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The Irish Economy: Lessons for New Zealand?

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ABSTRACT

This paper compares and contrasts the economies of Ireland and New Zealand. It attempts to identify important factors behind Ireland's recent strong growth, and seeks to derive 'lessons' for New Zealand. It is suggested that Ireland has benefited from its location, openness, macroeconomic stability, favourable demographics, educated population, wage moderation, foreign investment, European Union transfers, and luck! From a New Zealand viewpoint, the Irish experience reiterates the significance of quality investment, education and human capital, and macroeconomic stability and openness. But given the differences between the two countries, caution should be exercised in applying specific Irish policies in New Zealand.

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Summary

Motivation

Since the mid-1980's Ireland has undergone a transformation. The economy is now one of the top performers in the OECD. GDP growth averaged 5.4% pa between 1987-96, with particularly high growth after 1993. Earlier, Ireland had spent its way into severe economic difficulties, with low growth, huge debt, and large and growing government and current account deficits. The scenario seems very familiar; indeed, New Zealand and Ireland do share some important characteristics regarding their experiences with economic crisis and subsequent reform. Not only this, but Ireland and New Zealand also have very similar country characteristics such as size, population, and an agricultural background. Despite the similarities though, New Zealand has experienced somewhat different results from the reform process. Even though reforming more intensely New Zealand only managed to average around 2% GDP growth between 1987-96. The differing growth rates meant that while Ireland's GDP per capita was only 65% of New Zealand's in 1985, by 1995 it had risen to 108% according to OECD statistics. The motivation for this study is quite clear — given the similarities between Ireland and New Zealand, can we learn anything from their performance that could help us achieve higher growth rates?

This summary outlines the main sections of the paper. A table of main economic indicators can be found on page 13.

Contributions to Growth

Before looking at particular areas of the economy and the government's policy stances, Ireland's actual growth is decomposed into contributions from labour, capital and total factor productivity in the context of growth accounting. The decomposition suggests that Ireland's TFP contribution to growth equaled 59% over the period 1970-96, which is above average compared with studies of other countries. Ireland experienced average annual TFP growth of 2.4% over the period, with labour growth of 0.55% and capital growth of 1.16%. These figures contrast sharply with New Zealand, where average annual TFP growth was 0.83%, labour growth was 1.23% and capital growth was 0.22%. While Ireland was converging to OECD levels at a slower than expected rate between 1945-88, it seems certain that it is now converging at a faster rate as its growth has accelerated. The question is whether this convergence may have been assisted by policy. There is also a question as to how much growth was assisted by the use of previously unemployed resources.

Sectoral Growth

As would be expected in a modernising economy the agricultural sector has experienced a decline, both in terms of output and exports as percentages of total output and exports. Even so, employment is still at relatively high levels as compared to New Zealand, as employment has been artificially sustained by EU transfers. It is notable that New Zealand exports still comprise a large amount of agricultural products, while Ireland has moved away from this reliance. Industry has assumed a greater role in Ireland, accounting for nearly 40% of GDP and over 75% of exports. The activities of foreign firms have been the driving force behind this manufacturing growth, with the Irish government being most encouraging.

Monetary Policy

Ireland seems to have a number of goals for monetary policy which have luckily remained collectively feasible, meaning that Ireland has not had to make too many tough decisions in the monetary policy arena recently. Inflation is the stated main objective of the Irish Central Bank, and they have succeeded in bringing inflation down, to hover within a stable band of around 2-4% since the mid-1980's. Membership of the ERM and the fiscal consolidation in the 1980's assisted in achieving this. The Central Bank also seeks to smooth temporary and predictable fluctuations in interest rates. Long term interest rates are converging to German levels as would be expected under the EMS regime.

New Zealand too has low and stable inflation, but the experience with interest rates has been much more volatile. In addition, the behaviour of real exchange rates differs markedly between the two countries. While Ireland has had a rather stable real exchange rate, with movement since 1984 being within a 16 percentage point band, New Zealand has had much wilder fluctuations, with a similarly measured band being about 36 percentage points wide. Ireland may be extracting this stability from EMS membership, but there are benefits of a stable exchange rate for investment. New Zealand has not been so fortunate.

Fiscal Policy

Reducing Ireland's net debt was a priority for the government, and the figure is now falling as a percentage of GDP. However, this seems to be mainly because of the strong growth in GDP, rather than dedicated fiscal prudence and repayment. The government has generally run a deficit, although there was a small surplus in the last financial year. Maastricht will restrict their ability to let any deficits widen at any point in time. Tax and spending as a percentage of GDP are quite high — generally over 40%. This contrasts with New Zealand, which has kept below 40% and is trying to achieve 30% for expenditure. There are suggestions that Ireland has cut expenditure by just enough to meet the

Maastricht criteria, and that underlying structural issues have yet to be addressed. New Zealand on the other hand, has made significant changes at the structural level. Perhaps strong growth has enabled Ireland to put off making hard decisions with regard to further reforms.

Most of the categories of revenue and expenditure are fairly similar between Ireland and New Zealand, except for Ireland's higher expenditure on debt financing costs and New Zealand's higher expenditure on social security and welfare. Ireland also has a large source of revenue in their Supply Services Receipts (social security levies). It is interesting that Ireland has a higher level of government involvement in the economy and is growing at such high rates — as suggested, perhaps high growth is masking the need to cut back government expenditure.

Tax policy is complicated, and distortionary due to the systems of allowances and selective taxation. There is also a complex system for pay-related social insurance. In general, personal average and marginal tax rates are high; in 1996 Ireland's average tax rate was 28.6% and its highest marginal rate was 55.8%. In contrast, New Zealand's average tax rate was 19.14%, with the top marginal tax rate being 33%. In Ireland though, there are substantial clawbacks which effectively reduce the marginal tax rate, although these are highly distortionary. Reforms are underway, with the 1998 Irish Budget announcing tax cuts for most classes. Notably the 10% tax rate for specific trading activities, predominantly manufacturing, will not be altered until 2010 when the current legislation expires. At that point the rate will increase slightly to 12.5%, although they may face pressure from the EU to align with other member countries.

Asset sales have not featured as prominently in Ireland's history as they have in New Zealand's, with sales of state-owned firms representing 0.3% of Ireland's GDP between 1988-92, compared with 3.6% for New Zealand.

The effect of the system of wage moderation, brought about by the national pay agreements, is unclear. It seemed to work, at least in the public sector, from 1987 to the early 1990's. However, there is now increasing pressure on the agreements as workers demand higher settlements while at the same time the Government is being urged to restrain overall spending and wages.

Foreign Direct Investment

There has been a reasonably long history of openness in Ireland. Since the late 1950's FDI has been actively attracted into the country, with a special agency (the IDA) set up and charged with drawing it in. The incentives for FDI are large, diverse, and it would seem, effective. It is worth noting however, that this policy's success has only been apparent in the last decade or so. This possibly reflects some sort of virtuous circle, with other policy areas lending their support.

FDI has reached levels of around 3% of GDP in recent years, and there have been generally steady inflows. The majority of the investment is greenfield and export-oriented, with around half of the flows stemming from the USA. Other European countries also invest, suggesting that EU market penetration is not the overriding reason for investment in Ireland. Half of the employment and over 75% of the output of the industrial sector is attributable to foreign firms. Workers in foreign firms are generally more highly skilled, and are paid more. Real earnings have been rising, and the average manufacturing wage now exceeds that in New Zealand.

The IDA targets industries to attract to Ireland, including electronics, engineering, healthcare, consumer products, financial services, and international services. These industries are targeted for their potential for transferring skills and technology, and for their job creation effects. Additionally there is an International Financial Services Centre and a special export zone (Shannon Free Airport).

While Irish firms have received more encouragement recently, the incentives for FDI are still enormous. These include:

- tax incentives — the tax rate on profits is only 10% (to be converted to 12.5% by 2003);
- grants — including cash for capital, training, employment, research and development, and feasibility studies; and
- provision of office and building sites, and the construction of factories and offices.

There is evidence to suggest though, that FDI is squeezing out domestic entrepreneurship, with people finding it more profitable to work for a foreign firm than to start up a business of their own.

The contrast between the Irish Government policies and the New Zealand Government policies is fairly stark. While Ireland has an interventionist stance, New Zealand maintains a 'hands-off' policy. In addition, the type of investment in New Zealand is quite different, with direct investment mainly involving the purchase of firms which are domestic market oriented.

Savings and Investment

For the total economy in Ireland the balance between savings and investment has turned from negative to positive since 1987-88, reflected in the movement to a current account surplus. This was by virtue of falling investment levels with relatively stable savings. New Zealand's investment figures have generally been above those of Ireland, in recent years by around 5 percentage points. Savings does not differ a lot between the two countries, although at present Ireland exceeds New Zealand by about 2 percentage points. Despite the decline in Irish investment there has still been economic growth, to the astonishment of some Irish academics. The reason for this, it has been

suggested, it that inefficient public sector investment has fallen while foreign direct investment has risen. This FDI generates substantial flows of high value-added exports. This raises important questions about the quality of investment.

Current Account

As stated, the current account in Ireland is now in surplus, due to the huge improvement in trade performance stemming mainly from foreign sector activities. As FDI is export-oriented trade flows have been large, with exports representing 69.5% of GDP in 1995. This has lifted merchandise trade well into surplus, with the trade balance as a percentage of GDP in 1995 equaling 21.3%. However, FDI has also led to a large factor income deficit. The level of EU transfers is also quite large, and their removal from the calculation of the current account balance would result in a small current account deficit.

The fact that Ireland's FDI has been concentrated in the tradeable sector theoretically means that foreigners are the main beneficiaries of the product of the investment. And theoretically New Zealand's FDI, concentrated mainly in the non-tradeable sector, benefits New Zealanders. But the positive by-products of FDI have been important for Ireland — reduced unemployment, transfer of skills, knowledge and technology, and exposure to international competitive practises and pressures. These factors mean that Ireland has benefited greatly from FDI.

Unemployment

Ireland experienced the fastest rate of expansion of employment in Europe between 1985-95, but the unemployment rate is still high at around 10%. The problem is with long-term unemployment (60% of total unemployment in 1995), which tends to be structural in nature. Older, less educated workers are losing their positions within the downsizing traditional sectors, and are unable to find work in the rapidly growing modern sector. Their lack of education means they make up a large group of people that are difficult to employ. Young uneducated people also make up a distinct group in the long-term unemployment statistics. It seems then that education is becoming increasingly important for job-seekers. Also, the high population growth rates in Ireland have meant that there have been large inflows into the ranks of job-seekers.

Education

Emphasis has been put on the education system in Ireland, in recognition of its importance. New Zealand still has a greater proportion of students attaining higher levels of education, but there is a larger emphasis on technical and scientific disciplines in Ireland. There is also anecdotal evidence of a far higher private contribution to education in Ireland in the form of private tutoring and so

forth. Education has traditionally been a passport to greater opportunities for the Irish, and as such there is an entrenched attitude towards education that is very positive. This perhaps constitutes an important cultural difference between Ireland and New Zealand.

Future Prospects

In the short-term Ireland is in danger of overheating. The economy showing signs of producing beyond sustainable capacity, and options for addressing the problem are limited, given the constraints of the imminent currency union. There will have to be moves by the Irish government to dampen down the economy if they wish to avoid 'bubbling over'.

Looking to the medium term, there are concerns about the marginalisation of Ireland in EU policy once the currency union commences operation. Peripheral countries such as Ireland are worried that policy decisions will reflect the needs of the core EU countries, and will not deal with shocks hitting other economies. Another concern is that the labour market will be under more pressure as shortages of labour, both skilled and unskilled, emerge. This is due to the slowing of labour force growth. Finally, Ireland may have to undertake some serious microeconomic reform in the future. There is a need to enhance flexibility within the economy in order to cope with asymmetric shocks, since the currency union will restrict Ireland's options.

Despite these concerns though, forecasts of growth are strong by New Zealand's standards. Growth rates of over 4% are predicted until at least 2010 — a drop from current highs, but still very respectable. This continued faith in the growth performance of Ireland reflects the underlying strong fundamentals of Ireland, such as its location and open stance.

