recent years agricultural incomes have risen very rapidly. However, much of this has been due to a big increase in EU transfers. As a result of the GATT deal there is likely to be some reduction in these payments. We have assumed that this occurs next year although it is quite possible that this change could be spread out over a number of years.

We expect the volume of gross output to rise by about 0.5 per cent a year on average over the rest of the decade. With some reduction in the volume of inputs the volume of net output should rise by just over 1 per cent a year.

In the longer term the advent of new members to the EU will put further pressures on the CAP. The falling importance of agriculture generally within the EU may mean that radical change in the CAP could take place at the beginning of the next decade.

Market Services

The performance of the distribution sector is heavily dependant on the growth in the volume of consumption. As discussed in Chapter 2, the 1980s saw domestic demand, in particular consumption, growing more slowly than GNP. The forecast that the 1990s will see more balanced growth means that this sector should show an improved performance.

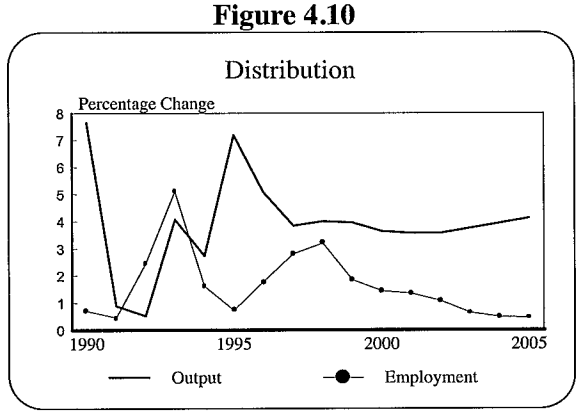
Three key factors will affect the pattern of growth in this sector over the next 10 years:

- the growth in consumption
- the after effects of *1992*
- demographic changes

Assuming that the expected consumer boom occurs next year there should be rapid growth in the output of this sector (Figure 4.10). Thereafter growth in output is expected to broadly follow the pattern of consumption. Employment growth of over 2 per cent a year can be expected out to the end of the decade. However, a significant part of this increase could be part-time jobs.

The completion of the internal market is expected to lead to some further rationalisation of this sector, in particular at the wholesale - import level. This should lead to some labour shedding to offset the gains in employment in retailing.

Figure 4.10



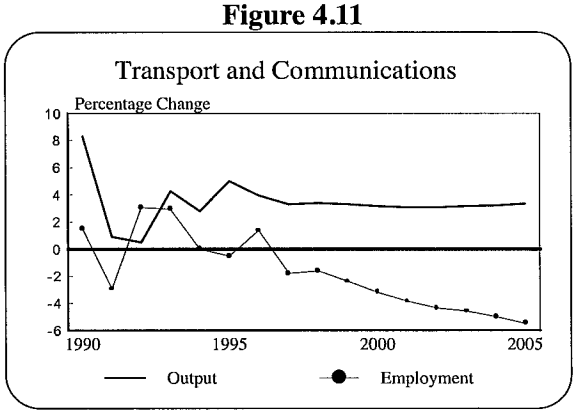
In the longer term demographic changes and the rising standard of living can be expected to have important implications for this sector. The decline in the number of children will obviously affect businesses catering for that market. However, rising standards of living of parents (and grandparents) may see a move to higher quality goods with higher margins.

The rapid growth in the young adult population without dependants and with well paid employment will see a big increase in the market for some of the non-food sectors of retailing. These too may be expected to have higher margins,

including higher employment. In general, the changing demographic structure could be expected to add to output and employment growth in the sector over the next 10 years.

The transport and communications sector is expected to see a fairly steady growth in demand over the next decade (Figure 4.11). There is also likely to be substantial investment in the sector in telecommunications and the railways (funded as part of the CSF).

Figure 4.11

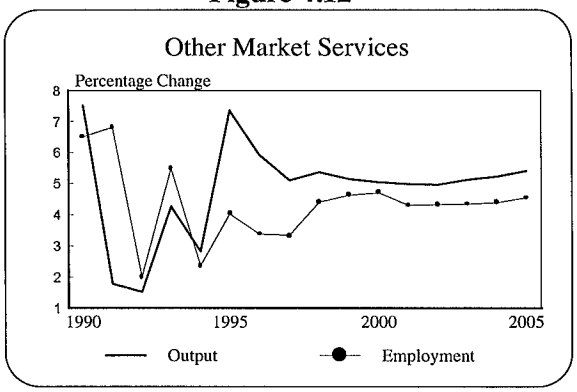


However, this sector suffers from major overstaffing at present and relatively low productivity. Increasing competition and the need to improve the competitiveness of the tradable sector of the economy will force increases in productivity and reductions in output prices. As a result, it is anticipated that over the rest of the decade employment will fall.

The other market services sector, as its name implies, covers a very diverse range of activities: from hotels, restaurants and pubs to banking, insurance and legal services. In the 1980s this sector had fairly steady growth of over 3 per cent a year. It has also seen a steady increase in employment over the years.

As shown in Figure 4.12, we expect growth to rise rapidly next year. Thereafter, it is expected to grow at an average of over 5 per cent a year. There should also be substantial growth in employment in this sector. The distribution of the employment gains across the sector could be uneven.

Figure 4.12



The banking sector has currently very high labour costs compared to our EU partners reflecting a relative lack of competition. It is to be anticipated that this situation will change over the next 10 years. As in a number of other *sheltered* sectors, increased competition is necessary to reduce the cost of services and generally improve the competitiveness of the economy as a whole. This argument applies not just to banking but also to the insurance industry and the area of legal and professional services.

Non-Market Services

Output in the non-market sector is almost totally determined by decisions by the Government on its demand for public services. In the 1980s there were severe restrictions in the growth in the provision of public services due to the fiscal crisis. In the second half of the decade output in non-market services was static. For the 1990s, with the public finances under control and rising living standards, there will be demands for improvements in public services.

In Chapter 3 we showed that the changing demographic structure will reduce the pressures on the educational sector. However, we still feel that it is realistic to expect the volume of non-market services to grow by around 2.5 per cent a year over the rest of the decade. The growth is

unlikely to be uniform across all sectors as the changing demographic pressures require a shift in the composition of services provided.

The result of this growth in output will be an increase in employment in the sector of around 2 per cent a year over the 1990s, in contrast to the near stability of the 1980s. The increase in 1995 and 1996 may be slightly greater due to the build up of new schemes for the training and employment of the long-term unemployed.

As shown in Table 4.3, GDP at factor cost is expected to rise by around 6.4 per cent in 1995 and by over 5 per cent in 1996 as the economy reaches the peak of the recovery phase of the European cycle. Thereafter it is expected to settle down to a steady growth rate of around 4 per cent a year.

4.4 Income, Expenditure and Prices

Income

Agricultural incomes grew quite rapidly over the last 2 years due to increased EU transfers as part of the CAP reform. However, the further changes in the CAP, partly due to the subsequent GATT deal, mean that transfers will fall. We have assumed that this takes place in 1995. For the first half of the decade agricultural income will still show an average growth of 3 per cent a year (Table 4.4) or 7 per cent per person employed. This compares with a rise of just under 5 per cent a year over the same period in average earnings per person for those outside agriculture.

In the second half of the decade the restrictions on development placed by the CAP will mean that incomes may only grow by 2 per cent a year, though still rising on a per capita basis at least as fast as income per person outside agriculture.

The growth in non-agricultural wage income over the rest of the decade will be quite rapid reflecting a forecast substantial growth in employment. Non-agricultural profits will grow at a fairly similar rate over the period as labour's share of value added remains roughly unchanged.

Transfer income will rise slowly over the period in spite of the assumed over-indexation of benefits. The fall in numbers unemployed and the impact of the demographic changes on the volume of transfers explains this slow-down compared to the early 1990s. National debt interest actually falls in the late 1990s reflecting the reduction in interest rates and very low levels of net borrowing.

As discussed in Chapter 3, we have assumed that average rates of personal taxation fall between 1995 and 1999. This means that taxes on personal income grow quite slowly over the forecast period and the average tax rate will fall from over 22 per cent of personal income today to 20.5 per cent in 2000.

Consumption

Consumption is not only a function of personal disposable income but of households' fears and expectations about the future. The expectations concerning the rate of interest, unemployment, and economic growth can stimulate precautionary saving thus constraining consumption. This can happen even in a situation of falling real interest rates such as in Ireland or France in the recent past. Faced with rapidly changing economic circumstances consumers may take some time to change their expectations about the future and to revise their consumption patterns.

In Ireland the personal savings ratio rose to a high level in the early 1980s as households' expectations about the future were adversely affected by the prevailing economic crisis (Figure

Table 4.4: Personal Income, per cent changes

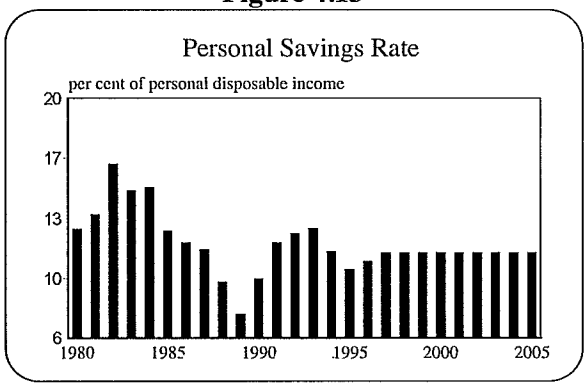
	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
				%					*Average Growth Rate, %*		
Agricultural Incomes	8.0	4.0	-4.3	2.0	2.0	2.2	2.4	2.5	3.0	2.2	2.6
Non-Ag. Wage Income	6.0	5.5	8.4	7.1	7.6	7.2	7.0	6.5	6.5	7.1	6.3
Transfer Income	7.9	6.1	3.3	3.0	3.2	3.6	3.4	3.6	7.2	3.4	3.7
Other Personal Income	1.7	3.5	13.6	16.3	10.8	7.0	7.8	8.1	5.2	9.9	8.7
of which :											
Non-Ag. Profits etc.	6.3	10.5	15.5	11.0	7.6	7.2	7.1	6.5	8.7	7.9	7.2
National Debt Interest	-1.1	-3.0	-0.3	0.1	-0.8	-2.1	-1.9	-1.0	-1.2	-1.2	-2.5
Net Factor Income	11.8	7.2	5.7	4.9	2.9	2.8	2.2	1.5	5.0	2.9	0.2
Other Private Income	1.2	10.2	18.6	12.1	7.9	7.2	7.5	7.3	8.2	8.4	8.5
Undistributed Profits (-)	0.4	22.0	26.1	6.5	3.8	7.6	7.0	6.0	13.0	6.2	8.2
Personal Income	6.0	5.2	6.9	7.1	6.8	6.2	6.2	6.0	6.2	6.5	6.1
Taxes on Personal Income	10.1	6.0	3.7	4.6	5.2	4.2	6.3	6.0	6.7	5.3	6.1
Personal Disposable Income	4.9	5.0	7.9	7.8	7.3	6.7	6.1	6.0	6.0	6.8	6.1
Personal Consumption	4.5	6.6	9.2	7.2	6.7	6.7	6.1	6.0	5.9	6.6	6.1
Personal Savings	7.3	-6.2	-2.8	13.2	12.4	6.7	6.1	6.0	7.2	8.8	6.1
Tax Ratio, % Personal Income	22.2	22.3	21.6	21.1	20.8	20.4	20.5	20.5			
Savings Ratio, % Disposable Inc.	12.4	11.1	10.0	10.5	11.0	11.0	11.0	11.0			

Table 4.5: Expenditure on GNP, Constant Prices, per cent changes

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
				%					*Average Growth Rate, %*		
Personal Consumption	2.5	3.5	6.4	4.9	4.3	4.2	3.6	3.6	3.4	4.1	3.7
Public Consumption	2.2	3.0	3.2	3.2	2.5	2.5	2.5	2.5	2.6	2.6	1.7
Fixed Investment	1.4	4.5	16.1	10.9	9.8	4.8	5.6	3.5	2.3	6.9	3.8
Building	1.0	4.5	13.4	10.3	9.6	5.1	5.9	3.7	3.9	6.9	3.1
Machinery	2.0	4.5	19.3	11.5	10.0	4.4	5.3	3.3	0.6	6.8	4.6
Total Exports	4.8	6.7	10.0	6.5	2.8	5.4	5.5	5.2	7.9	5.1	4.9
Merchandise	5.0	6.8	10.4	6.6	2.6	5.6	5.6	5.3	8.3	5.1	5.0
Services	2.8	5.1	5.9	5.1	4.3	4.2	4.2	4.0	4.1	4.4	3.9
Total Demand	3.6	5.2	8.9	6.1	4.2	4.7	4.7	4.3	4.9	4.8	4.2
Total Imports	4.4	6.6	12.7	7.5	4.3	5.5	5.4	4.8	6.1	5.5	4.6
Gross Domestic Product	3.0	4.3	6.4	5.2	4.0	4.2	4.1	3.9	4.2	4.3	3.9
Net Factor Income	7.8	4.9	3.8	2.8	0.8	0.8	0.3	-0.3	4.0	0.9	-1.8
Gross National Product	2.3	4.2	6.8	5.6	4.5	4.7	4.7	4.5	4.3	4.8	4.6
GNP - Average of Output & Expenditure	2.4	4.3	6.9	5.7	4.6	4.8	4.7	4.5	4.1	4.9	4.6
GNP Adjusted for Terms of Trade	2.6	3.9	6.1	5.4	4.6	4.4	4.3	4.1	3.2	4.6	4.4
Gross National Disposable Income plus Capital Transfers	2.9	3.4	5.3	5.1	4.5	4.3	4.2	2.3	3.1	4.0	4.3

4.13). The boom of the 1988 - 1990 period saw it fall to a new low of under 8 per cent of personal disposable income. In the subsequent slowdown it rose to around 12.4 per cent in 1993. The increase can be easily understood in terms of the turmoil in the EMS in the Autumn of 1992 and the ensuing rise in interest rates.

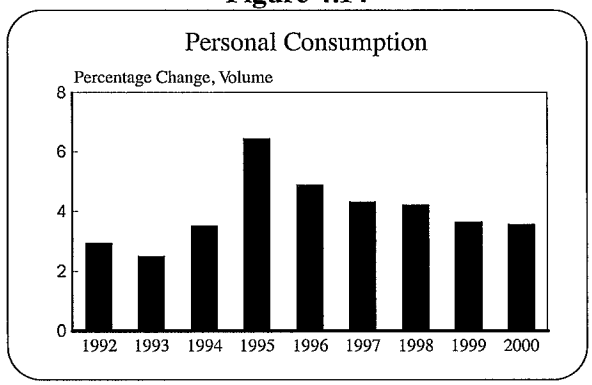
Figure 4.13



The fall in interest rates since early 1993 and the improvement in confidence should affect the economy in 1994. The savings ratio is expected to decline to 11 per cent in 1994 and to 10 per cent in 1995. From 1997 onwards we show the savings ratio stabilising at around 11 per cent for the remainder of the forecast period.