Conclusions

Ireland's growth is due to a number of factors. First of all Ireland is an English speaking nation on the edge of a large unified market, of which they are a member. They have actively encouraged foreign investment, which has been directed into high-tech exporting sectors. This created job opportunities for skilled labour and increased productivity. The macroeconomy was relatively stable, with low inflation and a steady exchange rate. Membership of the ERM helped to achieve this. In addition, fiscal moderation was followed with the aim of meeting the fiscal terms of the Maastricht Treaty.

Ireland has had a favourable demographic structure, with a young population supplemented by increased female participation and higher levels of immigration. Workers are well educated and skilled, and wage levels are relatively low. This has enabled the growth of high-tech sectors within the economy. Ireland was also fortunate to receive structural grants from the EU,

which may have been useful in easing the transition from agriculture to manufacturing. It is unlikely that these grants had a large growth-enhancing effect though. It may be too that Ireland is just lucky!

There are issues that Ireland faces in the future, the nearest being the danger of overheating. Further down the track Ireland may have cause for concern over the operation of the currency union, its competitiveness, and the process of structural change. Despite this though, growth forecasts are bright by New Zealand standards, with growth predicted to be over 4% until at least 2010.

What can New Zealand take from Ireland's growth experience? Our location and demographic structure are given, so perhaps New Zealand has to be twice as smart as other countries to achieve the same gains. We already have low inflation, and have been through extensive reforms. But while Ireland has not undertaken microeconomic reform to the extent New Zealand has, our position in the world may mean we have to address rigidities faster and more rigorously to remain in the game.

Ireland's stable macroeconomic environment may be something New Zealand can learn from. Are there different ways of running monetary policy that would yield a more stable exchange rate, and would this be beneficial for growth? Also, Ireland has attracted high quality investment, and has high quality workers. Is New Zealand's FDI policy growth maximising? Should we consider the merits of a competitive tax regime? What can we do to improve the quality of our labourforce?

According to the OECD, New Zealand will fall further and further behind the OECD average if our current performance is maintained. If anything, this study of Ireland has suggested that our potential may be much smaller given our location. Therefore New Zealand must put extra energy into improving the environment for growth and getting our policies right.

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1. MOTIVATION

Ireland is a relatively small island nation, situated on the western periphery of the European Union. It is divided politically into Northern Ireland and the Republic of Ireland; however, our interest here lies solely with the Republic of Ireland¹. Ireland became independent from Great Britain in 1921 after nearly 800 years of Anglo-Irish struggle, although in 1973 the country formalized fresh economic linkages by joining the then European Economic Community.

Since the mid-1980's and particularly in the 1990's Ireland's rate of economic growth has been markedly above the European and OECD averages. Yet in the early to mid 1980's the situation facing Ireland was serious; the country was experiencing poor growth, growing unemployment, escalating inflation, mounting current account and fiscal deficits, and a huge debt to GDP ratio. The need for adjustment was apparent but the political gridlock of coalitions retarded any initiatives. Like New Zealand, it took a near crisis situation and a change of government for reform to begin.

Ireland's experience in the 1980's, culminating in a period of economic reform, was not unlike that of New Zealand. Indeed, McNelis and Bollard (1991) note the common economic experiences of Ireland and New Zealand, including:

- a history of primary production and exposure to volatile commodity markets;
- past isolation in trade/financial markets;
- sudden changes in financial policies/exchange controls to allow inflows of foreign capital;
- heavy borrowing and subsequent build-up of a large external debt;
- changes in leadership initiating fiscal austerity in order to gain credibility in overall macroeconomic policy; and
- adjustment and stabilisation coupled with high unemployment.

The table below sets out some of the main economic indicators for New Zealand and Ireland over the pre and post-reform years. It clearly demonstrates the motivation behind the increasing interest in Ireland's economic performance. Although both countries undertook reforms in response to a potential meltdown, the results have been disparate. With a GDP per capita of around 65% of New Zealand's in 1980, Ireland's strong economic growth enabled them to surpass New Zealand by 1995, even with relatively lower participation rates and a relatively smaller working age population due to the young population base. This achievement has been accompanied by a current account surplus, extremely high openness to trade, and a low inflation rate. Unemployment though is still rather high; again, demographics play a role here.

¹ Hereafter referred to simply as Ireland.

Table 1: Comparative Overview of Ireland and New Zealand

GNP per Capita (US \$, 1987 prices)

	1980	1985	1990	1995
Ireland	7529	7577	9453	11706
New Zealand	10252	10859	10903	11958

Note: Converted to US\$ at 1987 exchange rate. NZ real exchange rate in 1987 is 1.7% above 1980-95 average, while the comparable figure for Ireland is 2.1%.

Trade

Current Account Balance (% of GDP)

	1980-85	1986-90	1990-95	1996	1997
Ireland	-8.2	-1.1	2.3	2.1	1.8
New Zealand	-6.2	-3.9	-2.5	-4.1	-7.0

Exports (% of GDP)

	1980-85	1986-90	1991-95
Ireland	45.4	52.6	61.9
New Zealand	24.0	20.5	23.8

Imports (% of GDP)

	1980-85	1986-90	1991-95
Ireland	51.7	45.3	48.0
New Zealand	24.9	20.0	22.5

Trade Balance (% of GDP)

	1981-85	1986-90	1991-95
Ireland	-5.2	6.6	13.8
New Zealand	-0.4	2.2	3.4

Savings and Investment

CPI Inflation Rate

	1980-85	1986-90	1991-95
Ireland	13.4	3.3	2.5
New Zealand	12.9	9.4	2.1

Household Savings Rate

	1980-85	1986-90	1991-95	1996	1997
Ireland	19.1	14.1	11.9	9.4	8.2
New Zealand	8.4	6.0	3.2	3.0	3.8

Investment - public and private (% of GDP)

	1980-85	1986-90	1991-95
Ireland	27.1	20.7	17.6
New Zealand	23.3	24.1	19.1

Government**Government deficit/surplus (% of GDP)**

	1980	1990	1994	1995	1996
Ireland	-6.3	-2.6	-2.0	-2.4	-1.1
New Zealand	0.1*	-4.6*	0.9	3.1	3.6

* Note: The Crown moved to an accrual accounting framework in 1991/92. The closest proxy to the operating balance (shown for 1994-96) is the series adjusted financial balance (shown for 1980 and 1990). The two series are not directly comparable.

Tax (% of GDP)

	1980	1990	1994	1995	1996
Ireland	34.4	39.8	42.0	40.4	40.9
New Zealand	30.6	36.9	34.0	35.5	35.8

Labour**Unemployment Rate**

	1980-85	1986-90	1991-95	1996	1997
Ireland	12.15	15.68	14.46	11.94	10.34
New Zealand	3.79	5.71	8.91	6.12	6.65

Participation Rates

	1990	1991	1992	1993	1994	1995	1996
Ireland	61.9	60.9	60.2	59.7	60.2	60.9	62.3
New Zealand	63.8	63.8	63.4	63.3	64.6	65.3	65.5

Working Age Population (% of total population)

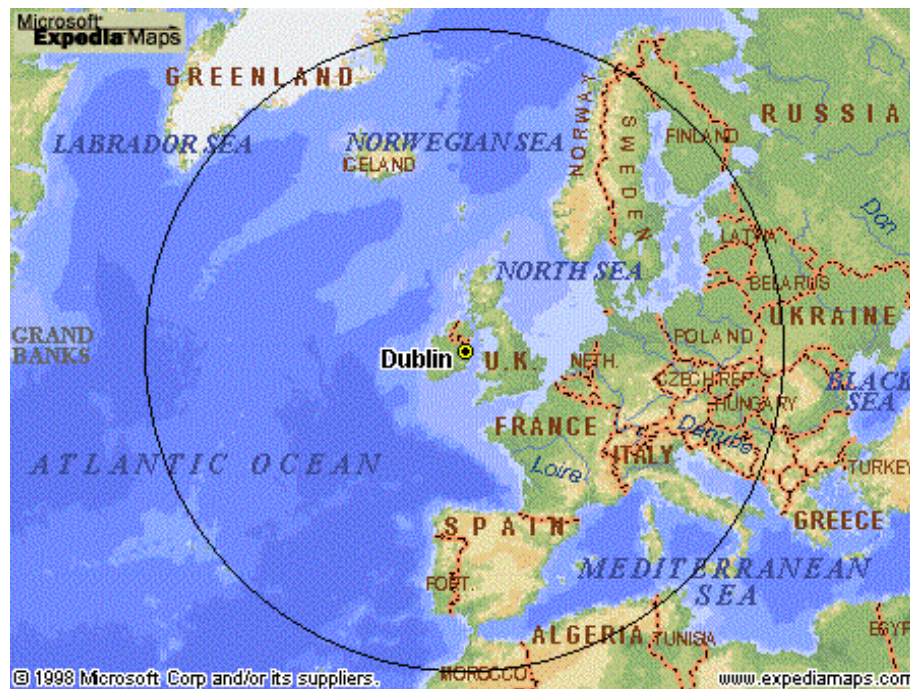
	1980-85	1986-90	1991-94
Ireland	59.34	60.71	62.70
New Zealand	65.93	67.04	67.08

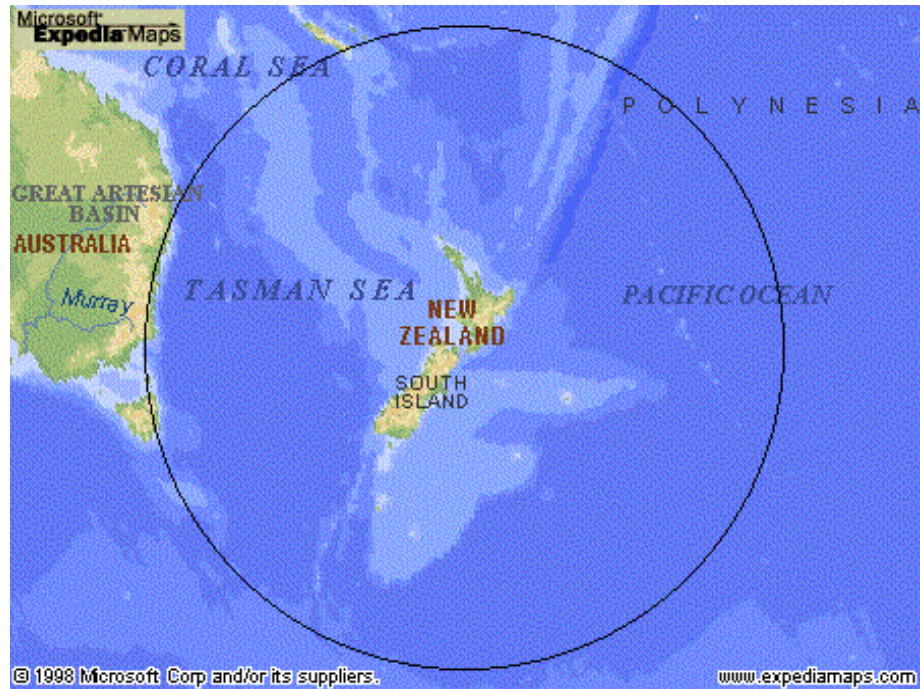
Employment Structures (% of total civilian employment)

	Agriculture	Industry	Services
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Ireland	12	27.6	60.5
New Zealand	10.4	24.9	64.6

Given some of the similarities between the two economies, for example, their peripheral nature, near-identical populations, similar employment structures and open approaches to international trade; and combining this with their similar encounter with, and disparate results of, economic reforms, it seems most worthwhile to examine Ireland's experience. Of course, there are differences between the two economies as well, the most prominent being location, as the maps below show.





The circles on the maps have a radius of around 2200 km. It is obvious that Ireland has much greater proximity to a collection of developed countries, while New Zealand's circle only just touches the Australian coast.

Nevertheless, if Ireland's growth could be linked to various policy initiatives then there may be lessons to be learnt for New Zealand.