The anticipated fall in the savings ratio combined with the increase in real after tax income indicates a period of rapid growth in consumption. Table 4.5 and Figure 4.14 show real consumption rising by nearly 6.5 per cent in 1995. With a slight increase in the savings ratio in 1996, the rise in volume is forecast to be 4.9 per cent. Overall we expect that the increase in private consumption will be higher in the second half of the decade than in the first with an average increase of 4.1 per cent per year between 1995-2000 compared to an average 3.4 per cent between 1990 - 1995. Box 4.3 examines what would be the effect on the economy if our forecast fall in the savings ratio proves too conservative.

Figure 4.14



The growth in public consumption in the 1990s is expected to far exceed the 1980s. Indeed the latter half of the 1980s was characterised by substantial volume cuts as the government pursued a considerable tightening of fiscal policy. The forecast increase of over 3 per cent in 1994 and 1995 is fuelled by the increased expenditure from the EU Structural Funds on various training schemes. Thereafter the forecast shows an increase in volume of around 2.5 per cent a year.

Investment

Our forecast shows a boom in investment in the middle of the 1990s. The sharp increase in total investment between 1995 and 1997 is expected both as a result of the natural reaction to an economic recovery and also due to the effects of the fall in the cost of capital.

Figure 4.15

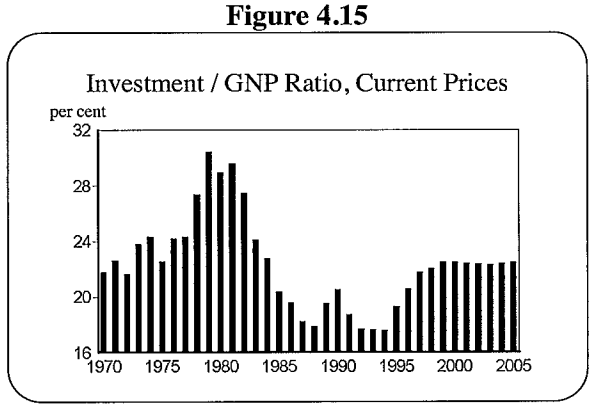


Figure 4.15 shows the ratio of investment expenditure to GNP over the last 25 years. The late 1970s represented an unsustainable peak in investment at a time when real interest rates were

Box 4.3: Changing the Savings Ratio

Households choose their level of consumption in the light of their needs and resources, not just in the current year but also in future time periods. Because their consumption decisions are related to their expectations about the future, each household has to make its own individual forecast. As with all forecasts, the individual forecasts are subject to some uncertainty and when circumstances are adverse, for example when unemployment is rising rapidly, fear of unemployment may cause them to cut consumption.

Experience in the 1970s suggested that high inflation caused uncertainty slowing consumption growth. In the 1980s rising unemployment and the prevailing fears of financial crisis raised saving. More recently the very high interest rates shocked households leading to a rise in saving.

In the absence of a stable pattern of saving behaviour in the past it is difficult to forecast aggregate consumption behaviour in the future. In the Central Forecast we have assumed a small temporary fall in the savings ratio next year. However, if consumers were to react as they did in the 1988-90 recovery, the fall could be somewhat greater. Here we examine what would be the implications of a savings ratio permanently 1 percentage point below the level in the Central Forecast and, in the Table we show the effects on the economy compared to the Central Forecast

Table: Cumulative Change Compared to Central Forecast

	1995	*2000*
GNP, % Change	0.4	0.2
Employment, Thousands	1.3	3.4
Balance of Payments Surplus, % of GNP	-0.4	-0.4
Exchequer Borrowing Requirement, % of GNP	0.2	0.3

Beginning in 1995 consumption would be higher, by 1 per cent. Both imports and GNP would be 0.4 per cent higher next year as a result of the higher consumption. By 2000 GNP would be 0.2 per cent higher than in the Central Forecast. The reduction in the savings ratio has little effect on inflation. Employment would increase, especially in the traditional manufacturing and the services sectors. There would be an extra 3400 employed compared to the benchmark in 2000. The sector that would see the largest increase in growth is the services sector; over 3000 extra jobs in 2000.

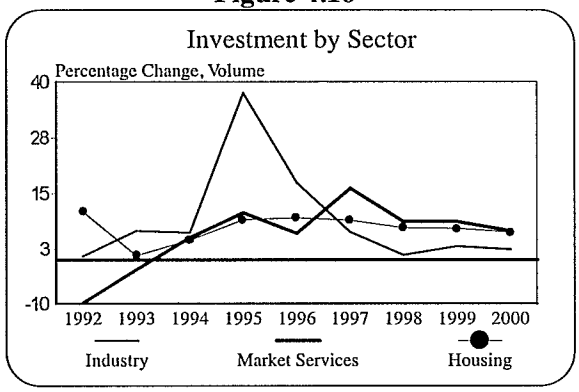
The exchequer borrowing requirement would fall by 0.3 per cent in the long run. This reflects the increased revenue buoyancy. Without any improvement in competitiveness exports remain unchanged while imports increase leaving the balance of payments surplus 0.4 percentage points of GNP lower than it would otherwise have been in 2000.

very low (Figure 4.4). By contrast, the last ten years have seen a very low investment rate at a time when real interest rates were very high. For the next 10 years we expect a recovery in investment to the level observed in the early 1970s.

The high level of real interest rates following the currency crisis in September 1992 had a strong adverse impact on fixed capital formation, with spending on equipment in particular falling sharply. In spite of the forecast recovery in 1995, the growth in the volume of total investment in the period 1990-1995 inclusive is likely to be well below that in the previous 5 years at 2.3 per cent (Table 4.5) compared to 4.2 per cent .

The fall in interest rates over the course of 1993, increased competitiveness following devaluation and the general improvement in business confidence are expected to be the immediate stimulus bringing about the substantial surge in private sector investment.

Figure 4.16



As Figure 4.16 shows, particularly in the middle of the decade, investment grows fastest in the industrial sector. This reflects the anticipated increase in capacity arising from the improved competitive position. The growth of the volume of investment in market services is at its highest in 1997 at 16 per cent. However, the timing of this peak is uncertain. Investment in agriculture is likely to perform poorly over the period reflecting the uncertain prospects for that sector.

Investment in housing is likely to show quite rapid growth in the next 5 years as households recover from the shocks of 1992-93. As with the pattern of consumption, the timing of the recovery in the housing market is uncertain depending on households' expectations about the future. If the recovery follows the pattern in other countries, such as Denmark or the UK in the 1980s, the rise in house prices will itself increase household wealth further enhancing expectations about future growth. This pattern of development carries within it the seeds of inflation; however, at present, there is scope for further expansion.

In the longer term the growth in the young adult population means that household formation will continue at quite a rapid pace requiring a continuing increase in the housing stock.

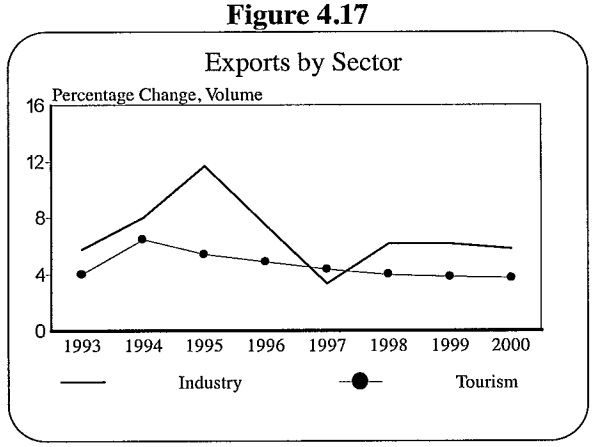
The cumulative effect of investment growth in the different sectors of the economy is a rapid increase in the volume of investment in both building and machinery over the second half of the decade. A volume increase of 16 per cent in total fixed investment is forecast in 1995, followed by an 11 per cent increase in 1996. Thereafter the increase in the volume of total investment moderates with an average growth of nearly 6.9 per cent for the period 1995-2000.

A very modest contribution to GNP is expected from stock building over the forecast period. Non-agricultural stock building is expected to increase in line with the acceleration in economic activity. Intervention stocks, on the other hand, which fell heavily in both 1992 and 1993, are expected to continue their decline until 1997.

Exports

We expect quite rapid growth in the volume of exports over the next 3 years. As exports account for a larger and larger share of GNP however, the rate of growth is likely to slow significantly, while exports will still make a major contribution to the growth in GNP.[5] Average growth in the volume of exports between 1995-2000 is 5 per cent compared with 8 per cent in the first half of the decade and 9 per cent between 1985 and 1990. Our forecast for the years after 2000 shows growth roughly in line with the forecast for the last 5 years of this decade.

Figure 4.17



[5] A given percentage increase in exports on a larger base will have a bigger impact on GNP.

The increase in 1994 and especially in 1995 reflects the improved international economic environment. Multinational high-tech exports continued to perform well in 1993 but traditional exports, especially to the UK, suffered. With the recovery in the UK now firmly established a faster increase in the volume of manufactured and industrial exports over the next 2 years is assumed, as shown in Figure 4.17.

Overall, the volume of agricultural exports is constrained by the absence of growth in agricultural output. The underlying rate of increase is around 1 per cent a year. However, the pattern of growth is affected by our assumptions about the run down in intervention stocks. When these special factors are taken into account agricultural exports are expected to rise by only 0.3 per cent a year to the end of the decade.

Tourism

Tourism exports have risen rapidly over the last decade and there appears to be no slow down in this trend over the last few years. The average volume increase between 1985 and 1990 was 7.4 per cent a year. For the period 1990-1995 the average increase is forecast to be somewhat lower at around 4 per cent a year. It has been adversely affected by the world recession over the last 4 years. Tourism is also affected by a number of other factors, such as taste, which are difficult to project. The role played by marketing and changes in competitiveness is also important.

Our forecast for the second half of the 1990s shows an average increase in the volume of tourism exports of around 5 per cent. This could turn out to be conservative in the light of the relatively robust performance during the last 3 years.

Imports

The pace of economic activity expected over the remainder of the decade, with rapid growth in both consumer spending and industrial output, implies a significant increase in the volume of imports.

As shown in Table 4.5, the volume of imports is expected to rise sharply in 1995 and in 1996. A major factor is the forecast rapid increase in investment, the machinery and equipment component of which has a high import content. The expected consumer boom will also contribute to a surge in imports.

For the remainder of the forecast period the growth in import volumes moderates somewhat averaging around 5.5 per cent in the second half of the decade.

Net Factor Income

Over the 1980s a very big wedge was driven between the growth in GDP and the growth in GNP by the rapid growth in net factor income paid abroad - profit repatriations, national debt interest and interest and dividends received from abroad. The significance of profit repatriations has been dealt with already. The contributions to GNP of the other two components of net factor income, national debt interest paid abroad and interest and dividends from abroad, are shown in Table 4.6. The negative contribution from debt interest payments was an important factor in the

Table 4.6: Contribution to GNP Growth of Net Factor Flows, percentage points of GNP

	1980-1985	*1985-1990*	*1990-1995*	*1995-2000*	*2000-2005*
National Debt Interest	-0.59	-0.26	0.06	0.25	0.24
Other - Interest and Dividends Received	0.04	0.27	0.29	0.12	0.13

increasing wedge between GDP and GNP growth in the 1980s. However, because of the turnaround in the public finances, the reduction in debt interest paid abroad will actually contribute to growth in the forecast period.

The interest and dividends received, a credit item, will continue to add to GNP reflecting the build up in net private sector foreign assets corresponding to the continuing balance of payments surplus.

GNP

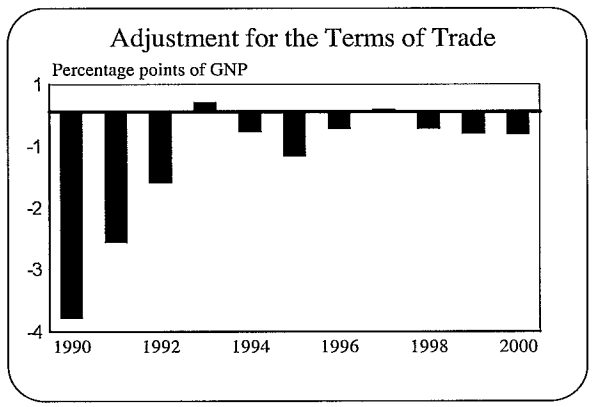
In the 1980s the rapid increase in the two net factor income items, profit repatriations and interest payments on foreign debt, resulted in a GNP growth well below that of GDP. Average growth in GNP over the period 1980-1985 was 0.8 per cent compared with average GDP growth of 2.4 per cent for the same period. As shown in Table 4.5, for the period 1990-1995 GNP growth is forecast at 4.9 per cent a year on average, slightly above that of GDP growth. The result of this changing pattern of factor flows is that over the next 10 years the gap between GDP and GNP will narrow as GNP growth will be above that of GDP.

Gross National Disposable Income

Chapter 2 discussed the importance of changes in the terms of trade and EU transfers in determining our standard of living. The measure which captures these additional factors is Gross National Disposable Income (GNDI). As shown in Table 4.5, we expect that for the 5 year period 1990-1995 the rate of growth in GNDI will be a full percentage point below that for GNP. The downward adjustment to growth due to adverse movements in the terms of trade was particularly severe in the period 1990-92. (Figure 4.18). In those years the fall in export prices was especially acute.

To some extent the disimprovement in the terms of trade was due to developments in agricultural exports where prices fell but producers were compensated by EU transfers.

Figure 4.18



In the forecast period we anticipate that, for the reasons discussed in Chapter 2, the terms of trade will continue to be mildly adverse. The growth in transfers under the EU Structural Funds, which bolstered growth in the 1990-1993 period, will taper off from now on providing no offset to the loss on the terms of trade. The assumed halving of Structural Fund payments in 2000 means that for the second half of the decade GNDI will grow 0.9 percentage points less a year than GNP.[6]

However, the forecasting of the terms of trade is extremely uncertain. As exports constitute such a large share of GNP any error in projecting this item has major consequences for GNP. As a result, we examine the sensitivity of our forecast to changing assumptions about the terms of trade (Box 4.4). This shows that if the terms of trade were to prove more adverse than forecast it would substantially affect our Central Forecast. Conversely, a more favourable outcome on the terms of trade would significantly improve the prospects for growth and employment in the medium term.

[6] However, the supply side impact of the investment funded by the CSF will remain a significant factor in the underlying strength of the economy.

Box 4.4: The Effects of a Deterioration in the Terms of Trade

In this box we examine the effects of a 1 per cent deterioration in the terms of trade in 1995 compared to the Central Forecast. We assume that the deterioration persists indefinitely. We also assume that the Government reacts to the change by raising personal tax rates to hold the Exchequer Borrowing Requirement (EBR) unchanged in the medium term. This latter assumption about the constant EBR greatly magnifies the impact of any deterioration in the terms of trade. The results are presented as changes compared to the Central Forecast.

As shown in the Table, the disimprovement in the terms of trade would have an immediate effect on trade volumes and GNP. The volume of imports would fall by almost 0.7 per cent in 1995 and by as much as 1.2 per cent in the long run. The volume of exports would also decline, initially by under 0.1 per cent. This would rise to 0.4 per cent in the long run as competitiveness disimproves due to wage rates adjusting to compensate for their reduction in purchasing power.