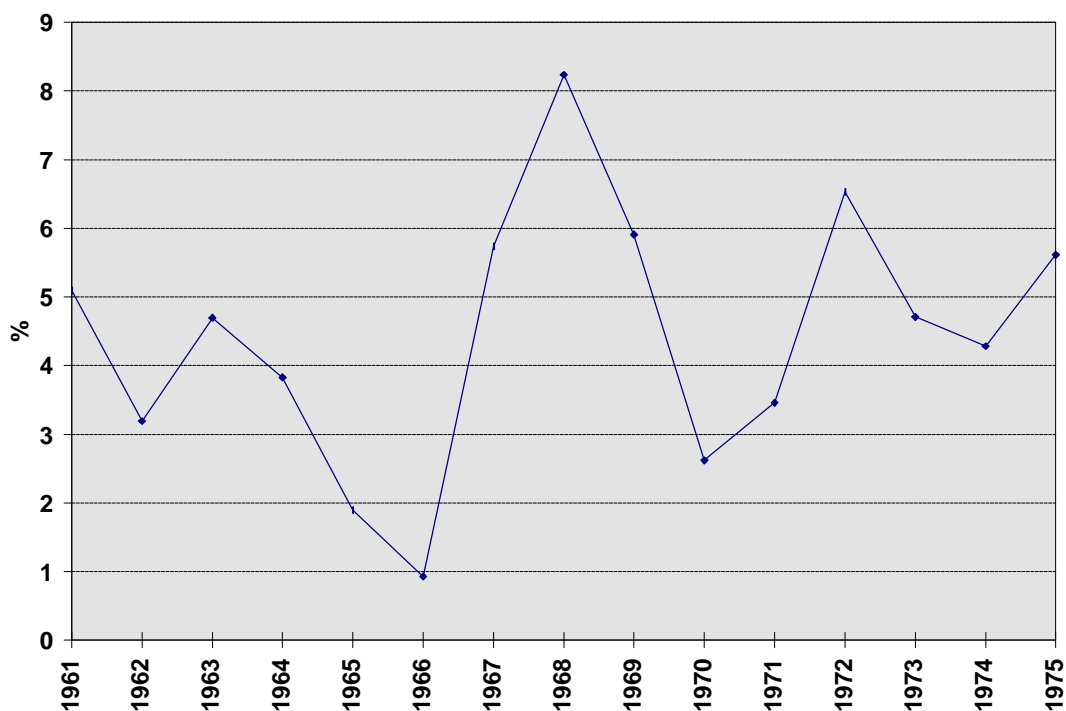
2. SITUATION LEADING TO REFORM IN IRELAND

The Early Days...

Having followed protectionist policies for a number of years, the Irish government decided in 1958 to pursue an export-oriented trade policy with foreign direct investment occupying the central role. The aim was to establish an extensive and sophisticated industrial base with a high export focus, by using imported private capital and technology. It was hoped this would cut unemployment, enable more efficient resource use, and stimulate growth and modernisation in the economy².

Growth rates were reasonably varied in the period 1960-75, but predominantly remained above 2% per year. Real GDP growth even surpassed 8% briefly, in 1968. In addition, growth looked to be on an upward trend from the mid-1960's. Unemployment over the period was stable, and hovered between 4-6% for all but the last observation. In general then, the Irish economy looked to be growing over the period, with unemployment remaining at a relatively low level.

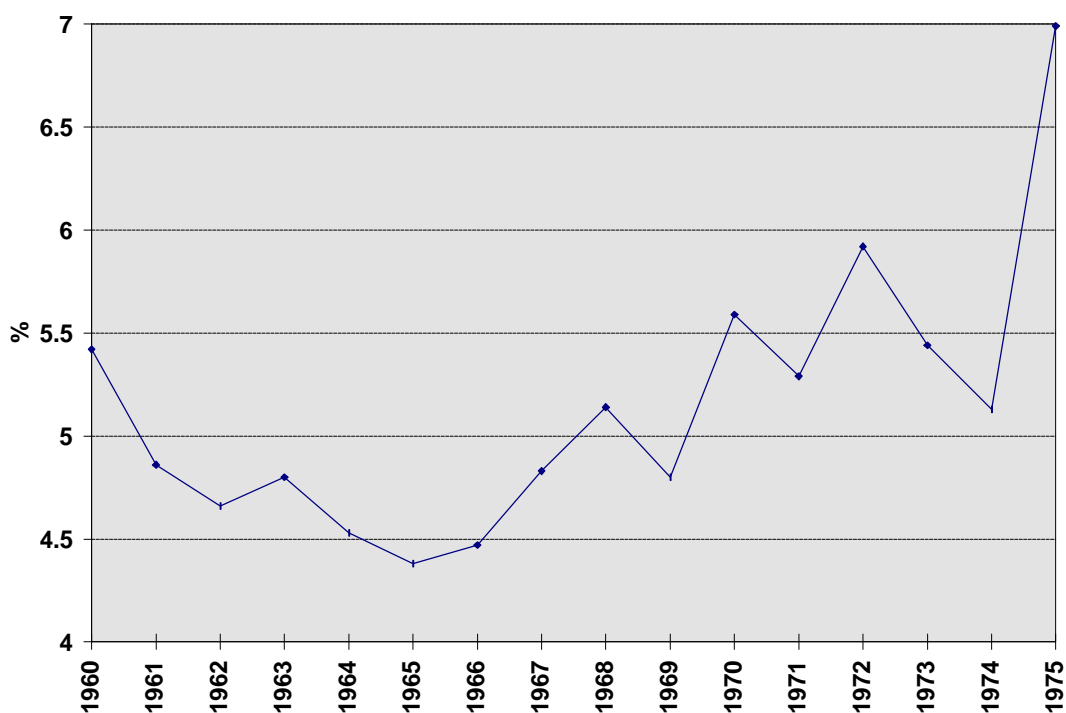
Figure 1: Irish Real GDP Growth 1960-75



Source: OECD Database, PCInfos

² O'Sullivan (1993)

Figure 2: Irish Unemployment 1960-75



Source: OECD Outlook database, PCInfos

Oil Shocks Hit...

However, around the time that Ireland joined the EEC, the first oil shock hit the world, and the price of oil rose sharply in response. A worldwide recession followed, and the response of the Irish government was to strongly boost government spending. This Keynesian-type approach aimed to offset the decline in aggregate demand resulting from higher import prices, and was financed by foreign borrowing. The large inflow of capital was followed by an appreciation of the Irish currency, and a rise in interest rates. Another consequence of increased government current spending was a skyrocketing current budget deficit³, which rose from 0.4% of GDP in 1973 to 6.8% by 1975⁴. However, GDP did continue to grow during the period 1973-77, by around 4% per year, although the unemployment rate also grew, reaching 9% in 1977.

The budget deficit fell as the recession passed, although only to 3.6% of GDP, not nearly as low as in 1973. However, in 1978 the new government boosted spending in a 'think-big' style as an attempt to reduce unemployment. This

³ The narrowest definition of the budget deficit in the Irish case is the current budget deficit, which comprises the difference between government current spending and current receipts (tax and non-tax).

⁴ Houghton (1995)

spending was pro-cyclical, in contrast to the counter-cyclical spending carried out between 1973-75. It did have the appearance of success, with economic growth continuing, and unemployment falling to around 7% in 1979. However, the effects of this spending are still being felt, as the large increases in the public services have not yet been fully rationalised.

Ireland's Luck Runs Out...

Unfortunately though, Ireland's luck ran out after 1979. As the government was forced to borrow heavily to finance the increased current expenditure, the debt to GDP ratio rose from 52% in 1973 to reach 129% in 1986. The cost of servicing this debt in 1986 came to 94% of all revenue from personal income tax. The solutions that successive governments tried to implement were based on tax increases, but these increases failed to raise the tax take by a significant amount. Much of the spending had gone to finance imports, and the current account deficit had widened accordingly. Growth was just 1.5% per annum between 1979-86, unemployment rose to reach 17% in 1986, and the Irish pound was devalued several times within the EMS structure in the early 1980's.

The Turning Point...

The turning point came with the election of the Fianna Fail party once again in 1987. This government set out immediately to cut the fiscal deficit, even though they had campaigned on continued fiscal generosity. The main measures employed were eliminating or reducing social initiatives, cutting public sector employment and controlling wage settlements with state employees, and reducing public capital expenditure⁵. The fiscal deficit fell, and confidence in the economy began to grow. However, while this fiscal reform was vital, it did not address the underpinning economic structures — a big difference between the New Zealand's and Ireland's reforms.

Reducing interest rates was also a priority. The Irish government assisted by convincing the markets of their intention to stick to the reform program and to the maintenance of the exchange rate within the EMS. Credibility was enhanced through such initiatives as ECU-denominated bond issues, using market rates instead of the higher Irish rates (so taking on the exchange rate risk)⁶. Ireland may also have borrowed some credibility from the EMS, since the credibility of the system itself was enhanced by the converging economic performances and exchange rate stability of the member states. Participation in the EMS allowed a convergence of interest rates and inflation towards German levels, and as such Irish rates, both real and nominal, fell from 1987.

5 Mawdsley (1995)

6 Massey (1989)

Regarding other policy initiatives, the Irish government continued to provide support and incentives to foreign investors, as they had done since the 1950's. Other policies included the setting up of a special agency to help address the problem of unemployment, a selection of tax reforms, and a national wage-setting agreement.

The table below details a few key indicators over the period 1960-96, broken down into rough periods of economic history that parallel those discussed.

Table 2: Key Indicators 1960-96 (%)

	1960-75	1976-86	1987-93	1994-96
GDP Growth	4.5	3.2	5.0	9.2
Exports/GDP	3.8	27.1	55.1	71.7
Agricultural exports/GDP	43.3*	32.2	23.7	19.8**
Unemployment (%)	5.1	11.1	15.2	12.9
Government Deficit/GDP	-1.5*	-7.0	-3.1	-1.8

* data from 1970-75 only

** 1994-95 data only

Source: OECD Database, PCInfos, Department of Agriculture and Food.

It can be noted that Ireland started on the 'reform' track earlier than New Zealand. The joining of the then EEC in 1973, and the EMS in 1979, were effectively large reforms to the trading sector and monetary policy. However, fiscal reform started at around the same time as in New Zealand. It is likely that there are lags in the gains from reform, particularly from the opening up of the economy. But, if anything, this highlights the need for more understanding of adjustment paths.

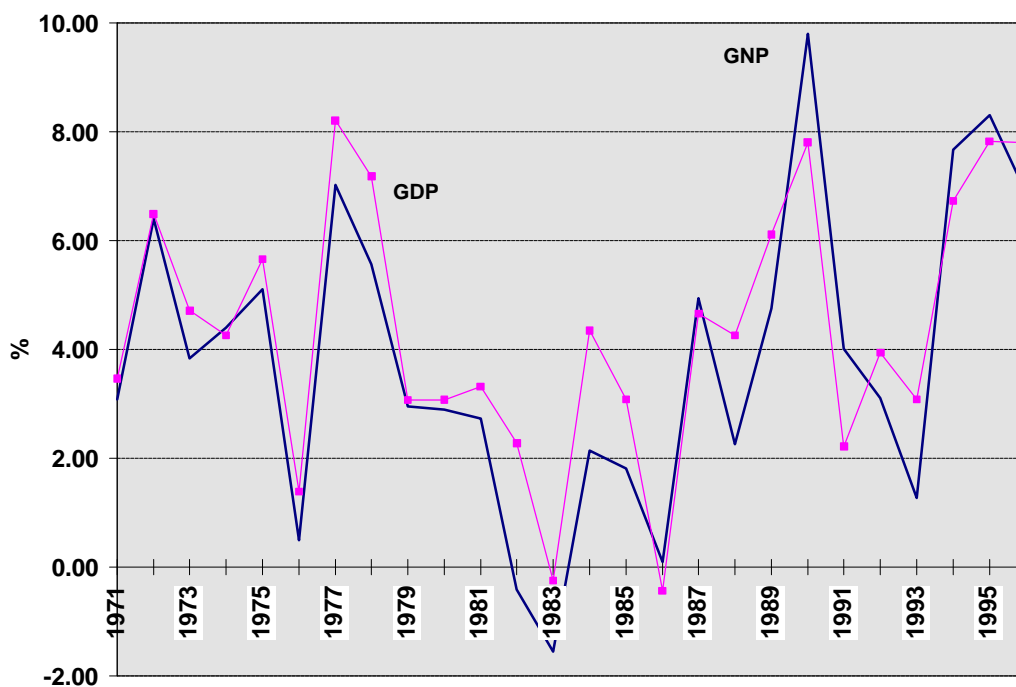
The remainder of this paper explores in more detail the growth experience of Ireland, and outlines the main policy areas of interest, with special emphasis on the role of foreign direct investment.

3. IRELAND'S GROWTH PERFORMANCE

Economic Growth

The growth experience of Ireland post-reforms has been impressive, both in terms of GDP and GNP. Generally growth has exceeded 2% since the late 1980's, and has reached peaks of over 8%, as can be seen from the graph below. However, the spike in growth in the early 1990's was referred to as a period of jobless growth. While recorded growth was impressive, anecdotal evidence suggests the economy did not feel as if it were growing — indeed there was large-scale migration at this time.

Figure 3: Irish Real GNP/GDP Growth



Source: World Bank database, PCInfos

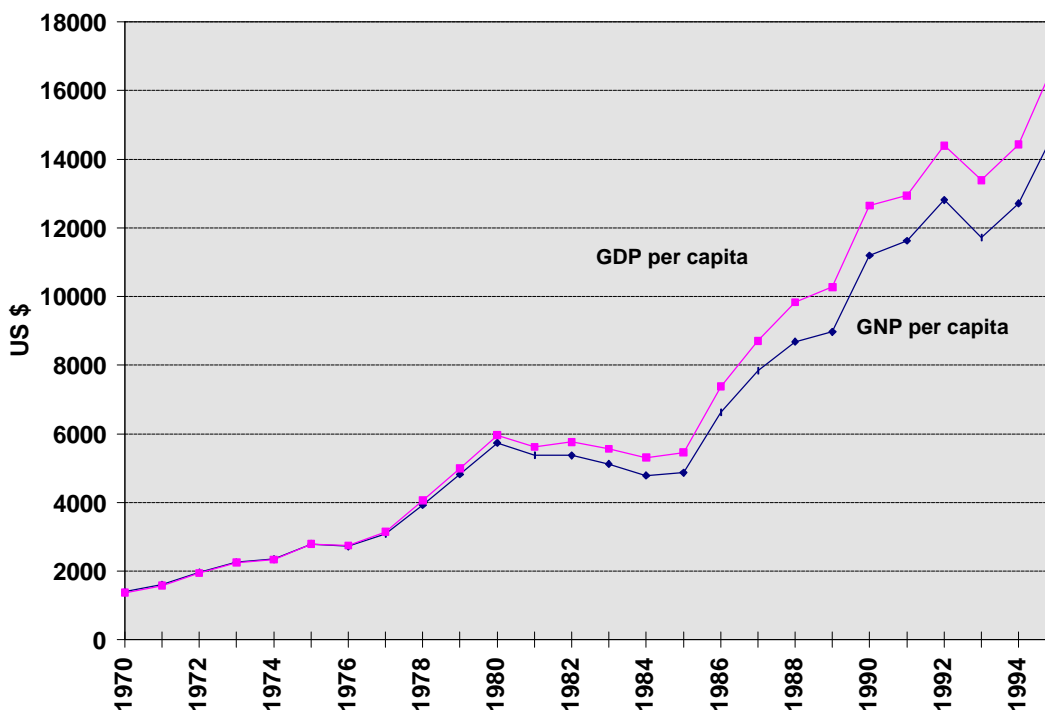
An interesting view of Irish economic performance pre- and post-1987 reforms can be provided by breaking down the growth data into smaller time periods. Growth certainly seems to have moved to a higher level since 1987.

Table 3: Economic Growth (average annual %)

Time Period	GNP Growth	GDP Growth
1980-86	1.1	2.2
1987-96	5.3	5.4

One other feature to note is the divergence between GDP and GNP per capita in absolute terms. This is due to the large amount of foreign owned activity in the economy, with outward factor income flows increasing in magnitude over recent years.

Figure 4: Irish Output/capita 1970-95



Source: Calculated from OECD database, PCInfos

Growth Accounting

Growth accounting is a useful tool for attributing Ireland's growth to changes in labour and capital inputs. This method takes the growth rate of output, and breaks it down into contributions by labour, capital, and total factor productivity (TFP). Total factor productivity is the output growth which cannot be accounted for by growth in inputs, so it captures such elements as productivity gains or technological advance. Growth accounting calculates TFP as the rate of growth in output less the weighted growth rates of labour and capital inputs.

Results for Ireland...

A recent piece of work by Kenny (1996) dealt with accounting for Irish growth for the period 1970-1996. Kenny uses both GDP and GNP growth rates to signify output growth, and finds that the results are fairly similar. The contribution of TFP when using GDP growth as the focus is approximately 59%,

compared to a contribution of approximately 50% when using GNP. Kenny notes that studies of other countries have generally yielded a TFP contribution of between 30-50%, therefore Ireland's TFP growth appears to be above average, particularly when using GDP as the measure of output. He does make the caveat though that the data on labour is not adjusted for quality of the workers.

Irish GDP growth has been varied over the period, with cyclical peaks and troughs. Cyclical low points in 1976, 1983 and 1986 saw growth below 1%, but growth reached 8% in 1978, 1990, and 1995. This yields an average growth rate over the sample period of 4.11% per annum. Kenny finds TFP growth has also been volatile over the period, but that it tended to follow cyclical trends. In general it has been positive, so the interpretation could be that overall efficiency in production has been improving steadily over time.

To abstract from the cyclical variations, Kenny looks at the average contributions of capital, labour and TFP to Irish growth over the sample period 1970-1996. The average GDP growth rate of 4.11% is accounted for by:

- average annual growth in TFP of 2.4%;
- a labour contribution of 0.55%;
- a capital contribution of 1.16%⁷.

These numbers suggest that TFP accounts for 59% of growth, while 28% is attributable to capital growth, and the remaining 13% to labour. The low contribution of labour may reflect weak employment growth relative to output growth. This could raise questions about how well the labour market operates, and this is discussed later under 'Wage Setting'. Strong TFP growth could well be due to the concentration of FDI in high-tech, high productivity sectors of industry. This would have had the effect of shifting resources from low value-added sectors to high value-added ones, and extracting greater outputs from resources.

Results for New Zealand...

The Irish growth accounting literature can be compared to that for New Zealand. Data from Janssen (1996) reveals that for the period 1970-96, New Zealand's average growth rate of 2.28% was accounted for by:

- annual average TFP growth of 0.83%
- average labour productivity growth of 1.23%
- average capital productivity growth of 0.22%.

These numbers imply that TFP accounted for 36% of growth, with 54% attributable to labour and the remaining 10% to capital. These numbers are a

⁷ To make these calculations the average shares over the period, 0.68 and 0.32 for labour and capital respectively, are used to weight an average growth of labour of 0.81% and capital stock growth of 3.64%.

distinct contrast to those for Ireland, particularly, the greater role of labour and distinctly lesser role of capital and total factor productivity.

Another study which highlights the differences between Ireland and New Zealand is a paper by Bosworth, Collins and Chen (1995). Their paper applies a growth accounting approach to a variety of countries and regions. From the study it can be calculated that Irish TFP growth has far exceeded that in New Zealand since the 1960's, as shown below. Perhaps the difference in recent years can be explained by the relative levels of development in each country — Ireland is moving resources to the manufacturing sector, while New Zealand is shifting more into services, where productivity gains may be less. It may also be that productivity is more difficult to measure in the service sector, in which case New Zealand's productivity growth may be understated.

Table 4: Total Factor Productivity

	Ireland	New Zealand
1960-70	2.5	0.7
1970-80	2.3	0.0
1980-86	1.6	1.1
1986-92	3.7	0.3

Source: Calculated from Bosworth, Collins and Chen (1995)

A Convergence Story?

Putting Ireland's growth experience into the context of growth theory, many authors have commented on the consistency of Ireland's performance with the convergence hypothesis. The hypothesis generally refers to a situation where lower income countries, which have a lower level of capital stock, will 'catch up' to the more developed countries. Kenny's paper notes that Irish growth is outstripping the EU and USA, which is consistent with this convergence hypothesis, ie catching up to the group entails a higher level of growth. The 1990-96 period is most notable with Irish growth 3 times that of the EU. The 1970-96 period that Kenny focuses on yields an average growth rate of 4.11% per annum, compared with 2.25% and 2.75% for the EU and US respectively over the same period. The results for Irish TFP shares were also consistent with convergence, as 'catch-up' countries generally exhibit a higher TFP growth.

O'Grada and O'Rourke (1996) focus on Irish economic growth between 1945-88, using both the Heston-Summers and the Maddison/OECD data sets. They note that while the OECD countries have shown a clear convergence pattern, with growth rates being highest for countries with low GDP/capita, Ireland was a clear outlier with relatively low growth for its initial income level. This performance is even more pronounced when GNP is used. The result seems to suggest that while Ireland was converging to OECD levels between 1945-88, it was doing so at a slower than expected rate.

O'Grada and O'Rourke's comments as to why Ireland's performance was relatively poor included such factors as the small size of the economy, the importance of agriculture, low-quality investment decisions (particularly by the public sector), and rent seeking in industrial relations. They also cite proximity to the slowly growing UK — Ireland could be considered a region of the UK, and certainly they effectively have a common labour market.

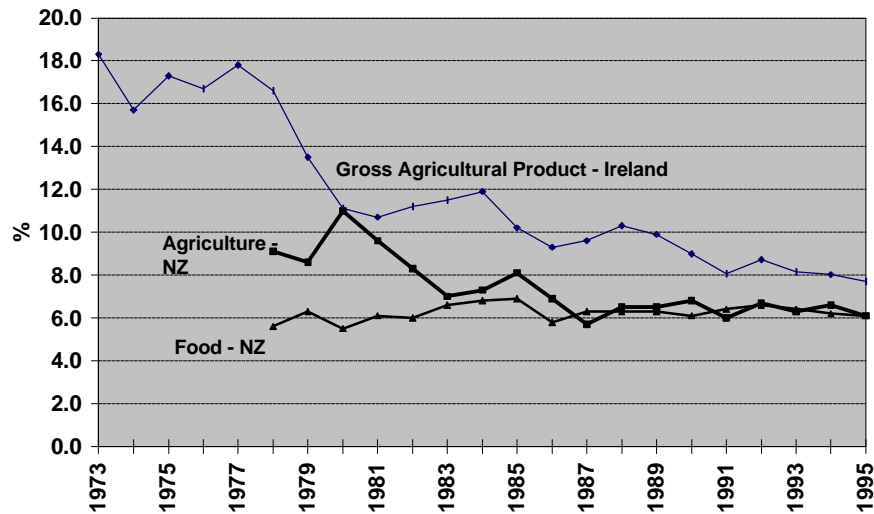
O'Grada and O'Rourke do conclude that the Irish economy had been one of the fastest growing in Europe since 1988 (the end-date of their comparative analysis), and that a continuation of that growth would modify or even reverse their gloomy appraisal of the post-1973 period in Ireland. As Ireland has indeed maintained its strong growth performance, it could be suggested that the convergence story may be more applicable now. Perhaps convergence is conditional on the policy environment that the economy is operating within, and convergence for Ireland has sped up with the 'coming together' of growth conducive policies. It may also have been accelerated with the use of previously unemployed or underemployed resources, for instance, young people moving off the farm into the manufacturing sector. The convergence story does serve to highlight a question for New Zealand — which country/countries are we converging to? Australia? The OECD?

Sectoral Breakdown of Growth

Agriculture's Decline...

The 'modern' sector has been growing in size and importance in Ireland, particularly under the influence of substantial foreign direct investment. Meanwhile the agricultural sector has been in decline, freeing up resources for deployment in other more productive parts of the economy. Gross agricultural product (GAP) as a percentage of GDP (in terms of factor costs) has fallen steadily, to reach just 7.7% in 1995. The Irish Department of Agriculture and Food take GAP to be the most widely accepted measure of the contribution of agriculture to the economy.