To hold the EBR unchanged the Government has to raise taxes. This, in turn, raises wage rates which has a further adverse effect on competitiveness. Value added in industry would fall by 0.5 per cent after 10 years. Resultant from the fall in trade and output, employment would also fall. Industrial employment would fall by roughly 2,500 by the year 2000; the building sector would also be affected indirectly. In the services sector employment would fall by 4700. Overall total employment would be over 7000 lower than the benchmark in the year 2000.

Unemployment would not rise by the same amount as the fall in employment as people would begin to emigrate in greater numbers - up by 400 in 1996 and by over 2,000 in the year 2000. Unemployment would increase by just under 4500 in the year 2000, 0.32 percentage points higher than in the benchmark. Consumer price inflation would be 0.35 per cent higher than in the benchmark.

Because of the deflationary nature of the Government action designed to hold the EBR constant as a percentage of GNP, the balance of payments is also unaffected by the loss of terms of trade. However, by the year 2000, the volume of GNP would be 0.5 per cent below the Central Forecast and, adjusted for the terms of trade, it would be 1.4 per cent below it.

Table: Cumulative Effects of a Permanent Disimprovment in the Terms of Trade by 1% Compared to Central Forecast

	1995	1997	2000
GNP unadjusted, %	-0.2	-0.4	-0.5
GNP adjusted for Terms of Trade, %	-1.2	-1.3	-1.4
Total Employment, numbers	-400	-5200	-7300
Unemployment, numbers	400	4600	4500
Unemployment Rate, percentage points	0.0	0.3	0.3
Import Volume, %	-0.7	-1.1	-1.2
Export Volume, %	-0.1	-0.3	-0.4
Inflation, %	0.2	0.4	0.4
Balance of Payments Surplus, % of GNP	-0.1	0.1	0.1
Exchequer Borrowing, % of GNP	1.1	0.0	0.0

Table 4.7: Prices, per cent change

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
					%				*Average Growth Rate, %*		
Personal Consumption	2.0	3.0	2.6	2.3	2.3	2.4	2.4	2.4	2.5	2.3	2.3
Government Consumption - Total	4.7	4.4	4.6	3.6	4.2	4.4	4.2	4.2	5.0	4.1	4.2
Investment - Building	3.0	2.4	3.9	4.1	4.2	3.9	3.7	3.4	3.1	3.9	3.4
Investment - Machinery	3.9	2.4	3.9	3.9	3.6	3.2	2.9	2.7	2.5	3.3	2.5
Exports	3.6	2.1	1.8	2.0	2.1	1.9	1.9	1.8	1.0	2.0	2.0
Imports - Energy	2.1	0.0	2.5	2.5	2.5	2.5	2.5	2.5	-2.8	2.5	2.5
Imports - Non-Energy	3.0	2.2	2.1	2.1	2.1	2.1	2.1	2.1	1.9	2.1	2.1
Agricultural Output - Gross	5.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	1.0
Manufacturing Output - Gross	3.0	3.0	1.6	1.8	1.9	1.4	1.2	1.0	1.2	1.5	0.8

Prices

The rate of inflation in Ireland is largely determined by the rate of inflation in our trading partners combined with movements in the exchange rate. In the forecast period we are assuming no change in the Irish pound - DM rate and a small appreciation *vis-à-vis* Sterling. We will inherit a weighted average of the forecast rates of inflation of our main trading partners, discussed in the last Chapter.

For the manufacturing sector this means a continuing low rate of growth in output prices from 1995 onwards. The forecast moderate rise in labour costs means that firms will still be profitable in spite of this low rate of inflation.

The rate of inflation in consumer prices, while primarily determined by external forces, is also affected by developments in domestic costs, including taxation. However, given the forecasts for domestic labour costs and our assumptions on taxation we envisage a rate of inflation on average slightly less than 2.5 per cent a year over the next 5 years (Table 4.7), very much in line with the forecasts for our EU partners and almost identical to our experience of the last 5 years.

One area of concern is the building industry. If an investment boom occurs next year, as forecast in Section 4.3, then the volume of output of the building industry could rise rapidly. Past experience indicates that under such circumstances building prices can rise rapidly. In Table 4.7 we forecast that the price of building investment will increase faster than the general rate of inflation next year. It will be important to monitor developments in this sector to ensure that overheating does not occur over the next 3 years which could jeopardise the competitiveness of other sectors of the economy.

Finally, while our forecast for the rate of inflation is broadly in line with that for our EU partners, the absolute level of prices in parts of the non-tradable sector is above that in the UK and elsewhere due to lack of competition. In the search for greater employment through improving competitiveness it is important that competition in the non-tradable sector be encouraged to promote increased efficiency and reduced costs. Sectors where improvement in the price of services could be sought are financial and professional services, communications and utilities. It is likely that developments in the EU in terms of increasing competition should help bring this about. However, in our forecast we have assumed that progress in these areas is slow over the rest of the decade.

4.5 Labour Market

As discussed in Chapter 2, due to a range of different factors, the 1980s were very unfavourable

Table 4.8: Employment and the Labour Force, mid-April

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
				thousands					*Average Growth Rate, %*		
Agriculture	144	141	137	133	129	125	121	117	-4.1	-3.1	-3.7
Industry	312	314	327	339	351	353	358	359	0.4	1.9	0.1
Traditional Manufacturing	103	104	110	114	117	119	120	121	-0.9	2.0	0.3
Food Processing	38	35	34	34	33	32	32	31	-1.5	-1.7	-1.0
High Technology	88	90	94	97	101	102	103	104	2.9	2.1	1.1
Manufacturing	229	229	238	245	251	253	255	257	0.4	1.5	0.5
Utilities	12	12	12	11	11	10	10	10	-0.7	-3.7	0.0
Building	71	73	78	83	90	90	93	93	0.4	3.6	-0.8
Market Services	473	481	491	503	516	532	546	559	2.8	2.6	2.1
Distribution	185	188	189	193	198	204	208	211	2.1	2.2	0.8
Transport & Communications	70	70	70	71	69	68	67	64	0.5	-1.6	-4.7
Other Market Services	218	223	232	240	248	259	271	284	4.1	4.1	4.4
Non-Market Services	215	219	225	231	236	240	245	249	1.1	2.1	0.9
Health & Education	149	152	156	161	164	167	170	173	1.1	2.1	0.5
Public Administration	66	67	69	70	71	73	74	76	1.1	2.0	2.0
Total	1144	1155	1180	1207	1231	1250	1269	1285	0.8	1.7	0.9
Unemployment	235	235	227	218	210	207	202	200	5.1	-2.5	-0.7
Labour Force	1379	1390	1407	1425	1442	1457	1471	1484	1.5	1.1	0.7
Net Emigration	2	5	10	14	16	18	18	17			
				% of Labour Force							
Unemployment Rate	17.0	16.9	16.1	15.3	14.6	14.2	13.7	13.4			

for employment growth. We anticipate a different situation in the 1990s in view of the improved competitiveness of the economy across a broad front, a more balanced pattern of growth and also because the effects of the process of European integration have been largely absorbed by the economy.

The pattern of change in employment within the different sectors was discussed in Section 4.3 and Table 4.8 provides a summary of these trends. Our forecast shows a cumulative increase in employment, net of job losses, of 130,000 between 1994 and 2000. The average increase in employment from 1995 onwards, at 1.7 per cent a year, is considerably higher than that between 1990-1995 when the rise per year is expected to average a modest 0.8 per cent. This improvement however is not enough to match the growth in the labour force. Nor does it match the EU target for growth in employment for the period.

Agricultural employment is expected to fall continuously over the next decade. This reflects the age structure of those in agriculture. With small numbers entering employment in agriculture nearly all the fall in employment occurs through retirement.

The industrial sector is expected to see rapid employment growth in the next few years. However, after the recovery peaks we envisage a much slower growth in employment as the benefits of improved competitiveness have been reaped. However, unlike the last *Review* we do not expect a major disimprovement in competitiveness in the long term: our forecasts could even prove pessimistic.

The growth in employment in the building industry reflects the expected surge in investment. However, once that surge is past, employment in the sector could fall slowly in the next decade, though still remaining well above current levels.

The major increases in employment are expected to occur in the market and non-market services sector. A considerable element of this may be in the form of part-time employment. In the former, job increases in other market services are expected to dominate, though distribution sector employment will also grow. This increase is fuelled by a steady growth in domestic demand.

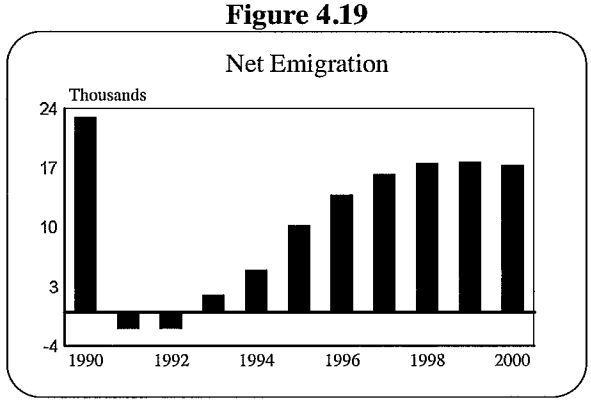
In the non-market sector there will also be significant growth in employment. However, the growth in employment will be uneven across the different sectors. In the educational field, the falling pupil numbers at the lower level combined with some increase in the upper levels will pose difficult staffing problems for the Government.

Table 4.8 also shows a steady rise in the labour force throughout the 1990s with the increase slightly faster in the first half of the decade. This takes account of a range of factors, two of which tend to offset one another - increased participation by women and higher participation in second and third-level education. As discussed in Chapter 3, the forecast also takes account of the expected natural increase in the population in the forecast period.

Our forecast assumes a continuing rise in educational participation over the next 10 years. However, there must be some uncertainty as to whether the planned rise will be fully translated into reality. It involves a significant expansion of parts of the educational system, especially at third level, which is likely to be temporary given the demographic structure. If the rate of participation was lower we could expect a higher unemployment rate than that envisaged. Box 4.5 looks at the effect on unemployment of a slower growth in educational participation.

The final factor which has a very important bearing on the size of the labour force is migration. As shown in Figure 4.19 we expect net emigration to resume after a period of very low net migration flows in 1992 and 1993. The recovery in the UK labour market, and in Europe in general from 1994 onwards, is one of the main factors underlying the increase in emigration over the period. The contrast between the high unemployment rate in Ireland and falling rates elsewhere will attract new labour market entrants in Ireland to the UK. However, in 2000 net emigration figures are likely to be still below those of 1990 and well below those of the late 1980s. A return to very high emigration is only likely if there is an unexpected radical improvement in the UK labour market over the rest of the decade.

Figure 4.19



The net result of these different factors is that the labour force is expected to rise by 94,000 over the period to 2000.

Given the expected rise in employment, the size of the labour force determines the level of unemployment. The net result of the expected larger increase in employment than in the labour force is a decline in the numbers unemployed of around 35,000. The rate of unemployment should fall from 16.9 per cent in 1994 to 13.4 per cent in 2000. As Figure 4.20 shows the biggest decline in unemployment is between 1994 and 1996 when economic growth is expected to be especially rapid, with a gradual decline thereafter. We do not expect the rate of unemployment to fall to the rate that existed at the beginning of the recession in 1990.

Box 4.5: Lower Participation in Education

As discussed in O'Connell and Sexton in *Economic Perspectives*, educational participation rates have increased rapidly over the last 15 years. To some extent the increase has been driven by the absence of job opportunities elsewhere. However, the evidence on the Irish labour market indicates that there are substantial returns to the private individual from increased education (see T. Callan, "Returns to Educational Investment" in *The CSF 1989-93: Evaluation and Recommendations for the 1994-1997 Framework*.). This, together with public policy, has been a major factor in increased participation in education. However, over the rest of the decade there remains considerable uncertainty as to whether this trend will continue as we have assumed. Here we simulate the effects on the economy of a slower rate of increase in the participation rate in education where around 16,000 fewer people are in education each year for the forecast period. Because of the relatively short time scale we take no account of the impact of this change on the human capital of the workforce; instead we concentrate on the medium-term labour supply implications.

Initially reduced educational participation would be reflected in an increased labour force and unemployment on almost a one for one basis. Beginning in 1995 the unemployment rate would be almost 1 per cent higher than in the Central Forecast. Because domestic wage rates are very insensitive to the rate of unemployment there would be only a marginal rise in total employment. Emigration would gradually increase and by the year 2000 emigration would be 4,500 higher. The effect on GNP would be small.

Table: Cumulative Impact of Lower Educational Participation

	1995	1997	*2000*
GNP - % change	0.10	0.07	-0.01
Unemployment	15770	13182	8095
Unemployment Rate	0.93	0.77	0.46
Net Migration Abroad	1588	3659	4558
Total Employment	277	648	405

Despite the sustained increase in emigration over the period the numbers unemployed will probably remain around 200,000 as we enter the 21st century. The paper by Sexton and O'Connell in *Perspectives for the Medium Term* suggests that a very high proportion of these are likely to be long-term unemployed and that job prospects are likely to shared very unevenly between those with and without educational qualifications.

Figure 4.20

The growing dichotomy in the labour market between those with education and skills and those without may require a more sophisticated treatment of the operation of the Irish labour market than we have been able to undertake in this *Review*. It is possible that there will be jobs for all those with qualifications entering the labour market after 2000 while those without qualifications will still be unemployed. Even if employment growth were greater than forecast it is likely that many of the jobs would require skills which those who are unemployed do not have. This highlights the importance of labour market policies aimed at increasing the skills and education of the unemployed, especially of the long-term unemployed.

4.6 Balance of Payments and Public Finances

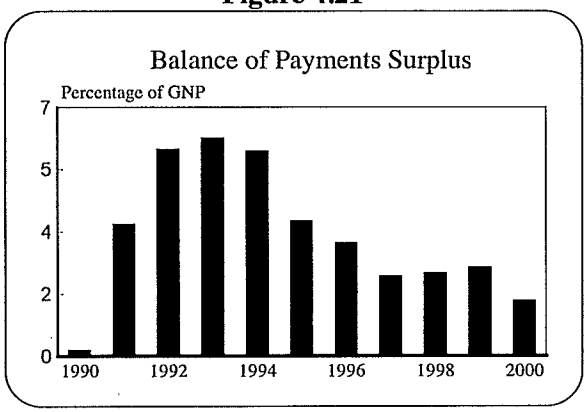
The Balance of Payments

For 1993 the current account surplus of the balance of payments is estimated to represent just

over 6 per cent of GNP. If the estimate proves correct this will be a record surplus. It reflects both a strong trading performance, with a substantial increase in the trade surplus, the increase in transfers from the EU under the Structural Funds and the fact that the economy has been operating below capacity in recent years. Total international transfers rose by approximately 10 per cent in 1993.