Figure 5: Agriculture as % of GDP, 1973-95

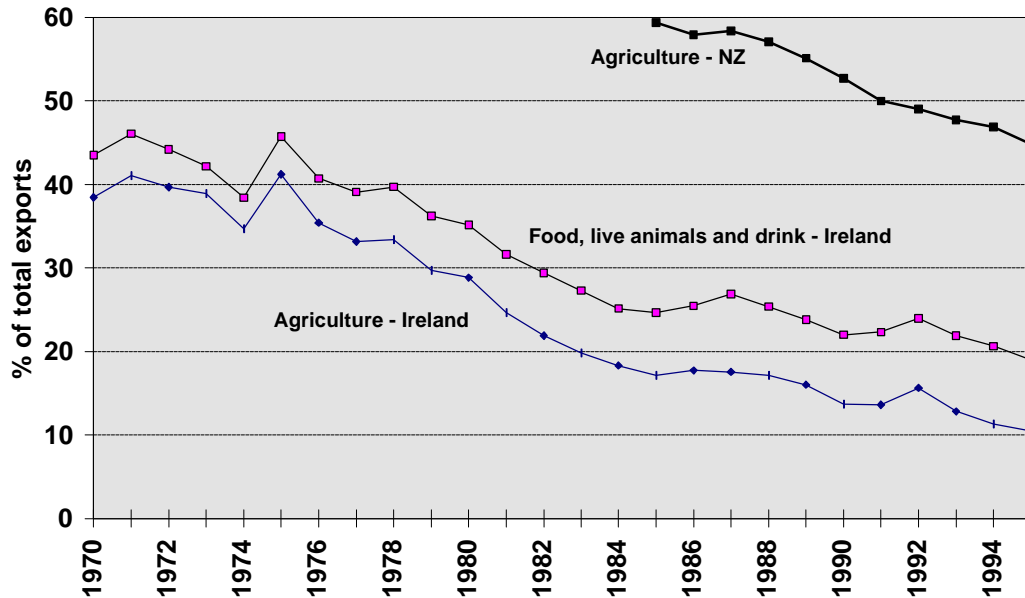


Source: Irish Department of Agriculture and Food, NZ data from PCInfos.

Agriculture has also declined in importance in Ireland's export bundle. As a percentage of total Irish exports agriculture now comprises just 10.5%. Agricultural exports are defined as including animal and vegetable products of an indigenous nature⁸. A broader definition is provided by the Department's measurement of Food, live animals and drink, which includes many of the items excluded from agricultural exports but which depend very heavily on the agricultural sector for raw materials. New Zealand's agricultural exports are notably more prominent in the total export bundle, possibly due to higher productivity in agriculture in New Zealand as compared to Ireland. The figure is declining however.

⁸ It excludes bread, pastry and sugar confectionery, casein and other food and animal products of a highly processed nature such as infant food for retail sale, cola concentrates etc., and leather and spun wool.

Figure 6: Agriculture in the Irish and New Zealand Export Bundles

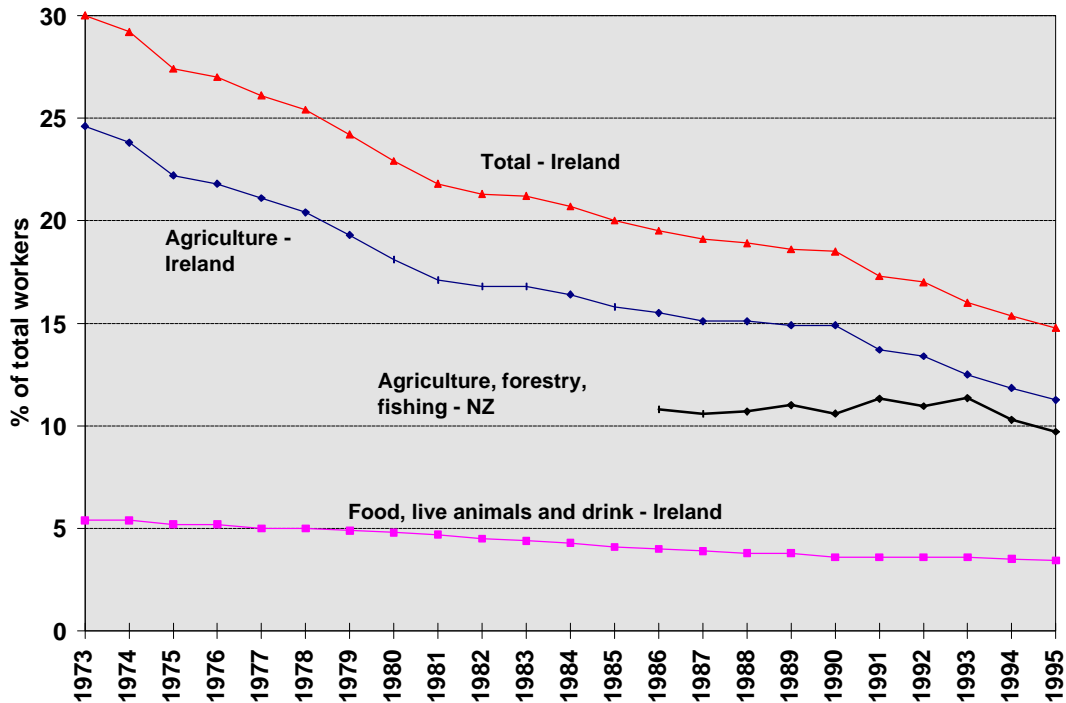


Source: Irish Department of Agriculture and Food. New Zealand figures from PCInfos.

Most of Ireland’s exports of agricultural goods go to other EU member countries, with just under 25% of these exports going to the United States and other non-EU countries in 1995. Great Britain (including Northern Ireland) is a large buyer of Irish agricultural goods, taking 34.3% in 1995, although their importance has diminished noticeably since Ireland joined the EU.

Employment in the agriculture sector has fallen by around 100,000 people since 1975, while employment in the food/drink sector has fallen by approximately 14,000. These two sectors accounted for 14.8% of total employment in 1995, with agricultural workers making up 11.3% of total workers and food/drink workers accounting for the other 3.5%. Employment within the agricultural sector has changed also, with landholders and labourers increasing as a percentage of total agricultural workers (to 78% and 16% respectively), while the percentage of assisting relatives has fallen. In New Zealand, workers in the sector of agriculture, forestry, and fishing, have remained relatively steady at around 10% of total employment since 1985. These figures may not be directly comparable but do give some idea of the level of employment in the general area of agriculture.

Figure 7: Agricultural Employment



Source: Irish Department of Agriculture and Food, NZ data from PCInfos.

It is important to note that the Irish agricultural sector receives a large amount of funding from the EU under the umbrella of structural funds, in particular from the European Agricultural Guidance and Guarantee Fund (EAGGF). The Guarantee part of this fund is designed to meet the objectives of the EU's Common Agricultural Policy, while the Guidance part helps to co-finance programmes concerned with the reorganisation of the sector and the development of the 'social fabric of rural areas'. Over the period 1973-95, the agricultural sector received Ir£16,969.5 million from the EU under the EAGGF. This agricultural support makes up the bulk of all support received from the EU. The table below sets out this information for a recent period, but it is important to note that the pattern presented has dominated consistently since 1973.

Table 5: EU Support for Irish Agriculture, 1992-95

Ir£mIn (\$NZ mln)

	1992	1993	1994	1995
Agricultural support	1233.9 (3904.7)	1325.9 (3593.2)	1374.3 (3461.7)	1383.5 (3374.4)
Net EU Transfers	1639 (5186.7)	1756 (4758.8)	1381 (3478.6)	1593 (3885.4)
Agricultural support as % Net EU Transfers	75.3	75.5	99.5	76.3

Source: Data from the Irish Department of Agriculture and Food, and the CSO. New Zealand \$ equivalents calculated using contemporary exchange rates.

Industry's Rise...

One corollary of a decline in the importance of agriculture in Irish output, exports and employment is the rise of industry. From 1978 to 1995 there was real growth of 155% in the industrial sector⁹. Later statistics break this category down to show the contribution of several sub-sectors; for instance, between 1990-95 the Chemical sub-sector experienced real growth of 92%, with Computers and Instrument Engineering growing by 60%, and Electrical Engineering growing by 91%, over the same period. The industrial sector accounted for 38% of GDP in 1995, or approximately Ir£13 billion¹⁰.

Industrial products are also accounting for a much larger proportion of exports. Chemicals and Pharmaceuticals made up 22% of Ireland's export bundle in 1996, with Data Processing, Machinery and Equipment, and Other Manufactures contributing 21%, 17% and 14% respectively¹¹. The activities of foreign firms have had a great deal to do with the growing importance of industry in Ireland, and this influence will be discussed in greater depth in the next section.

The change in the structure of the Irish economy does mirror that of other developing countries, in that agriculture lessens in importance while industry and, later, services become prominent.

⁹ Based on CSO estimates of GDP at constant 1990 factor cost by sector of origin.

¹⁰ Dept of Enterprise, Trade and Employment 1998

¹¹ Dept of Enterprise, Trade and Employment 1998

4. MONETARY POLICY

Monetary Policy and the EU

Monetary policy in Ireland has been somewhat constrained since 1979 by their membership in the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS). Prior to 1979 Ireland had a fixed one-to-one exchange link with the UK. Ireland saw EMS membership as allowing it to link its monetary policy to a lower inflation country, namely Germany. It was a good time to break the tie with the sterling, as continued maintenance of the tie would have entailed a large overvaluation of the Irish pound. Ireland has drawn great benefits from the ERM, in the form of low inflation and a relatively stable real exchange rate.

Ireland seems to have a number of goals as far as monetary policy is concerned. One is the maintenance of low and stable inflation, which has certainly been achieved since the mid-1980's. However, the Irish authorities also seem to strive for a stable exchange rate, and competitiveness against the United Kingdom. This trio of goals can be hard to achieve simultaneously in a fixed exchange rate environment, and will be harder still once Ireland moves to join the European Monetary Union (EMU).

The implications of the imminent EMU for Ireland are far-reaching, as they are for every potential player in this arrangement. The Governor of the Central Bank of Ireland expressed concerns in 1991 that the monetary policy prevailing will be that which suits the central members, not peripheral economies such as Ireland¹². These views are no longer voiced, publicly at any rate. However, if these concerns were realised, then given that the exchange rate is no longer available as a tool, inflationary pressures in Ireland would not be met by rising interest rates throughout the EMU area. Rather, the resulting fall in competitiveness would have to be met by other adjustment procedures such as greater unemployment, migration of capital or labour, countervailing policies from the centre, or a combination of these things. These are changes which may be hard to implement, or may be relatively more painful than a simple exchange rate adjustment.

Certainly the final completion of the single market is likely to lead to more intense competition in the EU, which may lead to clusters of production near the core rather than the periphery. This would increase the risk of sustained divergence between the periphery and the EU core. There is also a danger that Ireland is overly vulnerable to a global slowdown in high-tech sectors, and that such an asymmetric shock will not be able to be addressed through the exchange rate. Again, internal adjustment would bear the brunt.

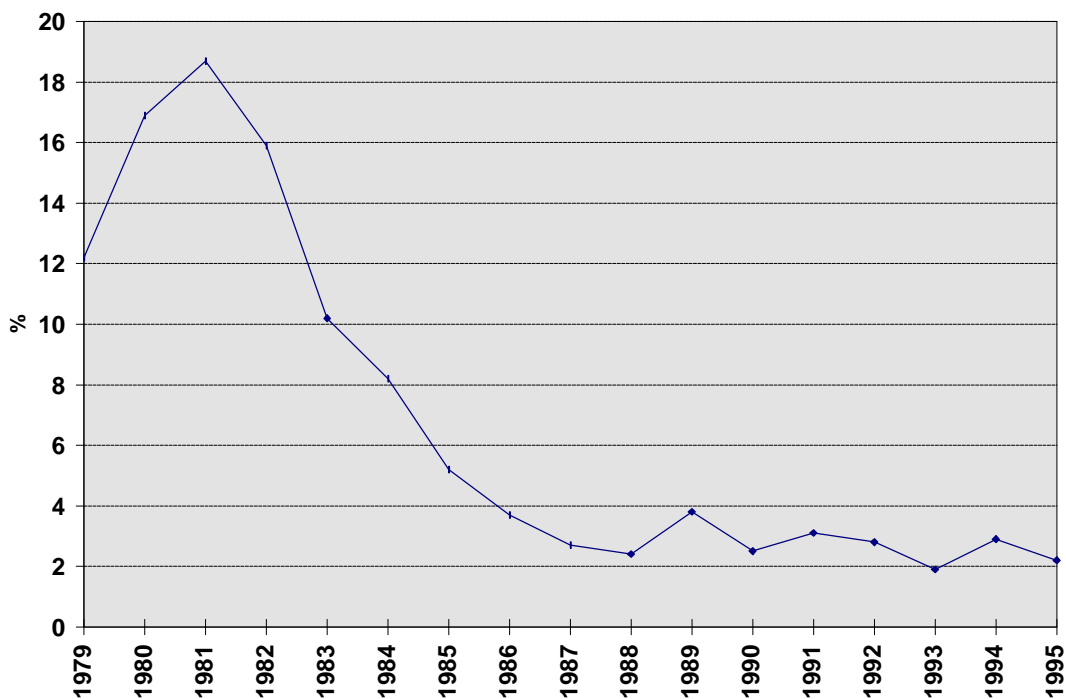
¹² Doyle (1991)

Inflation

The battle with inflation had historically been an ongoing one for Ireland. Even after joining the EMS inflation was still a problem, due to concerns over Ireland's policy credibility. Specifically, until the early 1980's the Exchequer's borrowing requirements stemming from sizeable fiscal deficits were met by large scale monetary financing. The resulting imbalances were reflected in high inflation, a weakening exchange rate and a substantial current account deficit. The weakening exchange rate was propped up somewhat by the large-scale use of foreign exchange intervention - however the foreign currency used for this was also acquired through extensive and ultimately unsustainable foreign borrowing. This behaviour undermined Ireland's credibility in maintaining it's exchange rate within the ERM.

Since the mid-1980's inflation has been steady and low, ranging between 2-4% per year. This reflects the direction of the Central Bank of Ireland, whose main objective is "to safeguard the integrity of the currency", which in practice is taken to mean the maintenance of low and stable inflation in Ireland¹³. The initial fall in inflation in the early 1980's was aided by fiscal consolidation and a subsequent fall in borrowing. It should be noted though that inflationary pressures are currently building in Ireland, with the strong growth performance heating up the economy.

Figure 8: Inflation



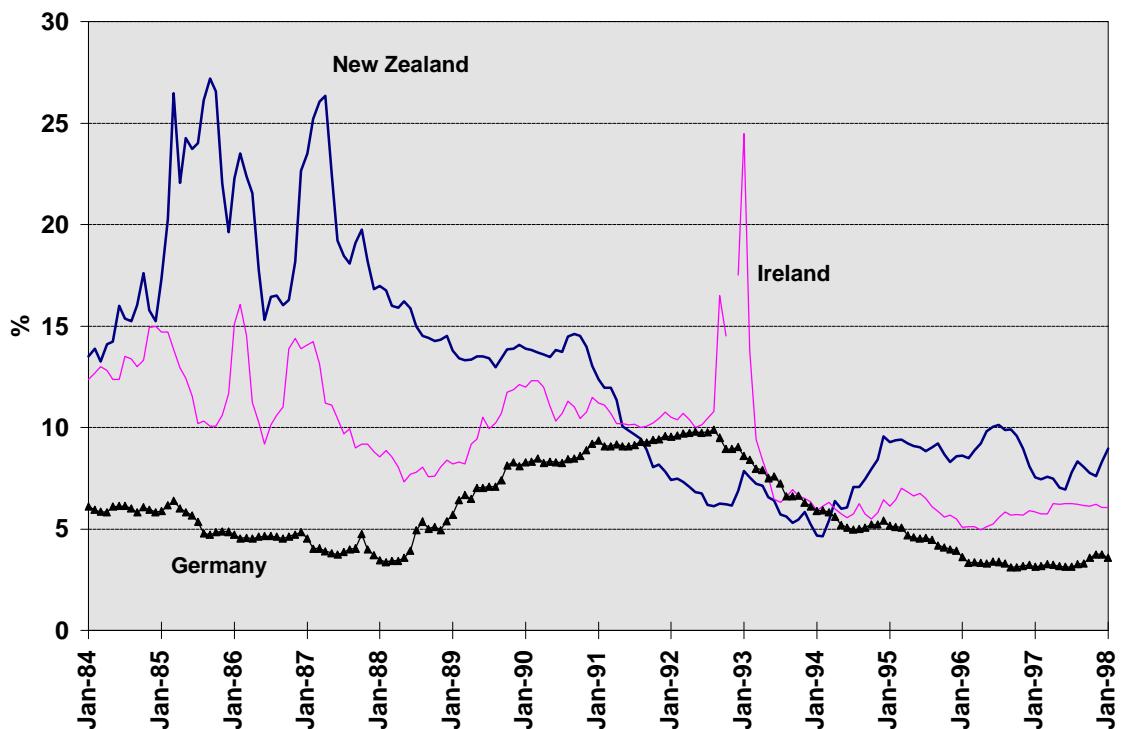
Source: OECD database, PCInfos.

13 Kenny & McGettigan (1996)

Interest Rate Policy

In terms of interest rate policy, the Irish Central Bank seeks to smooth temporary and predictable fluctuations in domestic interest rates, since with a fixed exchange rate the bank cannot actually control interest rates¹⁴. The motivation behind this policy was to reduce the harmful effects of volatile interest rates on investment decisions.

Figure 9: Short Term Interest Rates



Source: OECD, PCInfos

Note: Short term interest rates are taken as follows

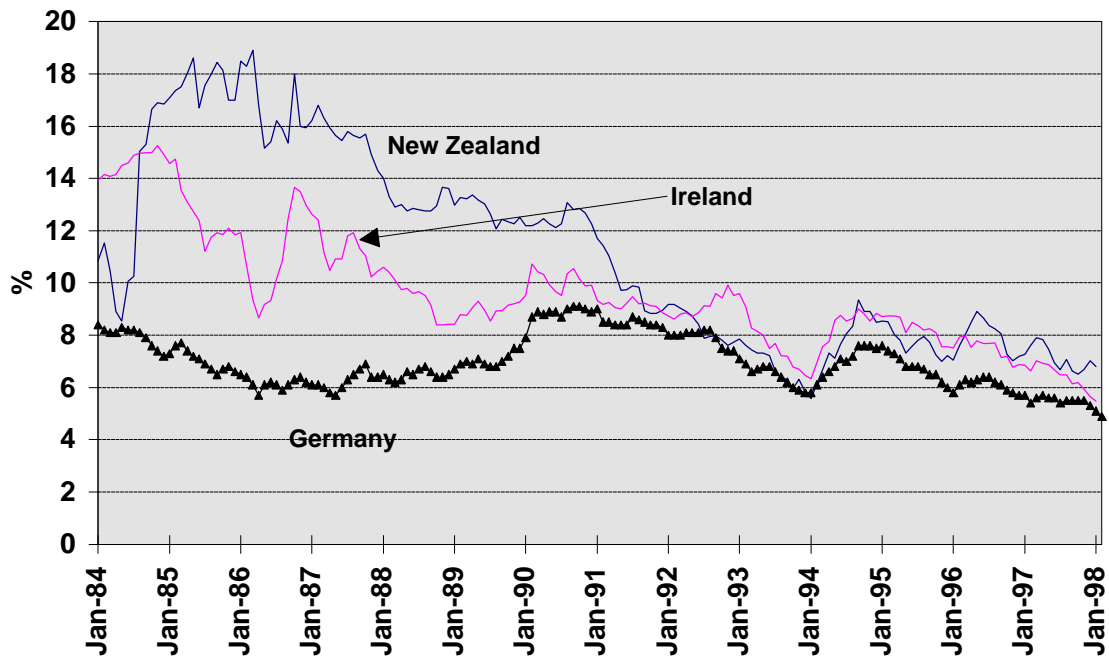
- Germany - 3 month FIBOR
- Ireland - 3 month interbank rate
- New Zealand - 90 day bank bills

The ERM currency crisis in 1992/3 saw Irish short term interest rates skyrocket to around 40% (point not shown on graph), as the Central Bank sought to defend the currency from expectations of devaluation. Devaluation became unavoidable however, and short term interest rates fell to a fairly stable level of

¹⁴ Leddin & O'Leary (1995)

just over 5%¹⁵. Short term rates have certainly moved nearer to the level exhibited by Germany, although the gap has widened since the 1995 currency crisis, sparked by instability in Mexico, as the Irish pound depreciated against the German mark. New Zealand short term interest rates have been both more volatile and at a higher level than these European countries.

Figure 10: Long Term Interest Rates



Source: OECD, PCInfos.

Note: Long term interest rates as follows

- Germany - 7-15 year public sector bonds
- Ireland - 15 year government bonds
- New Zealand - 10 year government bonds

Long term interest rates in Ireland have been steadily converging to German rates and are now practically identical. Ireland is therefore benefiting from the links with Germany as they are now able to access lower interest rates. Once again New Zealand exhibits higher rates than both these countries, although the rate has shown convergence towards German levels. It may be that the openness of international capital markets in developed countries is reflected in the convergence of interest rates.

¹⁵ It did not help that the centralised wage agreements in place prevented nominal wages from falling. Theoretically, when the Irish pound became overvalued the domestic price level should have fallen to compensate, with a corresponding fall in nominal wages to hold the real wage constant. The wage agreements inhibited wages from falling and so devaluation did prove to be inevitable.

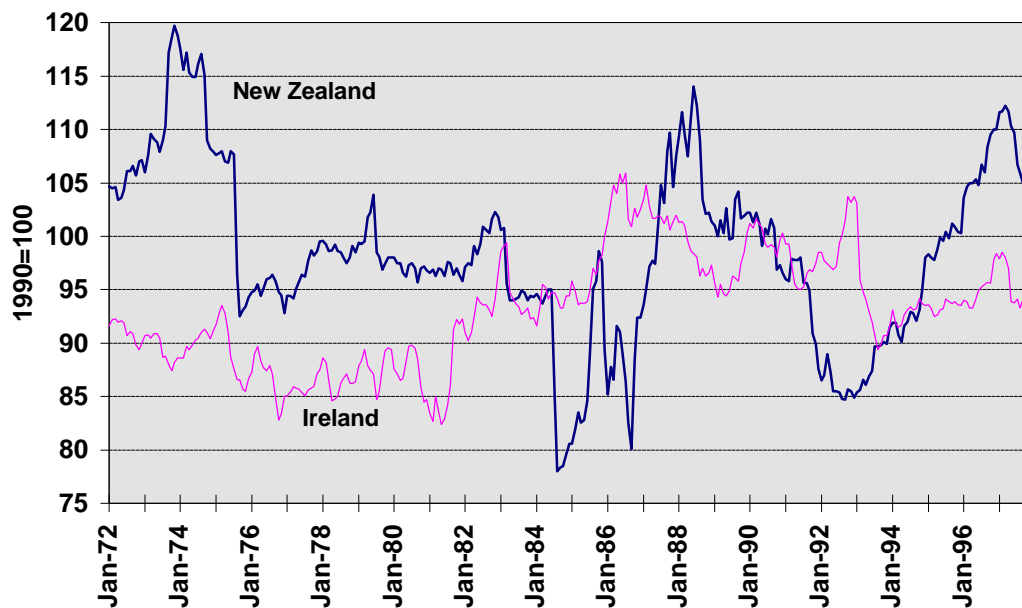
It is worth noting that, although not shown on the graphs, the Irish interest rates follow United Kingdom rates very closely indeed, no doubt reflecting ongoing linkages to the UK economy.

Exchange Rate Policy

Upon joining the EMS it was expected that in the initial period the Irish pound would be overvalued. Indeed, the failure of the real exchange rate to return quickly to its 1979 level indicates the adjustment process was prolonged, which further suggests adjustment costs were high. Leddin and O'Leary (1995) comment that the overvaluation was an important determinant of the rise in Irish unemployment, although they acknowledge the impact of factors such as the downturn in the world economy, tax increases, and rising oil prices.

One notable feature of Ireland's real exchange rate as compared to New Zealand's is its stability. Since 1984 Ireland's real exchange rate has moved within a band of around 16 points, while New Zealand's more volatile exchange rate has fluctuated within a band of around 36 points. This is most likely a byproduct of Ireland's membership of the ERM, but is worth noting nonetheless. Higher volatility of exchange rates may have a negative impact on productivity and investment, as the heightening of uncertainty may discourage new firms entering. Stable exchange rates probably served to increase Ireland's desirability as an investment destination.

Figure 11: Real Effective Exchange Rates



Source: OECD, PCInfos

The real exchange rate has still not yet fallen back to the level exhibited pre-1982, although it has moved to a lower level since the devaluation of 1993. This went against the views of many Irish economists who believed that the competitive gain resulting from a devaluation was short-lived. It seems that the movement in the nominal exchange rate has given Ireland a competitive gain, and it has apparently highlighted the need to “find a realistic and workable exchange rate policy”¹⁶.