While we envisage a continuation of a balance of payments surplus throughout the decade, 1993 is likely to represent the peak. In Figure 4.21 we show a gradual fall in the surplus as a percentage of GNP over the medium term. By the year 2000 the forecast surplus would represent 1.6 per cent of GNP.

Figure 4.21



One of the main reasons for the decline over the forecast period is the projected pick up in domestic demand, especially consumption.

The forecast increase in industrial investment will place temporary pressure on the balance of payments. However a sustained return to a balance of payments deficit would only be the result of unproductive investment. Investment which raises capacity and produces a permanent increase in output will tend to increase the surplus over the long run.

In the longer term other factors that could cause the balance of payments surplus to disappear include:

- a dramatic fall in the savings ratio because of a consumer boom. The simulation in Box 4.3 illustrates the effects of a fall in the savings ratio. Assuming no change in competitiveness, a savings ratio of 10 per cent , which is 1 per cent lower than in the Central Forecast, leaves the balance of payments surplus 0.4 per cent lower.
- a "Government boom" involving substantial fiscal expansion. A major element in the movement of the balance of payments from a situation of chronic deficits to unprecedented surplus was the deflationary fiscal policy pursued in the 1980s.
- a fall in domestic supply due to a loss of competitiveness. The improvement in Ireland's competitiveness in the 1980s contributed to the turnaround in the balance of trade. A major loss in competitiveness would seriously impact on the surplus.

The continuation of a moderate balance of payments surplus is probably necessary in the medium term. The economy is still heavily indebted and there is a need to substantially reduce the debt/GNP ratio. There is also the need to be prepared in the event that the structural fund payments are phased out, as we have assumed, beginning in 2000. Finally, as with other countries where the birth rate is falling to a low level, there may be a need to build up foreign investments to fund future pension liabilities.

Public Finances

Considering that most European economies suffered a considerable deterioration in their public finances during the current recession, even in situations where Government expenditure was reduced, Ireland's public finances performed well.

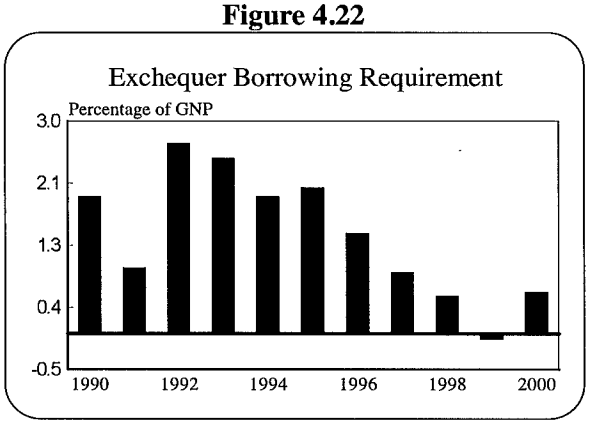
The full details of our forecast for the public finances are shown in Table 4.9. Our forecast shows a significant reduction in the current budget deficit over the next couple of years. From 1996 onwards we show a current budget

Table 4.9: The Public Finances, % Changes

	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*1990-95*	*1995-00*	*2000-05*
					%				*Average Growth Rate, %*		
Taxes on Income and Wealth	12.2	7.2	3.4	6.0	6.0	4.7	6.4	6.1	7.9	5.9	6.2
Company	27.2	14.6	1.4	14.4	10.3	7.2	6.8	6.7	17.1	9.0	6.7
Personal	10.1	6.0	3.7	4.6	5.2	4.2	6.3	6.0	6.7	5.3	6.1
Taxes on Expenditure	3.4	6.8	8.4	7.0	6.2	6.2	5.7	5.6	5.2	6.1	5.5
Net Trading & Investment Income	-4.5	-5.4	2.5	2.4	2.9	2.5	2.4	2.3	2.7	2.5	2.3
Transfers From Abroad	13.9	0.0	5.0	5.0	5.0	5.0	5.0	-58.1	13.5	-12.6	3.0
Total Current Receipts	8.1	6.3	5.3	6.3	6.0	5.2	6.0	4.0	6.8	5.5	5.8
Subsidies	21.5	5.1	4.3	4.2	3.7	3.3	3.1	2.6	8.3	3.4	2.1
National Debt Interest	-1.1	-3.0	-0.3	0.1	-0.8	-2.1	-1.9	-1.0	-1.2	-1.2	-2.5
Other Transfer Payments	8.8	6.0	3.3	2.9	3.1	3.6	3.4	3.6	7.5	3.3	3.7
Public Consumption	7.0	7.5	7.9	6.9	6.8	7.0	6.8	6.7	7.7	6.8	6.0
Total Current Expenditure	6.7	5.1	4.7	4.2	4.2	4.3	4.3	4.5	6.1	4.3	4.2
Budget Deficit as % of GNP	1.4	0.3	0.1	-0.7	-1.3	-1.6	-2.2	-2.0			
Total Capital Receipts	38.3	15.4	-4.6	4.0	4.0	4.0	4.0	-18.8	15.6	-1.0	3.0
Total Capital Expenditure	23.3	8.0	7.5	10.0	8.9	5.3	5.5	0.3	9.7	5.9	5.2
Exchequer Borrowing Requirement, as % of GNP	2.5	1.9	2.1	1.4	0.9	0.5	-0.1	0.6			

surplus. One of the main reasons for the rapid improvement is the reduced payments on national debt interest as a result of lower interest rates and reduced borrowing.

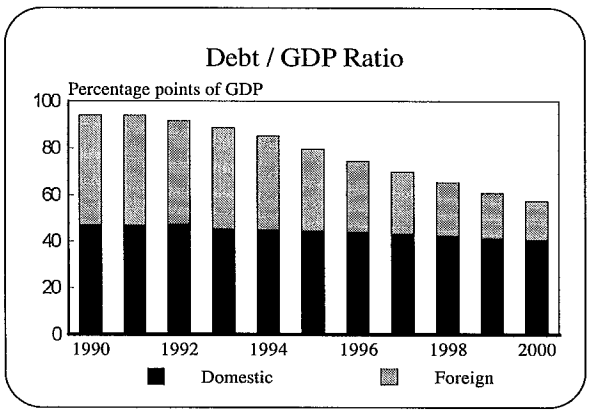
Figure 4.22



On the basis of the assumptions set out in Chapter 3, a significant surplus on the Exchequer Borrowing Requirement is not expected before the end of the decade. The reduction in the current budget deficit is partly offset by the rise in capital expenditure which is expected to be quite substantial over the period. A slow decline in the EBR as a percentage of GNP is expected, however, over the forecast period in preparation for any reduction in EU transfers which may occur in or after the year 2000.

Figure 4.22 shows a steady improvement in the EBR expressed as a percentage of GNP (The rise in the EBR in 2000 is due to the assumed fall in transfers under the CSF). If the personal savings ratio were to fall by more than we have assumed in the Central Forecast the EBR would improve faster, perhaps moving into surplus by the end of the decade.

Figure 4.23



As Figure 4.23 shows, Ireland's debt/GDP burden remains very high. However, the Central

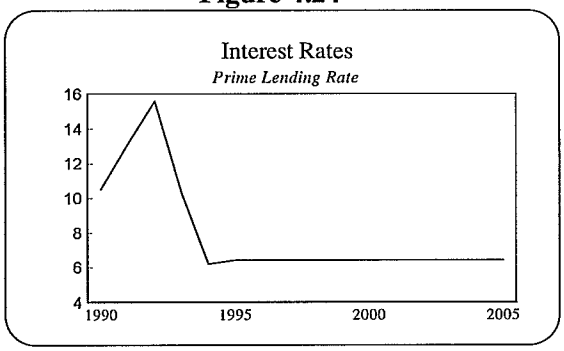
Forecast implies a continuing decline throughout the 1990s which would leave the debt/GDP ratio below the Maastricht target of 60 per cent in 2000.

4.7 Monetary Sector

Interest Rates

We set out our assumptions on monetary policy in Chapter 3. These imply that Irish interest rates in the medium term will follow closely German rates. While this loose relationship may be disturbed from time to time by movements in Sterling, Sterling rates will themselves be affected by DM rates. Nothing in the Central Forecast for the Irish economy is likely to disturb this long-run relationship, with inflation expected to remain low and competitiveness broadly satisfactory. The resulting forecast for the prime lending rate is shown in Figure 4.24.

Figure 4.24



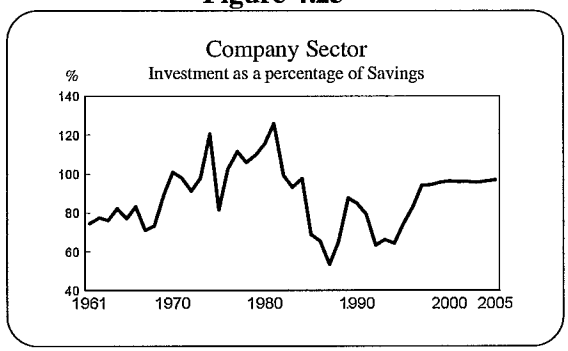
As discussed earlier in this Chapter, while appearing low in nominal terms, this time path for interest rates still implies quite high real rates (Figure 4.4) although no higher than in competing countries. It will still encourage a quite high level of saving and act as a brake on economic activity.

In the light of the problems of the EU economy there must remain some uncertainty that interest rates could be higher in the medium term than we have assumed. As illustrated in Chapter 2, Box 2.3, such an eventuality would be very serious for the Irish economy and could substantially change the medium-term outlook.

The Flow of Funds

In the late 1980s and early 1990s the company sector, which was earning substantial profits, had a high rate of saving. In many cases this manifested itself as a reduction in debt. In other cases companies may have invested their funds directly in financial instruments or may have invested abroad.

Figure 4.25



This increase in company sector saving was a natural reaction to the very high interest rates over the period and it was the mirror image of the low rate of investment in fixed capital. In the next 5 years we expect that private sector investment will increase rapidly due to the European recovery and the improvement in competitiveness, including the fall in real interest rates. In spite of the rapid increase in investment, Figure 4.25 suggests that the company sector will still not be using all its funds to invest in physical capital in Ireland over the rest of the decade. However, the surplus will be much smaller than in the last 10 years and the continuing need for Irish firms to develop abroad should increase the financing needs of the company sector in the medium term.

For the personal sector the Central Forecast assumes a similar pattern of saving and investment to that experienced in the past. In spite of the pick up in housing investment we expect the

personal sector to maintain a substantial surplus of savings over physical investment. It is only if there was a consumer-housing boom, as in the 1989-90 period, that this pattern would change and even then the change would in all probability be only temporary.

Where the 1990s are very different from the 1980s is in the position of the Government sector. The Central Forecast implies that the Government will have little need for the surplus funds of the personal sector as the EBR is held at a low level throughout the period. As a result much of the personal sector investment in financial assets will flow to the company sector or abroad over the rest of the decade.

4.8 Conclusions

Uncertainties

The one certainty about the future is that the actual outturn will prove more eventful than the smooth path we have plotted in the Central Forecast. However, we believe that the forecast average growth in the main aggregates is likely to prove reasonably robust in the face of shocks which may invalidate the forecasts for individual years. Predicting trends is easier than forecasting the timing of the economic cycle.

The Central Forecast is based on a wide range of different assumptions about the external environment in which the Irish economy must operate and about domestic policy and the collective behaviour of the individuals who make up the economy. Some of these assumptions are more important than others in determining the essential features of our forecast and some of them are more susceptible to change.

The experience of the last decade has shown that high real interest rates can have a serious impact on the Irish economy. The effects are more severe than those for many of our EU neighbours because of the very high indebtedness of the Government sector, in particular because of the size of its foreign debt. As discussed in Chapter 2, a 2 percentage point rise in real interest rates, operating through a range of different channels, may have reduced GNP by 4 per cent and employment by 30,000 below the levels they might otherwise have been.

Such a shock, either through higher or lower rates, is within the possible margins of error in the forecast period. If it were to occur it would obviously necessitate a major revision of expectations for growth. However, as the Government's indebtedness is reduced from 100 per cent of GNP to under 70 per cent by 2000, the potential disruption caused by changes in real interest rates will be reduced. A shock of the same magnitude in 2000 will have significantly smaller effects than one in 1990. This highlights the importance of reducing the burden of the debt.

A second possible disruptive feature is the uncertainty about the growth in EU and world demand. In the short-term the difficulties in predicting turning points obviously makes the timing of the forecast recovery phase for the Irish economy uncertain. However, more important for growth in the medium term is uncertainty about the sustainable growth rate in the EU. Clearly a major revision, upwards or downwards, in the forecast growth of the EU economy would necessitate similar changes in the Central Forecast.

The terms of trade are now very important in determining changes in our standard of living. Because trade represents such a large share of our GNP quite small changes can have big effects on growth in disposable income. In the forecast we have assumed a continuing small deterioration in the terms of trade over the forecast period. Obviously, a superior outcome, where the terms of trade were stable, would enhance the forecast

increase in living standards. However, we feel it is just as likely that the terms of trade could be worse than envisaged in the Central Forecast.

In our Central Forecast we have assumed that the process of determining pay rates continues much as it has since the mid-1980s. Pay rises will be such as to maintain the competitiveness of the Irish economy. As indicated in Box 4.1, if the pattern of pay determination were closer to that in the 1960s and the 1970s our competitive position would be eroded. While the immediate impact of such a development would not be very great, the long-term consequences for employment would be very serious.

Conversely, a more moderate time path for wage rates in the medium term could bring about faster growth in employment, while still allowing significant increases in living standards for those at work.

The exception to the moderation in pay determination has been the pattern observed in the public sector where average earnings have risen more rapidly than elsewhere in the economy. A continuation of this trend could put at risk the changes in pay determination observed elsewhere in the economy prejudicing the competitive position of the economy as a whole.

In the Central Forecast we have assumed a smooth time path for exchange rates over the rest of the decade. While it is likely that the outturn will be a somewhat more bumpy ride we feel that the economy will not be thrown off course by such deviations from trend. However, there remains the possibility that a similar crisis to that experienced in the winter of 1992-93 could occur again and, if prolonged, it could have more permanent effects on employment and output.

In the absence of major exchange rate changes there is relatively little scope for inflation in Ireland to diverge from rates observed in our major trading partners. If overheating were to occur it would be more likely to manifest itself in a fall in the balance of payments surplus. However, there remains a danger that the rate of increase in prices in some of the non-tradable sectors could move out of line with the general rate of inflation. This would affect the cost base of the economy resulting in a loss of competitiveness and a fall in employment.

The building sector presents the most obvious danger point for inflation. It is subject to surges of demand from investment and it is possible that demand could outstrip capacity in the next 3 years leading to higher inflation. However, for the present, there is little evidence of such a development.

The prices of the output and services of the non-tradable sector are vital in determining the competitiveness of the economy as a whole. There are a number of areas where lack of competition has resulted in unduly high prices for such services. A more active policy of promoting competition in the non-tradable sector could reduce prices, producing a once off competitive gain which would contribute to higher growth and employment than envisaged in the Central Forecast.

The uncertainty about the savings rate was discussed earlier in this Chapter. It is possible that there would be considerably greater variation in the savings ratio in the medium term than we have allowed for. As the analysis in Box 4.3 shows, such variation could significantly alter the rate of growth in one or two individual years but it is unlikely to produce a permanent change in the economy. It is only if there was a permanent large reduction, or increase, in the savings ratio that the medium-term forecast would need revision.

The assumed development of the public finances broadly represents a continuation of the current stance of fiscal policy. The reduction in the debt/GDP ratio and the maintenance of a low borrowing requirement are essential prerequisites if we are to safeguard the expected growth in employment and output in the medium term. The needs of the Irish economy call for the observance of guide-lines at least as stringent as those in the Maastricht "criteria".

In preparing the Central Forecast we have assumed a particular pattern of increase in participation in education and in the labour force. As discussed in Box 4.5, even if our assumptions prove wrong, it will not have a major impact on employment or output growth. However, it could significantly alter the forecast time path for unemployment, emigration and the population.

Finally, the Irish economy remains vulnerable to changes in the external environment which could upset the flow of foreign investment. By the end of the decade we will face increased competition from Central European countries for mobile foreign investment. In addition, in the next Chapter we discuss the vulnerability of the economy to changes in foreign tax legislation.

Features of the Forecast

The Central Forecast, described in this Chapter, shows a pattern of steady progress in terms of output growth over the 1990s together with an increase in employment slightly higher than that achieved in the 1970s. The difference compared to the 1970s is that the forecast growth in employment is sustainable. In spite of this progress in increasing output, unemployment is likely to remain high at over 13 per cent of the labour force up to the end of the decade.

This progress in terms of growth is likely to take place against a backdrop of somewhat slower growth in our EU partners. As discussed in Chapter 5, the result will be a more rapid convergence in living standards towards the EU norm than has been achieved in any decade since the war.

As in the last *Medium-Term Review*, a major feature of the Central Forecast is the persistence of a significant balance of payments surplus. On this occasion we have assumed that high investment and a continuing deterioration in the terms of trade somewhat erodes it. However, even with a halving of EU structural funds in 2000, the Central Forecast shows a surplus of around 1.5 per cent of GNP. This continuing surplus indicates that the rapid growth rate we forecast for the rest of the decade is not likely to be a temporary phenomenon. It reflects the underlying growth in the potential output of the economy - a potential which is likely to be sustained into the next decade.

The changing demographic balance over the next 10 years will radically change the Irish economy (and have significant effects on society at large). The fall in the dependency ratio will contribute to the rise in living standards. An aspect of this change will be the ability to simultaneously reduce real Government expenditure while increasing the quality of services.

The very rapid fall in numbers of children will require changes in many sectors of the economy. It poses major personnel problems for the Department of Education. For both the manufacturing and services sectors catering for the home market there will be major changes in the pattern of demand.

The underlying competitiveness of the economy has been masked by the fall-out from German unification and the related downturn in the EU economy. Over the rest of the decade we should see the economy exploit its strengths. In our Central Forecast we have made quite a conservative assessment of the ability of the Irish

manufacturing sector to take advantage of its position. It may well prove possible to expand output and employment more rapidly than we have suggested.

The picture of economic recovery and employment growth painted in the Central Forecast is our best assessment of the medium-term prospects for the economy. However, it is also clear that for the long-term unemployed the future is not very bright. The jobs created over the forecast period will be suitable for young people with skills and a high level of education. If more jobs are created they will tend to be "more of the same". Employment growth, on its own, is unlikely to be the answer. While the long-term unemployed lack the skills and education necessary to participate effectively in the Irish labour market they will remain locked into their present situation. It is only if public policy can tackle the underlying causes that we will see long-term unemployment falling rapidly.

CHAPTER 5

Dependence or Development

In this *Review* we have examined the prospects for the economy into the next decade. Growth, including employment growth, is likely to be reasonably strong, measured by the standards of our EU partners. However it will still not be enough to make a serious impact on the numbers of long-term unemployed.[1] Nevertheless, it seems probable that for the rest of the population considerable progress will be made over the 1990s in bringing about a convergence in living standards between Ireland and the rest of the EU 12. While this will represent a significant improvement on past performance, the likelihood that unemployment will remain high raises questions as to what should be the appropriate objective of economic policy in the medium term: what development strategy should be adopted and what strategic issues face the economy over the coming decade?

We consider first the process of convergence and whether it may bring about sustainable development if the economy is left on auto-pilot, without major policy intervention. We then examine how best public policy can intervene to speed the process of convergence in living standards **for all of the population**. This process of convergence must be sustainable in the sense that it is due to convergence in output per head and is not merely a result of increased transfers used temporarily to support rapid growth in incomes.

5.1 Process of Convergence

The Irish Experience

Why do the living standards of some countries converge to that of the leader while other countries lag behind? This question has been energetically debated by economic historians. According to the simplest theories of international integration free trade, with or without free movement of labour and capital, should be enough to promote such convergence. The fact that this pattern has frequently not been reproduced in the real world has highlighted a range of factors which may postpone or prevent such convergence: the potential to reap economies of scale from larger plants; economies from proximity to large markets or from operating in a central location; and a range of additional factors which may include hidden barriers to movement of labour or capital.

In Ireland's case the opening up of the economy from the late 1950s ushered in a period of major change and restructuring. Beginning in 1960 the stock of both physical and human capital was well below the Western European norm. This should have made it attractive to invest in industry and services in Ireland, helping to narrow the gap in output per head. However, a number of factors intervened to prevent a rapid convergence in terms of output per head through investment.

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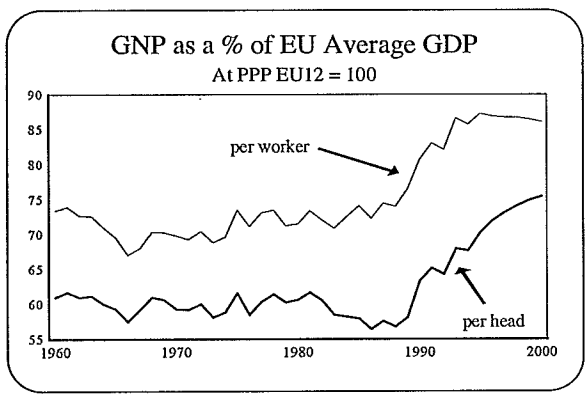
[1] This issue was discussed by O'Connell and Sexton in *Economic Perspectives for the Medium Term.*

As discussed earlier in this *Review*, labour costs rose more rapidly in Ireland than they did in the UK over the 20 years from 1960 to 1980. By 1980 labour costs in industry in Ireland were similar to those in the UK. This rapid convergence in labour costs can be understood as part of the process of integration; with free movement of goods and labour, factor prices, in this case the price of labour, should tend to converge. The relatively rapid convergence in labour costs meant that the incentive to invest in Ireland was reduced and many existing firms lost out as they saw their competitive position disimprove. However, the speed and nature of this convergence through rising labour costs was not inevitable. The example of Portugal is interesting in this regard; there, in spite of EU membership, labour costs have remained well below the EU norm and unemployment has also remained low.

Figure 5.1

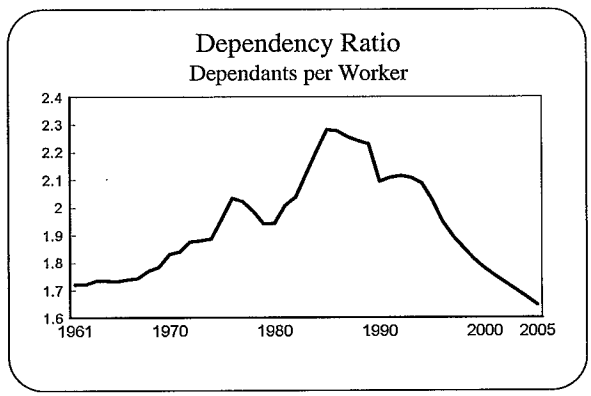


The process of integrating Ireland into the wider European economy through removing barriers to trade and investment began at the end of the 1950s and continued over a period of roughly 20 years to the early 1980s. However, progress was slow in bringing about a convergence in living standards.[2] In 1960 Irish output per worker was around 73 per cent of the average for the EU 12. Using this measure, between 1960 and the late 1980s, almost no progress in convergence was observed (Figure 5.1).[3] This period of little progress roughly coincided with the period of full integration into the EU economy.

However, from the late 1980s onwards quite rapid strides have been made in narrowing the gap in output per worker between Ireland and the EU norm: since 1988, when we were 74 per cent of the EU average, output per worker has risen to roughly 84 per cent of the EU norm today. On the basis of our Central Forecast we expect this higher relative level to be sustained to the end of the decade.

The position is rather different when we consider Ireland's relative position using output per head of population. This is a more appropriate measure of the standard of living than output per worker. The difference between the two measures depends on the number of dependants for every worker in the economy.

Figure 5.2



In 1960 the number of dependants per worker was over 1.7 (Figure 5.2), much higher than the norm in the rest of the EU 12. Between 1960 and the mid-1980s the number of dependants per

2 K. Kennedy, 1992, "Real Convergence, the European Community and Ireland", *Journal of the Statistical and Social Inquiry Society of Ireland.*

3 In comparing the standard of living in Ireland with the EU we use GNP at PPP as the measure of output in Ireland and GDP for the rest of the EU. GNP figures at PPP are not readily available for the EU for the relevant period. GNP is the more appropriate measure for Ireland. For the rest of the EU, however, there is little difference between the two measures.

Box 5.1: Convergence and Eligibility for EU Funds

Eligibility for EU Structural Funds as an Objective 1 region depends on GDP per head, measured in a common unit (purchasing power standard), being less than 75 per cent of the EU norm. The threshold for funds from the Cohesion Fund is 90 per cent of the EU average GNP per head. The calculations are made using the average of official figures for the latest 3 years available.

The advent of the Scandinavian countries and Austria to the EU will marginally increase the EU average standard of living, reducing the ratio of Irish GDP per head to the EU average by 0.5 percentage points. However, if Poland, the Czech Republic, Hungary and Slovenia were to join the EU Ireland's relative position would be revised upwards significantly. On the assumption that these countries would have a GDP per head of roughly 50 per cent of the EU average in 2000, the EU norm would itself be reduced. The effect of this reduction would be to raise Irish GDP per head from around 82 per cent of the average for the EU 16 in 2000 to 88 per cent of an EU 20.

In the light of these calculations it seems unlikely, with or without enlargement of the EU, that Ireland will continue to enjoy the same level of EU Structural Fund transfers from 2000 onwards as it is enjoying today. This assumption is built into our Central Forecast for the period to 2005.

head of population rose greatly in Ireland, reaching a peak of almost 2.3 per person working in 1985. While there has been some fall since the mid 1980s, the number remains around 2.1 per worker today. However, it is likely to change very rapidly over the next 10 years falling below 1.8 in 2000 and reaching around 1.65 in 2005. While still above the rest of the industrial world (1.3) this reduction in dependants will contribute to a major change in Ireland's relative position measured in terms of GNP per head.

Table 5.1: Measures of Convergence

EU 12=100 average for	*GNP per worker*	*GNP per head*	*Difference*
1960-64	72.7	60.9	11.7
1965-69	69.0	59.5	9.5
1970-74	69.6	59.1	10.5
1975-79	72.4	60.4	12.0
1980-84	72.0	59.9	12.2
1985-89	74.2	57.4	16.9
1990-94	83.6	65.6	17.9
1995-99	86.8	72.8	13.9
2000-04	84.8	75.8	8.9

As shown in Table 5.1, beginning in the early 1960s Ireland's GNP per head was approximately 61 per cent of the average for the EU 12. As with GNP per worker, there was little change in Ireland's relative position up to 1980. During the 1980s Ireland's position actually worsened, partly due to rising dependency. This is reflected in the widening gap between the two measures of convergence: GNP per worker and GNP per head. It was only with the very rapid growth at the end of the decade and the good performance over the last 3 years that Ireland's position has shown significant improvement. This year GNP per head should be nearly 68 per cent of EU average GDP; the average for the period 1990-94 will be nearly 66 per cent, representing a significant improvement on earlier years.

However, the combination of the relatively rapid growth envisaged in the Central Forecast and the fall in the dependency ratio means that over the rest of the decade Ireland should continue to make quite rapid progress in terms of convergence, measured by GNP per head. By 2000 Ireland is likely to have reached a standard of living slightly greater than 75 per cent of the average of the existing EU. By the standards of Ireland's

experience of the first 80 years of this century this will mark unusually good progress.[4]

EU Experience

A rather similar process occurred in some other peripheral regions of the EU. In the case of the Mezzogiorno in Italy in the 1950s and 1960s wage rates were lower than in the rest of Italy and there was some narrowing in the gap in output per head between the two regions. However, progress ended after 1970 and by the late 1980s wage rates in the Mezzogiorno were 90 per cent to 100 per cent of those in the rest of Italy while output per head of population was still under 60 per cent of the rest of Italy.[5]

A similar process is under way today in the former East Germany where labour costs are rising from 30 per cent of the West German norm in 1990 to a position of equality over a period of 6 or 7 years. The consequence has been a major fall in output per head in the former East and a very high rate of unemployment in that region.

In the case of both East Germany and the Mezzogiorno there are very substantial transfers from the better off regions which ensure that the gap in living standards, measured in terms of income per head, is much narrower than for output per head.

The Northern Ireland economy is also an example of this process. It has been badly affected by the unrest there over the last 25 years and by the general decline in British manufacturing. However, the population has been insulated from the economic effects of the loss of output by substantial transfers from the UK. As a result, workers in the North enjoy fairly similar wage rates and standards of living to the rest of the UK, in spite of much lower output per head.[6]

In each of these three cases the effects of the transfers from the Central Government has been to lock in the differences in output per head, creating dependent regions. Once labour costs converged the process of convergence in output per head slowed or stopped. Without any difference in prices of factors of production within these countries there has been no strong economic incentive for entrepreneurs to shift investment into the depressed regions. While attempts have been made to counter the damaging effects of the harmonisation in factor prices through subsidies in the depressed regions, these policies have not been very successful.

A reflection of this dependence is the size of the balance of trade deficit (excluding transfers) in these regions. In the case of the Mezzogiorno it is probably around 20 per cent to 25 per cent of GNP, while the deficit on the balance of trade in Northern Ireland is of the order of 15 per cent to 20 per cent of GDP. Without the promise of indefinite transfers this situation would be unsustainable. However, within the context of a unitary state where there is the commitment to permanent support for disadvantaged regions, this may be sustainable but it is not necessarily desirable. For example, in Italy the dependency has created political tensions.

For member states within the EU, while there is some commitment to transfers to promote convergence, the size of the budget is nowhere near sufficient to achieve this objective.[7] In the case

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4 Kennedy K., T. Giblin and D. McHugh, 1988, *The Economic Development of Ireland in the Twentieth Century*, London: Routledge.

5 See "The Economic and Financial Situation in Italy", *European Economy,* No. 1, 1993.

6 See Bradley J. and J. Wright, 1993 The *Determinants of Growth and Development in the Two Economies of Ireland,* The Economic and Social Research Institute and the Northern Ireland Economic Research Centre, Discussion Paper No. 2.