The kind of statement made above serves to highlight the lack of clear targets for monetary policy. The literature and empirical evidence suggests that inflation has been a primary target, yet a stable exchange rate, and competitiveness against the United Kingdom, also feature strongly. Certainly the goal of competitiveness against the United Kingdom leads to a difficult balancing act if the sterling/Dmark exchange rate changes; should the sterling parity be maintained so as not to affect competitiveness against the UK? Or should the link with the German currency be maintained so as to ensure that inflation remains stable and that Ireland remains in contention for EMU? Perhaps Ireland has simply been fortunate in recent years that all factors have remained relatively stable. In any case, Ireland has committed to locking itself into the EMU, so future monetary policy decisions will be effectively out of their hands.

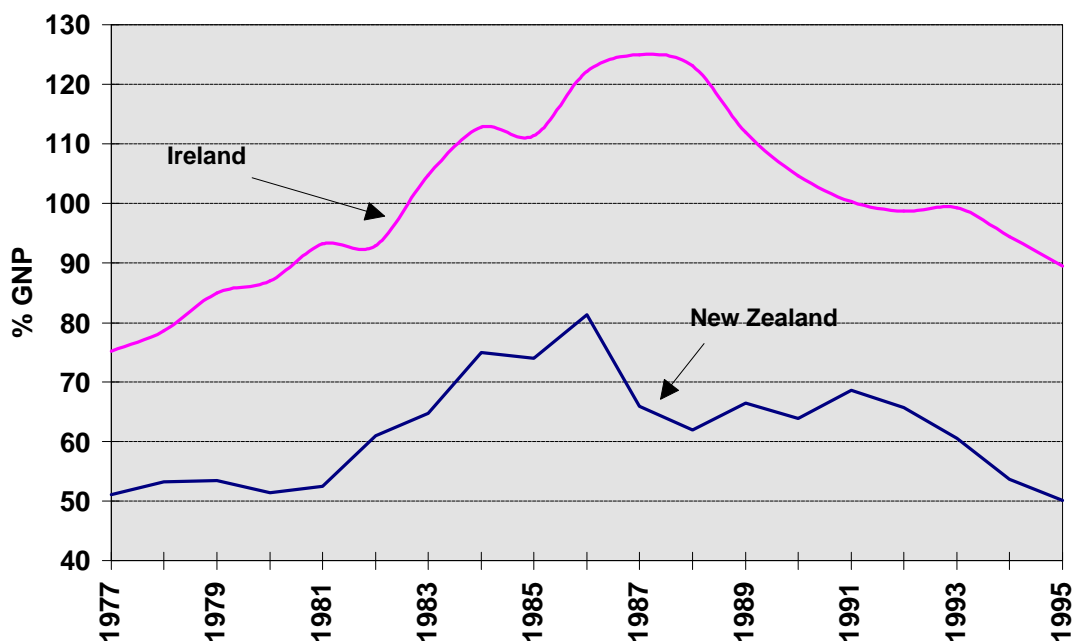
¹⁶ Leddin & O’Leary (1995)

5. FISCAL POLICY

The Main Objective

Since 1987 the overriding objective of Irish fiscal policy has been to reduce the ratio of government debt to GNP. As noted earlier, the Irish budget deficit first emerged as a problem when the government began offsetting the contractionary effects of higher oil prices. Unfortunately the lack of a coherent or consistent fiscal policy from 1973 through to 1986 meant that the budget deficit did not disappear once the original purpose became redundant. Instead the increase in borrowing that appeared was fuelled by conscious policy changes. Tax increases in the early 1980's were not useful in stemming the deficit. Growth of government debt also resulted from Exchequer borrowing for capital purposes, and by the end of the 1980's the level of debt had reached a highly concerning level.

Figure 12: Government Indebtedness as % of GNP, 1977-95



Source: *Leddin and O'Leary (1995), PCInfos.*

Note: *Figure refers to Gross Government debt.*

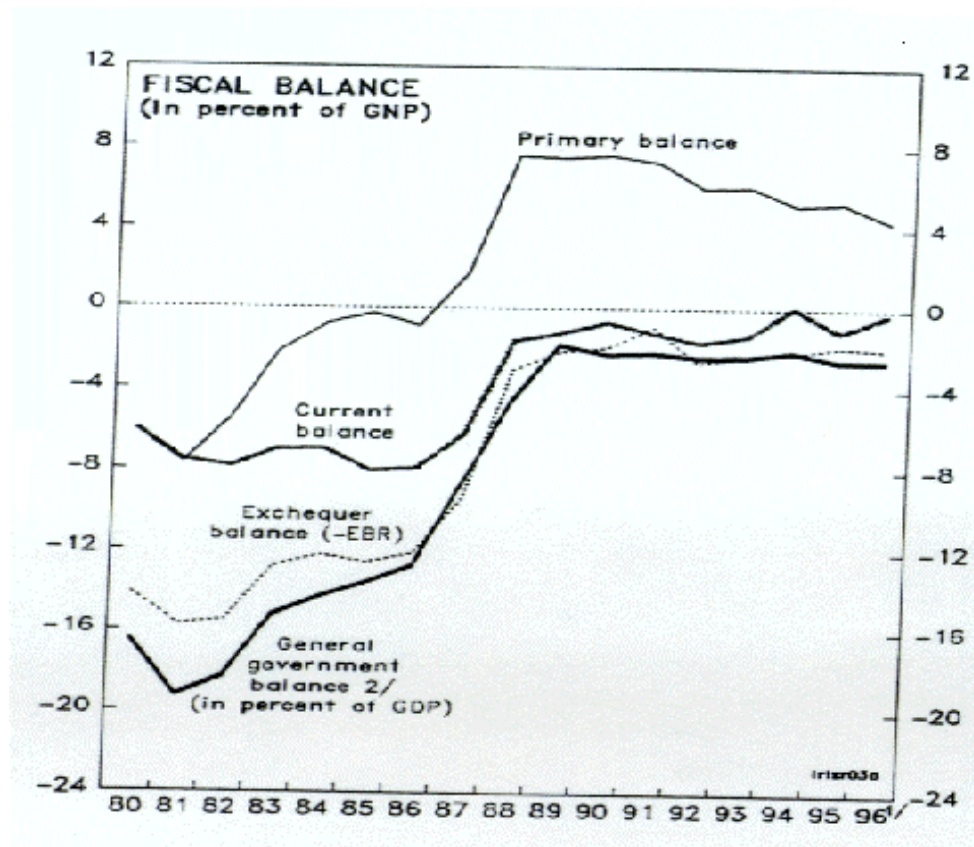
While debt as a percentage of GNP has fallen, it is important to note that economic growth has had a large hand in this. Reforms have not been as comprehensive as those carried out in New Zealand, and there have not been intense efforts to reduce expenditure. Indeed the current continued growth of expenditure in the order of 6% pa has resulted in warnings from the EU and EU

Central Banks that government spending must be reined in to dampen down inflationary pressure.

Fiscal Balance

The chart below illustrates Ireland's fiscal balance. The chart uses several definitions of the government's balance, which require explanation. The narrowest definition of the budget balance is the *current balance*, which is the difference between government current spending and current receipts. A wider measure is the *Exchequer Borrowing Requirement (EBR)* which also includes the balance between the capital receipts and capital spending of the exchequer. The *primary balance* is defined as the EBR exclusive of interest payments. A measure which has increased in usage since the signing of the Maastricht Treaty is the *General Government balance*, which goes one step further than the EBR and includes the balances of local authorities and the non-commercial semi-state bodies.

Figure 13: Irish Fiscal Balance



Source: IMF Staff Report for the 1996 Article IV Consultation - Ireland.

The current budget balance has improved sharply since the mid-1980's, with reductions in expenditure being the main explanatory factor. A widening of the tax base and a decline in interest rates also assisted. The fall in interest rates was fueled partly by an increase in financial market confidence in Ireland as the Irish government brought their finances under control.

The Irish government cites the Maastricht Treaty as the principal parameter guiding their budget. This is useful in terms of keeping finances under control, but gives a focus to the balance between tax and spending, rather than the actual levels of them. Leddin and O'Leary (1995) call this a satisficing approach, and note that since 1990 the primary budget surplus has actually fallen, although it is still within the bounds of Maastricht. They comment that the Irish public finances may currently be benefiting from a sort of virtuous circle, based on the combination of a primary budget surplus, low interest rates, and robust economic growth, but the circle is not unbreakable.

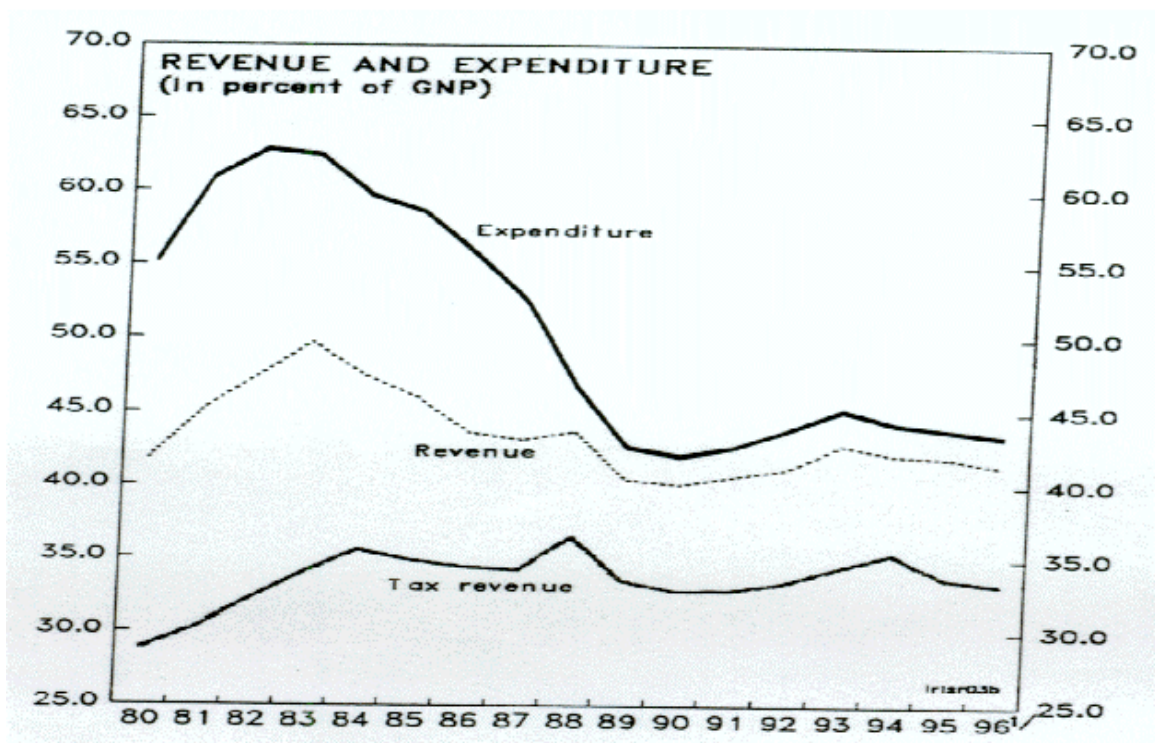
Revenue and Expenditure

Method of Recording...

It is important to note the system of accounting that lies behind the Irish revenue and expenditure figures. The levels (in percent of GNP/GDP) do vary across data sources, and this can cause confusion, as the differences are large. The reason is that the Irish Budget sets out spending into Gross Expenditure and Net Expenditure, where Net Expenditure equals Gross Expenditure less Supply Services Receipts. These receipts are made up of employee and employer social security levies. The use of Net Expenditure tends to understate the involvement of the government in the economy. In addition the absence of these receipts on the revenue side of the budget tends to understate the level of taxation in the economy. By adding the Supply Services Receipts to revenue, instead of subtracting it from expenditure, a more accurate picture of Irish revenue and expenditure levels can be gained. This adjustment reconciles the figures with those presented by the OECD and therefore this method is used in this investigation.

However the figure below, taken from the IMF Staff Report for Ireland, does not add Supply Services Receipts to the tax revenue figure.