7 National Economic and Social Council, 1989, *Ireland in the European Community: Performance, Prospects and Strategy,* Dublin: Report No. 88.

of Ireland, we have received substantial transfers from the EU since we joined in 1973 mainly in connection with the CAP. Since the late 1980s there has been a substantial increase in transfers from the EU Structural Funds as part of the Community Support Framework (CSF). These transfers are aimed at promoting convergence in living standards within the EU. By 1993 the CSF transfers to Ireland amounted to around 3.5 per cent of GNP.

While the process of integration over the period 1960 to 1980 was accompanied by the rapid increase in the price of labour relative to the UK there is no evidence that the increase in transfers under the CSF since the late 1980s has aggravated the situation. The increase in CSF funds has in many cases been used to fund an increase in public investment much of which would probably have taken place any way. As a result, the CSF funds relieved the Government from the need to borrow, resulting in a substantial improvement in the public finances and helping to increase the balance of payments surplus. The reduction in indebtedness and the associated reduction in interest flows on the foreign debt are part of the benefit to Ireland of the CSF funds.

The rapid increase in the balance of payments surplus over the past decade - much faster than the growth in EU transfers - illustrates one consequence of recent economic policy, namely that, as a nation we have effectively saved the transfers and used them to pay off debt in order to increase the long-term competitiveness of the economy. The alternative strategy, adopted in the other regions discussed above, has been to use the transfers to immediately increase the standard of living of the region by increasing consumption rather than to invest them in increasing output. The result in those cases was to increase dependence on the transfers. This option was not open to Ireland because of the conditional nature of the transfers.

The result of the policy adopted in Ireland is that the progress over the last 5 years, and the expected progress over the rest of the decade, will see a sustainable increase in living standards; even if, as we expect, the transfers are gradually phased out, this will not have a significant effect on current living standards nor will it put at risk the increase in output that is taking place.

5.2 Development Policy

Within the constraints facing a peripheral region in the EU economy how best can public policy promote sustainable development and low unemployment and what strategic issues face policy makers over the rest of the decade? The lessons to be learnt from regional policy within the EU point to the importance of concentrating on measures to increase the efficiency and productivity of the supply side of the economy. They also indicate the importance of maintaining labour cost competitiveness if dependence or high levels of unemployment are to be avoided.

Macro-Economic Issues

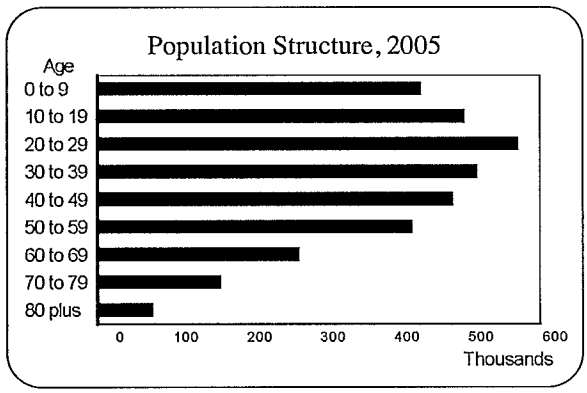
Demographic Change

The most profound changes in the economy over the next decade are likely to stem from the changing demographic structure. As discussed above, the fall in the dependency ratio will make a major contribution to raising living standards towards the EU norm. It will also have important implications for both the public and the private sectors. While we deal later with the implications of this demographic revolution for individual sectors, we deal here with the strategic issues which it raises for the long term.[8]

[8] It also raises major social questions which we do not attempt to discuss here.

While the initial effect of the rapid decline in the birth rate will be to raise the standard of living for individual citizens, it may store up problems for the economy in the very long term.

Figure 5.3



The developing population structure in Germany and Japan (Chapter 3, Figure 3.1) is a useful guide to what, on present trends, could happen eventually in Ireland. As shown in Figure 5.3, by the year 2005 the effects of the falling birth rate will already have a perceptible effect on the Irish population structure. In the absence of a reversal of the decline in the birth rate, or immigration, as the bulge moves through the age groups Ireland will arrive at a German or a Japanese situation. As those in their 20s today come to retire, old age dependency will be rising rapidly. The dependency ratio, shown (in Figure 5.2) falling up to 2005, will begin to increase again shortly thereafter. The increased dependency burden will be manifested in the higher share of national production which will have to be devoted to pensions. To ensure adequate resources to meet this predictable dependency bulge will require more saving - accumulation of productive assets. To the extent that the pensions are provided from public funds, the long term implication is that the public debt will need to be reduced further than implied, say, by Maastricht to allow the build up of a public pension fund.

The need to fund in advance such payments helps explain the long-term tendency for balance of payments surpluses in Japan and Germany to remain large.

An alternative approach, adopted in Scandinavia, has been to change working arrangements to facilitate couples to both have children and have a career. The birth rate in Scandinavia has responded to these policies promising a more balanced population structure in the future.

This choice of strategies for responding to the falling birth-rate is an issue for public policy over the coming decade.

Public Finances

While the Maastricht guide-lines on borrowing and reducing the debt/GDP ratio provide a useful benchmark against which to measure progress on the public finances they do not provide an adequate basis for determining the appropriate fiscal policy stance over the rest of the decade. The criteria for an appropriate policy derive from the needs of the Irish economy.

The current high level of indebtedness of the economy requires high tax rates to fund interest payments. In turn, the high tax rates detracts from the overall competitiveness of the economy. The expected continuation of the regime of high real interest rates in Europe lends additional urgency to the need to reduce our indebtedness. In the long run our debt to GNP ratio should be at least as low as that of our major competitors to protect the economy's competitiveness. This suggests a target of around 50 per cent of GNP by 2005.

The appropriate medium-term target for the Exchequer Borrowing Requirement must be examined in the light of the long-term objective on the debt. As discussed in Chapter 3, the need to provide for a possible reduction in EU Structural Fund payments from the end of the decade suggests that an appropriate target would be the elimination of the EBR by 1999. Then, even if

transfers from the EU fall in 2000, there will be no need for a disruptive change in fiscal policy. A consistent path towards this objective would also have as a necessary corollary the reduction in the debt/GDP ratio to the EU norm of around 60 per cent by the end of the decade.

Human Capital and Unemployment

The importance of the education and training of the labour force (human capital) for economic growth is confirmed by international studies. In Ireland there has been a huge improvement in the human capital of the labour force over the past 20 years arising from increased participation in 2nd and 3rd level education. Free second-level education was introduced in the late 1960s and it was only in the 1980s that the full impact of this change on the productivity of the economy began to be felt. The fact that the return from investment in this area takes a very long time to mature makes forward planning essential. The proposed increase in public investment in this area in the medium to long term is very important.[9]

The prospect that a major increase in living standards for the bulk of the population may be achieved over the next 5 to 10 years, while simultaneously the number of long-term unemployed shows little change, is a major issue for public policy. It seems clear that even if the rate of job creation were substantially greater than we forecast it would still have little effect on the numbers of long-term unemployed. This reflects the fact that, on present policies, the vast bulk of new jobs created will require high levels of skill and education from the work force. As the bulk of the long-term unemployed have few marketable skills and a low level of education they will not be able to compete for these jobs.

If the benefits of economic growth are to be shared with the long-term unemployed then a range of different policy measures will be needed. These should have three aims:

- to prevent children leaving school early without educational qualifications.
- to prevent those who lose their jobs from drifting into long-term unemployment.
- to provide the skills and training to the long-term unemployed so that they can re-enter the labour force.

The flow of new entrants into the army of long-term unemployed must be halted. This is best achieved by early intervention in the educational system to ensure that the numbers of early school leavers are drastically reduced. Once children leave school without skills or education it is exceptionally difficult to make good the failure of the educational system. As Breen and Shortall, (1992),[10] show, an **effective** intervention to upgrade the skills and education of the most disadvantaged school leavers is not only socially desirable but it would also produce a very significant economic return on the investment.

Measures are needed to upgrade the skills of those who become unemployed so that they can rapidly find their way back into the labour force.

For those who are already among the long-term unemployed a more successful provision of training and education would obviously improve their labour market prospects. Changes in policies could help increase the success rate of

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9 See Honohan P. and P. O'Connell, 1994, "The National Development Plan in the Context of Irish Economic Problems" in *Economic Perspectives for the Medium Term,* The Economic and Social Research Institute.

10 Breen R. and S. Shortall, "The Exchequer Costs of Unemployment among Unqualified Labour Market Participants", in J. Bradley and J. Fitz Gerald *et al.(* eds)., *The Role of the Structural Funds,* ESRI, Policy Research Series No. 13.

existing schemes (Honohan and O'Connell, 1994). In addition, there may be a need to provide specific employment policies which would ensure that the long-term unemployed can directly re-enter the labour force. Without such policies they may have difficulty obtaining the necessary experience to ensure permanent employment.

Tax Reform

The need for further reform of the tax system has been a constant refrain of past *Medium-Term Reviews*. We do not intend to rehearse the arguments made in so many reports, in particular the reports of The Commission on Taxation. The fact that the success rate of recommendations has been low in no way reduces their validity. It remains important for the future development of the economy across a wide range of areas that reform be pursued.

In the past an obstacle to tax reform has been the necessary uncertainty about the outcome, in particular about the revenue, from any reform. The easing of the constraint on the public finances and the expected buoyant growth will reduce the risks from a temporary budgetary overrun arising from tax reform. The economic recovery will also ease some of the problems faced in designing changes in the tax system as the number of dependants falls and the number of working tax payers rises. The next 5 years provide an important opportunity to make significant changes in the tax system.

The integration of the tax and welfare systems might make a significant contribution to reducing the numbers unemployed as well as increasing the overall efficiency of the tax system. A restructuring of the tax system generally, by increasing its efficiency, could increase the competitiveness of the economy in the long term. While significant progress has been made in reforming the system of company taxation and in dealing with the pervasive problem of evasion, the personal taxation code has seen much less success.[11]

Ireland and the EU

The relatively rapid progress in closing the gap in living standards between Ireland and the EU over the 1990s has important implications for the position of Ireland within the EU. By the end of the decade Ireland, if treated as a unit, may no longer be an objective 1 region. This explains the technical assumption underlying our Central Forecast that EU Structural Fund payments will be halved beginning in 2000. But part of the country will still fall well below the relevant threshold. The condition of these regions must now be identified with a view to ensuring that they qualify for EU support after 2000.

Of more importance in the long term is the likelihood that the EU will be further extended to include a number of countries in Central Europe. This extension will pose major problems for the way the EU is governed, issues which we leave to others to consider. However, it will also have important implications for the Irish economy.

In such an extended EU Ireland will be seen to enjoy an average standard of living - we will no longer be seen to suffer from peripherality in the same way we do today. This will affect our eligibility for Structural Funds. It is probable that the advent of Poland and other Central European countries would necessitate a radical reform of the CAP. To judge by our own experience and that of Spain, the prospect of membership would result in a substantial diversion of mobile foreign investment to locations in the potential new member states.

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[11] See O'Toole F., 1994, "Discretionary Tax Expenditures and Tax Reform in Ireland", in *Economic Perspectives for the Medium Term*, Dublin: The Economic and Social Research Institute.

While all of these factors are likely to prove adverse to the Irish economy, the experience with other major changes to the EU, for example *1992* and the GATT agreement, has been that the likely benefits to Ireland from the general increase in trade offset the costs arising from specific changes. However, it is too early to assess the likely balance of effects on Ireland from further enlargement of the EU but these issues must be borne in mind in framing longterm policy.

Strategic Issues for Specific Sectors

In the 1980s writing the prescription for the nation's economic ills proved easy even if the medicine was very unpalatable. However, for the 1990s preparing appropriate policies to promote development is much more complex. The area where most progress can be made by public policy is at the more micro level dealing with specific problems or sectors.

Because of the level of detail appropriate to such policies and their limited applicability, they are extremely difficult to explain at the level of public debate. This poses major problems for the political system. In the 1980s the public at large understood the debt problem; they may not have liked it or found it exciting but they understood the need to do something about it. It is much more difficult to explain how, for example, a more efficient system of managing sewage disposal can contribute to the economic welfare of society!

Here we discuss some of these more micro issues where changes at the level of individual sectors of the economy are required, changes which will contribute to a sustainable increase in output and employment in the medium term.

The changing demographic structure will require a major reorganisation of the educational system to ensure that resources are used efficiently. The need to close schools and reduce teacher numbers as pupil numbers tumble will coincide with a pressing need to reallocate some of these spare resources to dealing with those disadvantaged children who are destined to be the early school leavers and the long-term unemployed of the future.

The timing and nature of the increased participation in third-level education needs to be examined in the light of the exceptional bulge passing through the educational system. One option is to delay some of the increase until the bulge has passed through the existing system when additional resources will become available. A second option is to encourage some of the additional students to use facilities in Northern Ireland (or elsewhere). Finding the appropriate balance between either building new university or RTC buildings or delaying the increase in participation, with some cost in terms of lowering the potential human capital of the labour force, will be difficult.

The changing demographic structure may also change the needs and priorities for the social welfare system. Declining numbers of child dependants payments will reduce expenditure. It may also make possible reforms, such as changing the nature of the child dependency payments, which would earlier have proved too expensive. The rising share of children borne to single parents and the nature of the decline in fertility could also have implications for the priorities for social welfare support in the future.

For the private sector the changing demographic structure will lead to quite a rapid shift in the structure of consumer demand over the next decade. Rising living standards and falling numbers of children will alter the demand for goods and services, such as children's clothes and entertainment. On the other hand, the rapid rise in the number of young adults with higher spending power will increase the demand for a range of

different goods and services such as entertainment and eating out.

The increasing numbers of young adults combined with the small number of dependants has important implications for household formation. It seems likely that the average size of households will fall while their number will increase. This trend underlies the expected buoyancy in private residential investment over the forecast period. However, the nature of accommodation sought may change with the changing size of households.

The importance of using the resources available to the public sector, including the EU CSF funds, to invest in projects which will achieve a permanent increase in the productive capacity of the economy has been highlighted in a number of recent reports. If the funds were used to support a higher level of current consumption it would leave Ireland dependent on this essentially transitory source of income. When the money runs out we would have nothing to show for it.

Whether the funds are seen to come from the Irish or the EU tax payer should make no difference to the choice of investment projects. At the margin, the social rate of return from different projects should be equal. Each investment project should have the potential to produce a social rate of return greater than the cost of borrowing funds. Otherwise the project is best left undone.

Since joining the EU the agricultural sector has become very heavily dependent on transfers from the EU. In recent years transfers from the EU under the CAP were equal to between 50 per cent and 60 per cent of agricultural incomes. The heavy dependence of the sector on the CAP support raises important strategic issues.

The current CAP may be radically overhauled because of budgetary difficulties before the end of the decade. Even if it does not, the declining numbers of farmers in the EU, the massive economic inefficiency of the CAP at the level of the EU, and the prospects of a number of Central European states joining the EU early in the next decade all suggest that the CAP will undergo a revolution within the next 10 years. The dependent nature of the sector and its importance to the economy at large is a cause for concern.

Current policy in the CAP of restricting output while maintaining high prices may not be in the best interests of Irish agriculture in the long-term. Irish agriculture today may be potentially competitive in a free market for agricultural produce but current policies could damage this position. In so far as domestic policy can influence the future development of the sector it should aim at preparing it for an increasingly competitive global market some time in the next decade.

Irish industrial development policy since the 1960s has been primarily aimed at attracting foreign investment to Ireland. The inducement to multinationals, over and above factors such as membership of the EU or an English speaking skilled labour force, came through the fiscal advantages (low corporate profit tax rate, double taxation agreements etc.) and special assistance (grants, special loans, etc.) offered by the Government. In terms of its aim, the policy has been very successful and foreign firms make a substantial contribution to the Irish economy in terms of employment.

As shown in Chapter 2, growth in manufacturing output in Ireland has predominantly come from foreign owned firms who account for over 55 per cent of total manufacturing output. The US is by far the most important source of this foreign investment, accounting for over 50 per cent of employment in foreign manufacturers. As a proportion of all manufacturing employment, including that in domestic firms, US firms account for almost 25 per cent. In some industries the dominance of the US is even more pronounced.

In pharmaceuticals, for example, US subsidiaries account for over 60 per cent of employment.

However, the dependence on fiscal inducements as a means of securing foreign investment makes Ireland particularly vulnerable to changes in fiscal regulations of foreign Governments.

On the issue of grants the European Commission has decided to allow such state incentives to industrialisation in the less developed member states. However, reductions in corporate profit tax rates by other EU member states could erode Ireland's advantage while the increased transparency on inter-company transactions being sought by US tax authorities could reduce Ireland's attractiveness to US multinationals. In regard to the latter, the 1993 proposed and temporary regulations[12] are less stringent than those proposed in 1992 which threatened to severely restrict the utilisation of transfer pricing, which accounts for much of the profits of Irish subsidiaries of US firms. Nonetheless a limiting of the freedom of accounting operations of US multinationals is underway and the question has to be raised as to what effect this may have on their investment decisions.

From the Irish point of view it highlights our vulnerability to decisions by foreign Governments. It is, therefore, all the more vital that as we move into the next century our industrial policy develops along the lines envisaged in the Culliton Report[13]: that is, the elimination of the grant mentality which promotes dependence rather than sustainable growth; the encouragement of investment which stimulates strong linkage formation and the establishment of industrial clusters around sources of national competitive advantage. While not closing the door on new investment, the reliance on foreign firms to produce growth in manufacturing must be scaled down.

In Chapter 4 we highlighted the importance of promoting competition in the non-tradable sector. It is only through competition that the cost structure of the non-tradable sector can be controlled. Without such control the competitiveness of the economy as a whole will be prejudiced. Competition policy may be unsettling but it is important if growth in output and employment is to be advanced throughout the economy.

These strictures apply both to the public and to the private sectors. The overstaffing and high cost structure in public companies in the communications and energy fields have already come under pressure from competition. Under EU policy directives this competition is set to increase.

This issue of competition is not necessarily tied to ownership - it is not synonymous with privatisation. Competition will also be important in promoting change in the financial sector, the professions, including the legal profession, and a range of other sheltered sectors of the economy.

5.3 Conclusions

The Central Forecast suggests a period of substantial progress in improving living standards over the next decade. Ireland will thus have the capacity, if it has the will, to address its most basic problem - unemployment. However, solutions will not be found if the economy is left on auto-pilot and they will depend on changing attitudes among those at work as much as on Government policy.

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12 For a discussion of the 1993 IRS Regulations see Cantillon S. and D. Jacobsen, 1993. *Irish Banking Review*, Autumn.

13 Report of the Industrial Policy Review Group, 1992, *A Time for Change: Industrial Policy in the 1990s*, Dublin: The Stationery Office.

At the most basic level it involves policies to target the potential early school leavers to ensure that they receive an education at least adequate to the skills required for work in the economy of the next century. This will involve targeting resources on such children, a policy which may meet resistance from parents of other children.

It will also involve measures, discussed above, aimed at the existing stock of long-term unemployed, measures which will have to be financed out of taxes.

Finally, the strategy necessary to promote the competitiveness of the economy, on which increasing employment relies, will affect many of those at work. Any repetition of the dash for comparable pay rates with our trading partners, as occurred between 1960 and 1980, would postpone indefinitely the reduction in unemployment. Competition policy, if it is to be effective, may well affect profits, earnings and employment in firms in the sheltered sector.

Cassandra foretold gloom and doom and got it right. In our Central Forecast we paint a more benign scenario but we recognise our fallibility. However, the *Review* does focus attention on the areas of public policy which are important in promoting sustainable long-term development which can be shared by all the population.

APPENDIX

This appendix contains a set of tables giving additional details of the Central Forecast discussed in Chapter 4. These tables are also available on disk in Lotus 123 spreadsheet form with data for the years 1960 to 2005.

Table A.1:Expenditure on GNP

	1992	*Volume*	*Price*	*1993*	*Cont. to*	*Volume*	*Price*	*1994*	*Cont. to*
	£M	*%*	*%*	*£M*	*Growth %*	*%*	*%*	*£M*	*Growth %*
Personal Consumption	17267	2.5	2.0	18044	1.6	3.5	3.0	19237	2.3
Public Consumption	4773	2.2	4.6	5107	0.3	3.0	4.4	5490	0.5
Fixed Investment	4676	1.4	3.3	4901	0.2	4.5	2.4	5244	0.8
Building	2752	1.0	3.0	2862	0.1	4.5	2.4	3062	0.4
Machinery	1924	2.0	3.9	2039	0.2	4.5	2.4	2182	0.3
Final Domestic Demand	26716	2.3	2.7	28052	2.2	3.6	3.1	29971	3.5
Stock Building	-61			0	0.2			60	0.2
Agricultural	83			-40	-0.5			-40	0.0
Intervention	-373			-40	1.4			-20	0.0
Non-Agricultural	229			80	-0.8			120	0.2
Total Domestic Demand	26655	2.4	2.7	28052	2.4	3.8	3.2	30031	3.7
Total Exports	18693	4.8	3.6	20296	4.2	6.7	2.1	22102	6.1
Merchandise	16403	5.0	4.0	17907	4.0	6.8	2.1	19529	5.6
Services	2289	2.8	1.5	2389	0.2	5.1	2.4	2572	0.4
Total Demand	45348	3.6	3.0	48349	6.6	5.2	2.5	52133	9.8
Total Imports	15742	4.4	3.3	16980	3.1	6.6	2.4	18531	4.8
Gross Domestic Product	29607	3.0	2.8	31369	3.5	4.3	2.7	33602	4.9
Net Factor Income	-3154	7.8	3.7	-3526	-1.2	4.9	2.1	-3778	-0.8
Gross National Product	26453	2.3	2.9	27842	2.3	4.2	2.8	29824	4.2

	1994	*Volume*	*Price*	*1995*	*Cont. to*	*Volume*	*Price*	*1996*	*Cont. to*
	£M	*%*	*%*	*£M*	*Growth %*	*%*	*%*	*£M*	*Growth %*
Personal Consumption	19237	6.4	2.6	21005	4.2	4.9	2.2	22525	3.1
Public Consumption	5490	3.1	4.6	5922	0.5	3.2	3.6	6329	0.5
Fixed Investment	5244	16.1	3.6	6304	2.7	10.9	4.0	7266	2.0
Building	3062	13.4	3.9	3610	1.3	10.3	4.1	4146	1.0
Machinery	2182	19.3	3.9	2706	1.5	11.5	3.9	3135	1.0
Final Domestic Demand	29971	7.6	3.0	33231	7.4	5.8	2.8	36120	5.6
Stock Building	60			114	0.1			132	0.0
Agricultural	-40			0	0.2			0	0.0
Intervention	-20			-100	-0.4			-100	0.0
Non-Agricultural	120			214	0.3			232	0.0
Total Domestic Demand	30031	7.7	3.1	33345	7.5	5.8	2.8	36252	5.7
Total Exports	22102	10.0	1.8	24758	9.3	6.5	2.0	26899	6.2
Merchandise	19529	10.4	1.8	21963	8.8	6.6	2.0	23896	5.8
Services	2572	5.9	2.6	2795	0.5	5.1	2.2	3003	0.4
Total Demand	52133	8.9	2.4	58103	16.8	6.1	2.4	63151	11.9
Total Imports	18531	12.7	2.5	21398	9.4	7.5	2.3	23535	5.9
Gross Domestic Product	33602	6.4	2.7	36704	7.4	5.2	2.6	39616	6.0
Net Factor Income	-3778	3.8	1.8	-3994	-0.6	2.8	2.0	-4190	-0.4
Gross National Product	29824	6.8	2.7	32710	6.8	5.6	2.6	35425	5.6

	1996 £M	*Volume* %	*Price* %	*1997* £M	*Cont. to Growth* %	*Volume* %	*Price* %	*1998* £M	*Cont. to Growth* %
Personal Consumption	22525	4.3	2.3	24029	2.8	4.2	2.4	25632	2.7
Public Consumption	6329	2.5	4.2	6759	0.4	2.5	4.4	7232	0.3
Fixed Investment	7266	9.8	4.1	8300	1.9	4.8	3.8	9029	1.0
Building	4146	9.6	4.2	4732	1.0	5.1	3.9	5167	0.6
Machinery	3135	10.0	3.6	3571	0.9	4.4	3.2	3848	0.4
Final Domestic Demand	36120	5.1	2.9	39089	5.0	4.1	3.0	41893	4.0
Stock Building	132			242	0.4			255	0.0
Agricultural	0			0	0.0			0	0.0
Intervention	-100			0	0.4			0	0.0
Non-Agricultural	232			242	0.0			255	0.0
Total Domestic Demand	36252	5.5	2.8	39331	5.4	4.1	3.0	42148	4.0
Total Exports	26899	2.8	2.1	28230	2.7	5.4	1.9	30339	5.2
Merchandise	23896	2.6	2.1	25026	2.3	5.6	1.9	26921	4.8
Services	3003	4.3	2.3	3204	0.4	4.2	2.4	3418	0.4
Total Demand	63151	4.2	2.7	67561	8.1	4.7	2.4	72486	9.2
Total Imports	23535	4.3	2.2	25094	3.5	5.5	2.2	27069	4.4
Gross Domestic Product	39616	4.0	3.1	42467	4.6	4.2	2.6	45417	4.8
Net Factor Income	-4190	0.8	2.1	-4312	-0.1	0.8	1.9	-4432	-0.1
Gross National Product	35425	4.5	3.1	38155	4.5	4.7	2.6	40985	4.7

	1998 £M	*Volume* %	*Price* %	*1999* £M	*Cont. to Growth* %	*Volume* %	*Price* %	*2000* £M	*Cont. to Growth* %
Personal Consumption	25632	3.6	2.4	27203	2.3	3.6	2.4	28842	2.2
Public Consumption	7232	2.5	4.2	7721	0.3	2.4	4.2	8239	0.3
Fixed Investment	9029	5.6	3.5	9869	1.1	3.5	3.3	10549	0.7
Building	5167	5.9	3.7	5672	0.6	3.6	3.4	6081	0.4
Machinery	3848	5.3	2.9	4169	0.5	3.3	2.7	4424	0.3
Final Domestic Demand	41893	3.9	2.9	44793	3.8	3.4	2.8	47630	3.3
Stock Building	255			269	0.0			281	0.0
Agricultural	0			0	0.0			0	0.0
Intervention	0			0	0.0			0	0.0
Non-Agricultural	255			269	0.0			281	0.0
Total Domestic Demand	42148	3.9	2.9	45062	3.8	3.4	2.8	47911	3.3
Total Exports	30339	5.5	1.9	32592	5.3	5.2	1.8	34895	5.0
Merchandise	26921	5.6	1.8	28947	4.9	5.3	1.8	31012	4.7
Services	3418	4.2	2.4	3646	0.3	4.0	2.4	3883	0.3
Total Demand	72486	4.7	2.4	77654	9.1	4.3	2.3	82806	8.3
Total Imports	27069	5.4	2.2	29172	4.4	4.8	2.2	31236	3.9
Gross Domestic Product	45417	4.1	2.5	48482	4.7	3.9	2.4	51570	4.4
Net Factor Income	-4432	0.3	1.9	-4530	0.0	-0.3	1.8	-4597	0.0
Gross National Product	40985	4.7	2.5	43952	4.7	4.5	2.3	46973	4.5

Table A.2:Output

	1992	*Volume*	*Price*	*1993*	*Cont. to*	*Volume*	*Price*	*1994*	*Cont. to*
	£M	*%*	*%*	*£M*	*Growth %*	*%*	*%*	*£M*	*Growth %*
Agriculture	2512	-1.5	8.4	2681	-0.2	-1.0	4.5	2773	-0.1
Industry	9876	4.6	1.1	10443	2.2	6.4	1.2	11247	3.1
Manufacturing	7869	5.5	0.7	8356	2.1	7.0	0.8	9013	2.7
Utilities	674	1.0	3.0	701	0.0	4.0	2.9	750	0.2
Building	1333	1.0	3.0	1387	0.1	4.0	2.9	1484	0.2
Market Services	10830	4.3	3.1	11636	1.6	2.8	4.3	12475	1.1
Distribution	3430	4.2	3.0	3685	0.5	2.8	4.3	3950	0.3
Transport & Communications	1440	4.3	3.0	1547	0.3	2.8	4.3	1658	0.2
Professional & Financial	5960	4.3	3.1	6404	0.8	2.8	4.3	6866	0.6
Non-Market Services	4282	-0.2	7.2	4581	0.0	2.0	4.0	4860	0.3
Health & Education	2689	2.3	7.2	2948	0.2	2.0	4.0	3127	0.2
Public Administration	1593	-4.4	7.2	1633	-0.2	2.0	4.0	1733	0.1
Adjustment for Fin. Services (-)	1189	2.7	2.2	1248	0.1	2.0	2.9	1310	0.1
GDP at Factor Cost	26311	3.3	3.3	28093	3.4	4.0	2.8	30045	4.2
Taxes on Expenditure	4784	2.4	1.5	4970	0.4	5.5	1.5	5324	1.0
Subsidies	1488	3.6	10.0	1695	0.2	0.7	3.5	1767	0.0
GDP at Market Prices	29608	3.2	2.7	31368	3.6	4.4	2.6	33602	5.2
Net Factor Income	-3154	7.8	3.7	-3526	-1.2	4.9	2.1	-3778	-0.8
GNP at Market Prices	26453	2.4	2.8	27842	2.4	4.3	2.7	29824	4.3

	1994	*Volume*	*Price*	*1995*	*Cont. to*	*Volume*	*Price*	*1996*	*Cont. to*
	£M	*%*	*%*	*£M*	*Growth %*	*%*	*%*	*£M*	*Growth %*
Agriculture	2773	1.3	-4.5	2682	0.1	1.3	1.0	2743	0.1
Industry	11247	8.0	1.7	12357	3.9	6.7	2.7	13538	3.3
Manufacturing	9013	7.8	0.6	9774	3.1	6.6	1.8	10607	2.6
Utilities	750	8.8	4.6	853	0.4	5.1	3.7	930	0.2
Building	1484	8.8	7.2	1730	0.4	8.6	6.5	2001	0.4
Market Services	12475	7.1	2.9	13743	2.6	5.4	2.5	14849	2.0
Distribution	3950	7.8	4.5	4448	0.9	5.3	4.3	4885	0.6
Transport & Communications	1658	5.0	-0.2	1739	0.3	3.9	0.5	1816	0.2
Professional & Financial	6866	7.4	2.5	7556	1.5	5.9	1.8	8147	1.2
Non-Market Services	4860	3.1	5.2	5271	0.4	3.1	4.0	5649	0.4
Health & Education	3127	3.5	5.4	3409	0.3	3.4	4.1	3671	0.3
Public Administration	1733	2.5	4.9	1862	0.1	2.5	3.6	1978	0.1
Adjustment for Fin. Services (-)	1310	8.8	2.0	1453	0.4	7.4	2.5	1600	0.3
GDP at Factor Cost	30045	6.4	2.0	32600	6.7	5.3	2.5	35178	5.5
Taxes on Expenditure	5324	6.5	1.5	5757	1.2	5.0	1.8	6151	0.9
Subsidies	1767	3.0	-9.2	1653	0.2	2.4	1.3	1714	0.1
GDP at Market Prices	33602	6.6	2.5	36704	7.7	5.4	2.4	39616	6.2
Net Factor Income	-3778	3.8	1.8	-3994	-0.6	2.8	2.0	-4190	-0.5
GNP at Market Prices	29824	7.1	2.4	32710	7.1	5.8	2.4	35425	5.8

	1996	*Volume*	*Price*	*1997*	*Cont. to*	*Volume*	*Price*	*1998*	*Cont. to*
	£M	*%*	*%*	*£M*	*Growth %*	*%*	*%*	*£M*	*Growth %*
Agriculture	2743	1.2	1.0	2805	0.1	1.2	1.2	2874	0.1
Industry	13538	4.8	3.2	14638	2.4	5.0	1.6	15613	2.5
Manufacturing	10607	4.7	2.3	11356	1.9	5.5	0.5	12041	2.2
Utilities	930	3.4	4.4	1004	0.1	4.8	4.6	1101	0.2
Building	2001	6.3	7.1	2278	0.3	1.8	6.6	2472	0.1
Market Services	14849	4.5	2.9	15967	1.7	4.7	3.2	17244	1.7
Distribution	4885	4.0	4.4	5302	0.4	4.2	4.5	5772	0.5
Transport & Communications	1816	3.3	0.1	1878	0.2	3.4	-0.2	1937	0.2
Professional & Financial	8147	5.1	2.6	8787	1.0	5.4	3.0	9536	1.1
Non-Market Services	5649	2.2	4.8	6050	0.3	2.2	5.1	6496	0.3
Health & Education	3671	2.0	5.0	3932	0.2	2.0	5.3	4221	0.2
Public Administration	1978	2.5	4.5	2119	0.1	2.5	4.7	2275	0.1
Adjustment for Fin. Services (-)	1600	5.9	3.1	1746	0.3	6.0	2.6	1899	0.3
GDP at Factor Cost	35178	4.0	3.1	37714	4.1	4.2	2.6	40328	4.3
Taxes on Expenditure	6151	4.3	1.7	6528	0.8	4.2	1.8	6924	0.7
Subsidies	1714	2.1	1.5	1774	0.1	2.0	1.4	1835	0.1
GDP at Market Prices	39616	4.1	2.9	42467	4.8	4.3	2.5	45417	5.0
Net Factor Income	-4190	0.8	2.1	-4312	-0.1	0.8	1.9	-4432	-0.1
GNP at Market Prices	35425	4.7	2.9	38155	4.7	4.8	2.5	40985	4.8

	1998	*Volume*	*Price*	*1999*	*Cont. to*	*Volume*	*Price*	*2000*	*Cont. to*
	£M	*%*	*%*	*£M*	*Growth %*	*%*	*%*	*£M*	*Growth %*
Agriculture	2874	1.2	1.3	2948	0.1	1.2	1.4	3026	0.1
Industry	15613	5.1	1.1	16591	2.5	4.7	0.6	17469	2.3
Manufacturing	12041	5.5	0.0	12697	2.2	5.2	-0.4	13303	2.1
Utilities	1101	4.8	4.4	1204	0.2	4.7	4.3	1314	0.2
Building	2472	2.3	6.4	2690	0.1	0.1	6.0	2853	0.0
Market Services	17244	4.6	3.3	18630	1.7	4.4	3.4	20099	1.6
Distribution	5772	4.1	4.5	6282	0.5	3.8	4.5	6813	0.4
Transport & Communications	1937	3.3	-0.7	1986	0.2	3.2	-1.5	2018	0.2
Professional & Financial	9536	5.2	3.3	10362	1.0	5.0	3.5	11268	1.0
Non-Market Services	6496	2.2	4.8	6954	0.3	2.2	4.7	7441	0.3
Health & Education	4221	2.0	5.0	4519	0.2	2.0	4.9	4835	0.1
Public Administration	2275	2.5	4.4	2435	0.1	2.5	4.4	2606	0.1
Adjustment for Fin. Services (-)	1899	5.9	2.5	2062	0.3	5.6	2.3	2227	0.3
GDP at Factor Cost	40328	4.2	2.5	43061	4.3	4.0	2.3	45808	4.0
Taxes on Expenditure	6924	3.7	1.9	7318	0.7	3.6	1.8	7721	0.6
Subsidies	1835	1.9	1.5	1897	0.1	1.8	1.4	1959	0.1
GDP at Market Prices	45417	4.2	2.4	48482	4.9	4.0	2.3	51570	4.6
Net Factor Income	-4432	0.3	1.9	-4530	0.0	-0.3	1.8	-4597	0.0
GNP at Market Prices	40985	4.8	2.3	43952	4.8	4.6	2.2	46973	4.6

Table A.3: National Income and National Product, £Million

	1992	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Agricultural Incomes	2141	2311	2403	2300	2346	2392	2445	2502	2565
Non-Ag. Wage Income	14769	15654	16515	17903	19181	20644	22123	23664	25212
Non-Ag. Profits Net	7733	8361	9249	10510	11679	12577	13497	14461	15413
Non-Ag. Profits Gross	7878	8371	9249	10686	11860	12761	13682	14648	15602
Adjustment for Stock Appreciation	145	10	0	175	181	184	185	186	188
Adjustment for Financial Services	1189	1248	1310	1453	1600	1746	1899	2062	2227
Domestic Income	23453	25078	26857	29261	31606	33866	36165	38567	40963
Depreciation	2858	3015	3188	3339	3572	3848	4163	4495	4844
GDP (Factor Cost)	26311	28093	30045	32600	35178	37714	40328	43061	45808
Taxes on Expenditure	4784	4970	5324	5757	6151	6528	6924	7318	7721
Domestic	4459	4610	4924	5337	5710	6065	6438	6808	7185
EC	325	360	400	420	441	463	486	511	536
Subsidies (-)	1488	1695	1767	1653	1714	1774	1835	1897	1959
Domestic	340	413	434	453	472	489	505	520	534
EC	1148	1282	1333	1200	1242	1286	1331	1377	1425
GDP (Market Prices)	29608	31368	33602	36704	39616	42467	45417	48482	51570
Net Factor Income	-3154	-3526	-3778	-3994	-4190	-4312	-4432	-4530	-4597
Gross National Product	26453	27842	29824	32710	35425	38155	40985	43952	46973

Table A.4: Personal Income and Personal Expenditure, Current Prices, £Million

	1992	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Agricultural Incomes	2141	2311	2403	2300	2346	2392	2445	2502	2565
Non-Ag. Wage Income	14769	15654	16515	17903	19181	20644	22123	23664	25212
Transfer Income	4815	5193	5509	5691	5859	6046	6264	6478	6713
Domestic	4579	4912	5212	5384	5541	5716	5924	6126	6347
Foreign	236	281	297	307	318	329	341	353	365
Other Personal Income	3255	3311	3426	3890	4523	5010	5361	5778	6248
Non-Ag. Profits etc.	7878	8371	9249	10686	11860	12761	13682	14648	15602
Adj. for Financial Services (-)	1189	1248	1310	1453	1600	1746	1899	2062	2227
National Debt Interest	2096	2073	2010	2004	2006	1990	1948	1911	1892
Net Factor Income	-3154	-3526	-3778	-3994	-4190	-4312	-4432	-4530	-4597
Government Trad. & Inv. Inc.(-)	509	486	460	471	483	497	510	522	534
Other Private Income	5121	5184	5711	6772	7593	8196	8788	9445	10136
Undistributed Profits (-)	1866	1873	2285	2882	3070	3186	3427	3667	3889
Personal Income	24979	26469	27853	29785	31909	34091	36193	38423	40737
Taxes on Personal Income	5328	5866	6215	6446	6742	7093	7393	7858	8331
Personal Disposable Income	19651	20603	21638	23339	25168	26999	28800	30565	32406
Personal Consumption	17267	18044	19237	21005	22525	24029	25632	27203	28842
Personal Savings	2384	2559	2400	2334	2643	2970	3168	3362	3565
Tax Ratio (% Pers. Income)	21.3	22.2	22.3	21.6	21.1	20.8	20.4	20.5	20.5
Savings Ratio (% Disposable Income)	12.1	12.4	11.1	10.0	10.5	11.0	11.0	11.0	11.0

Table A.5: Balance of Payments, £Million

	1992	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Exports - Total	18693	20296	22102	24758	26899	28230	30339	32592	34895
Imports - Total	15742	16980	18531	21398	23535	25094	27069	29172	31236
Balance of Trade	2951	3316	3571	3359	3364	3136	3270	3421	3659
as % of GNP	11.2	11.9	12.0	10.3	9.5	8.2	8.0	7.8	7.8
International Transfers									
EU Subsidies	1148	1282	1333	1200	1242	1286	1331	1377	1425
EU Taxes (-)	325	360	400	420	441	463	486	511	536
Capital	454	520	510	588	617	648	681	715	436
Government Payments (-)	111	191	197	202	207	211	216	222	227
Government Receipts	338	385	385	404	424	446	468	491	206
Private Transfers	236	281	297	307	318	329	341	353	365
Net International Transfers	1740	1917	1928	1878	1954	2034	2117	2204	1670
Factor Income Flows	-3154	-3526	-3778	-3994	-4190	-4312	-4432	-4530	-4597
National Debt Interest (-)	938	1004	983	991	943	892	840	782	715
Profits etc. Outflows (-)	2735	3091	3431	3676	3970	4192	4412	4620	4808
Other Factor income	519	569	636	673	723	772	820	872	926
Current Account Balance	1537	1707	1721	1243	1128	858	955	1094	732
as % of GNP	5.8	6.1	5.8	3.8	3.2	2.3	2.3	2.5	1.6

Table A.6: Public Authorities Accounts, Current Prices, £Million

	1992	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Taxes on Income and Wealth	6088	6833	7323	7569	8027	8510	8912	9481	10062
Company	760	967	1108	1123	1285	1418	1519	1623	1732
Personal	5328	5866	6215	6446	6741	7092	7393	7858	8330
Taxes on Expenditure	4459	4610	4924	5337	5710	6065	6438	6808	7185
Net Trading & Investment Income	509	486	460	471	483	497	510	522	534
Transfers From Abroad	338	385	385	404	424	446	468	491	206
Total Current Receipts	11395	12314	13093	13782	14644	15518	16328	17301	17988
Subsidies	340	413	434	453	472	489	505	520	534
National Debt Interest	2096	2073	2010	2004	2006	1990	1948	1911	1892
Other Transfer Payments	4690	5103	5409	5586	5748	5928	6140	6347	6574
Public Consumption	4773	5107	5490	5922	6329	6759	7232	7721	8239
Total Current Expenditure	11899	12696	13343	13964	14554	15166	15825	16499	17240
Public Authorities Savings (net)	-504	-382	-251	-182	90	352	504	802	748
as % of GNP	-1.9	-1.4	-0.8	-0.6	0.3	0.9	1.2	1.8	1.6
Total Capital Receipts	773	1069	1234	1178	1225	1274	1325	1378	1119
Total Capital Expenditure	1035	1276	1378	1482	1630	1774	1868	1970	1975
Borrowing for Capital Purposes	-262	-207	-144	-304	-405	-500	-543	-592	-855
Total Borrowing	-766	-589	-395	-486	-315	-148	-39	211	-107
as % of GNP	-2.9	-2.1	-1.3	-1.5	-0.9	-0.4	-0.1	0.5	-0.2
Budgetary Definitions, (positive sign indicates borrowing)									
Exchequer Borrowing	710.3	687.1	576.8	674.1	503.1	328.7	215.5	-38.8	273.3
as % of GNP	2.7	2.5	1.9	2.1	1.4	0.9	0.5	-0.1	0.6
Current Budget Deficit	443.3	376.1	90.8	28.6	-243.5	-513.1	-668.9	-972.1	-923.8
as % of GNP	1.7	1.4	0.3	0.1	-0.7	-1.3	-1.6	-2.2	-2.0

Table A.8 National Debt, Current Prices, £Million

	1992	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Total Government Securities:	13871	13901	14582	15491	16305	16997	17700	18379	19050
Other Borrowing from C.Bank	-518	-549	-582	-636	-686	-736	-787	-840	-893
Small Savings	2886	3059	3243	3584	3885	4125	4365	4592	4816
Total Debt Held Domestically	13918	14090	14922	16117	17183	18065	18957	19811	20652
Total £Ir Debt	16239	16411	17243	18438	19504	20386	21278	22132	22973
Foreign Debt:									
Foreign Currency	10826	11364	11361	10691	9980	9269	8428	7373	6648
Government Securities	2321	2321	2321	2321	2321	2321	2321	2321	2321
Total Foreign Debt	13147	13684	13682	13012	12301	11590	10749	9694	8968
Total National Debt	27065	27775	28603	29129	29484	29655	29706	29505	29621
Other Bank Borrowing	-394	-417	-442	-483	-521	-559	-598	-638	-679
Budgetary Definitions:									
Total Domestic Debt	13198	14674	15505	16701	17766	18648	19540	20394	21236
Total Foreign Debt	13147	13684	13682	13012	12301	11590	10749	9694	8968
Total National Debt	26345	28358	29187	29712	30067	30238	30289	30088	30204
Debt Ratios (% of GNP)									
Total National Debt	99.6	101.9	97.9	90.8	84.9	79.3	73.9	68.5	64.3
Total Domestic Debt	49.9	52.7	52.0	51.1	50.2	48.9	47.7	46.4	45.2
TotalForeign Debt	49.7	49.2	45.9	39.8	34.7	30.4	26.2	22.1	19.1
Total £Ir Debt	58.7	61.0	59.8	58.2	56.7	55.0	53.3	51.7	50.1
Total Foreign Currency Debt	40.9	40.8	38.1	32.7	28.2	24.3	20.6	16.8	14.2
Debt Ratio (% of GDP)									
Total National Debt	89.0	90.4	86.9	81.0	75.9	71.2	66.7	62.1	58.6

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