Figure 14: Irish Revenue and Expenditure



Source: IMF Staff Report for the 1996 Article IV Consultation - Ireland

Irish Government expenditure as a percentage of GNP has dropped from a high of over 60% in the early 1980's, to a more moderate level of around 43% from 1989 to 1996. The corollary of this though is that while expenditure as a percentage of GNP is stable, GNP is rising rapidly — thus as noted earlier, Irish expenditure is growing in absolute terms by quite a sizeable amount. Revenue comprised around 42% of GNP in 1996, down from levels of around 50% in the early 1980's. Tax revenue has followed the trend and level of total revenue fairly closely since the late 1980's, with tax revenue being 40.9% of GNP in 1996.

Components of Revenue and Expenditure...

The components of revenue and expenditure can be gleaned from Irish government budget data. The table below sets out some of the main components from the 1998 Irish Budget. GNP was projected to be Ir£41 640 million in 1998¹⁷.

Table 6: 1998 Irish Budget - main components

Expenditure	% of GNP*	Revenue	% of GNP*
Gross Expenditure	42.0	Total Revenue	44.6
Service of public debt	6.2	Tax Revenue	36.4
Interest	5.5	Customs	0.42
Economic Services	3.2	Excise duties	6.4
Industry and labour	1.5	Capital taxes	0.5
Agriculture	1.4	Stamp duties	1.1
Fisheries/forestry	0.1	Income tax	13.3
Tourism	0.1	Corporation tax	4.6
Infrastructure	0.2	VAT	9.6
Social Services	24.7	Agricultural levies	0.02
Health	7.1	Employment and training levies	0.5
Education	5.6	Non-tax Revenue	8.2
Social Welfare	11.7	Supply Services Receipts	7.4
Subsidies	0.3		
Security	3.1		

Source: Irish Department of Finance website

* *projected GNP*

¹⁷ Estimated from Irish Budget 1998 Economic Background.

These numbers can be compared to the New Zealand 1997/98 Budget, the main components of which are presented below. Projected GNP for this time period was taken to be NZ\$90 236 million¹⁸.

Table 7: 1997/98 New Zealand Budget

Expenditure	% of GNP*	Revenue	% of GNP*
Total Expenditure	38.4	Total Revenue	39.5
Finance costs	2.9	Tax Revenue	36.9
Economic and industrial services	0.92	Source deductions	14.1
Primary services	0.35	Other persons	3.7
Heritage, culture and recreation	0.35	Company tax	4.5
Transport and communications	1.0	Residents withholding tax	1.1
Social security and welfare	14.7	Non-residents withholding tax	0.7
Health	6.7	Foreign dividend withholding tax	0.004
Education	6.3	GST	8.9
Core government services	1.7	Excise tax	2.0
Law and order	1.4	Customs	1.1
Defence	1.2	Non-tax Revenue	2.7

Note: Core government services is comprised mainly of departmental expenses.

** projected GNP*

Source: The Treasury

The most notable differences are New Zealand's lower total expenditure and revenue as a percentage of GNP. Differences between actual components include the much greater profile of debt financing costs for Ireland, New Zealand's higher social security and welfare spending, Ireland's greater reliance on excise taxes, and New Zealand's greater tax take from personal income (when including Other persons). Ireland's Supply Services Receipts (social security levies) add a large chunk to revenue, which lifts Ireland's total revenue beyond the percentage shown in New Zealand. Most of the other categories of revenue and expenditure are fairly similar. This in itself is interesting — Ireland's corporate tax receipts are marginally higher than New Zealand's, yet

¹⁸ Estimated from 1997 Budget Economic and Fiscal Update (NZ).

New Zealand's corporate tax rate is higher. Perhaps this is because of higher activity levels in Ireland?

It will be interesting to see the future path of expenditure in Ireland. With strong economic growth there may be increasing pressure on the Irish government to improve the level and quality of public provision, perhaps to continental European levels. Such a move would be likely to increase inflationary pressures in the economy and may serve to deteriorate the Balance of Payments as domestic demand rose. Ireland's options are constrained though by Maastricht, and the calls from EU institutions to rein in spending.

Another interesting area to note is asset sales. Irish sales of state-owned firms between 1988-92 represented 0.3% of their GDP, while over the same period New Zealand's sales averaged 3.6% of GDP. State enterprises in Ireland have a large presence in the energy, steel, transport and communications sectors, with some holdings in banking and insurance companies, and other commercial endeavours such as hotels. Postal services, telecommunications services, water, electricity and gas distribution, and railways are public monopolies. The current government is committed to a 'viable and profitable state commercial sector' with changes in ownership taking place only if it is in the public interest and in the best interests of the firm and its employees. There must also be consultations with the social partners. Privatisation is moving slowly in Ireland, but international competition may force changes. Telecom Ireland is to be floated next year — perhaps more may follow?

Tax Policy

Ireland's tax policy is characterised by a system of tax allowances and selective taxation. Each individual has a range of income (a set of tax allowances) on which no tax is imposed. The standard tax rate is then applied to income within a certain range, beyond which a higher rate of tax applies. This tends to narrow the tax base and thus requires higher rates of tax, and therefore higher marginal tax rates.

This is exacerbated by the fact that the Irish equivalent of GST is not applied to all consumption goods, property taxes have a high tax-free threshold, and the inheritance tax system differs depending on the relationship between the parties. This narrowing of the tax base tends to increase the distortionary effects of the taxation system.

The tax system has also created significant distortions in resource allocation, particularly in the property market. Tax incentives from the 1980's to boost the building industry have had a large part in creating a speculative property bubble in Dublin.

Income Tax...

With respect to income tax, there are four different schedules, which in order of importance are:

- Schedule E: income from an office, employment or pension (PAYE system),
- Schedule D: profits of trades, professions, rental income, interest income and income from abroad,
- Schedule C: interest income on certain government and other securities, and
- Schedule F: income from distributions received from a resident company.

The present system in Ireland has two tax rates; a standard rate of 24% and a higher rate of 46%. The standard rate applies as soon as the tax-free allowances are used up; the automatic allowances being £2500 for individuals and £5000 for a married couple, single parent, or widow/er with children; and special allowances taking account of the social conditions of individuals, for example, caring for incapacitated children, old age etc. The Irish system is neutral between marriage and non-marriage when both individuals are participating in the labour market, but marriage is favoured when one individual is not working in the formal labour force. There are also allowances for people on the PAYE system, and the self-employed are able to get allowances for items such as petrol. Discretionary allowances also apply, with allowances given for contributions to superannuation funds, mortgage interest, health insurance, business expansion schemes, and long term savings accounts.

Social Security...

The system for pay-related social insurance and levies is very complex, but generally there is a class for employed persons and a class for self-employed persons, with a variety of rates and conditions applying to different categories of individuals within these broad classes. Employer contributions also follow a complex structure, with different rates applying to different bands of income. The table below sets out the rates paid by employers and employees into the Pay Related Social Insurance (PRSI) scheme. Overall, employers contributed 70% of the scheme revenues in 1996.

Table 8: Social Insurance Contribution (% weekly earnings - 1997)

	Pay Related Social Insurance	
	Employers	Employees
Below Ir£30	0.5	0
Ir£30 to Ir£80	8.5	0
Ir£80 to Ir£197	8.5	5.5
Ir£197 to Ir£260	8.5	5.5
Over Ir£260	12.0	5.5

Source: OECD (1997)

Other Taxes...

Capital gains tax is applied to assets on disposal, with the rate of inflation subtracted from the nominal rate of capital gain so that only real gains are taxed. The standard rate was lowered in the 1998 Budget from 40% to 20%, although land with development potential will still have gains taxed at 40%. The tax is applied to gains above an annual exemption of £1000 for an individual and £2000 for a married couple. There are special areas of concession, the most significant being property, where the sale of a private individual's primary residence is exempt, unless its value has been inflated by redevelopment potential.

The corporate tax system is characterised by its dual rates. There is a standard rate of 32%, and a lower rate of 25% for the first £50,000 of taxable profits. There is also a preferential rate on profits in manufacturing and certain internationally traded services of 10% (as discussed earlier). There are allowances available for capital expenditure, which can reduce the tax liability of a firm.

Value-added tax is applied at rates of 0%, 2.5%, 12.5%, and 21%. Food, children's clothing and footwear, passenger transport, and admission to cultural and sporting events are exempt from VAT, and goods produced by labour-intensive sectors tend to be put into the lower VAT classes. It is only recently that adult clothing/footwear, legal services, and electricity have been introduced into the VAT system. Hydrocarbon oils, alcohol, tobacco products and motor vehicles are all subject to excise tax, with the justification that these products impose externalities on others.

Average and Marginal Tax Rates...

Marginal tax rates, which affect people's incentives to work, have been high in Ireland, as have average tax rates. However, when all allowances are taken into account, the average rate does decrease. This does reduce the progressivity of the system though, leading to controversy over the share of the tax burden. The OECD 1997 study of Ireland outlined the rates of tax faced in Ireland by individuals, as follows:

Table 9: Income Tax and Social Levies (% of average gross earnings of a single person).

	Tax Rates		Proportion taxed at		
	Average	Marginal	Zero/Low	Standard	Higher
1985	35.0	56.5	31.2	50.3	18.5
1986	34.2	55.5	31.1	48.9	20.0
1987	35.5	55.8	29.6	46.6	23.9
1988	34.5	55.8	29.7	53.9	16.4
1989	33.2	55.8	28.5	55.5	16.0
1990	32.3	55.8	27.5	56.9	15.7
1991	32.3	55.8	26.7	56.2	17.1
1992	30.8	55.8	25.7	60.3	14.1
1993	32.4	55.8	24.9	58.7	16.4
1994	30.7	55.8	25.5	61.0	13.5
1995	29.1	55.8	25.0	64.7	10.3
1995 NZ	20.39	33.0	38.21	40.11	21.68
1996	28.6	55.8			
1996 NZ	19.14	33.0	36.94	43.27	19.79

Source: OECD (1997)

Note: Ireland: Tax rates include social security taxation and temporary income tax levies. The proportions taxed at the different levels take account of income tax only.

New Zealand: No zero tax rate applies. See Appendix for data sources and tax rates.

An international comparison of the total tax wedge shows that taxes in Ireland are slightly below the OECD average. However, the above table shows the very high marginal tax rate faced by Irish workers, and the OECD study notes that in 1996 a single person would have entered the top tax bracket at an annual income that was almost 10% below the level of average earnings¹⁹. The lowest possible marginal tax rate for a person to encounter is 34.8%. New Zealand certainly has much lower average and marginal tax rates.

Reform of the tax system?

Reform of the tax system has been under discussion for some time in Ireland. From 1980-85 a Commission on Taxation published reports dealing with recommendations on tax policy, for instance, taxing an individuals comprehensive income independent of its source and at a single rate, with all tax reliefs to be eliminated, with a single flat-rate social security tax. For corporate taxes they recommended taxing at the standard rate of income tax with full imputation allowed. Tax reliefs which were designed to attract foreign investment were encouraged to be replaced with direct aid. With respect to consumption taxes, the Commission recommended a single rate of VAT on all final purchases at a rate of 15%. Other recommendations dealt with property tax and tax administration. These recommendations are being dealt with very

¹⁹ OECD (1997) pg. 79

slowly, and the complexities and distortions of the present system remain. However, increasing pressure from outside Ireland, in the form of EU requirements, will eventually institute change. The 1998 Budget certainly introduced several changes in the rates of tax, with downward movements ranging between 2% and 20%.

Wage Setting

Since 1987 the control of inflation has been assisted by a system of wage moderation, brought about by national pay agreements between unions, employers and the government. This type of wage bargaining is referred to as corporatism.

There were several agreements in the 1970's but the period between 1981-87 saw none, although moderation in wages was achieved during this time simply because of rising unemployment. A series of agreements were then negotiated later in the 1980's to consolidate that moderation — *Programme for National Recovery (1988-90)*, *Programme for Economic and Social Progress (1991-93)*, *Programme for Competitiveness and Work (1994-96)* and *Programme 2000: Employment, Competitiveness and Inclusion (1997-2000)*. Leddin and Walsh (1997) note that a feature of the agreements has been that in return for low nominal wage demands the government has held out the prospect of a reduction in income taxation, improvements in social benefits, and a wide variety of other measures.

Programme 2000...

To give a general flavour of these agreements, the Programme 2000 covers pay policy, government spending, taxation, and social measures to reduce poverty and exclusion²⁰. To increase the extent of social consensus generated by the accord, a wide variety of groups were consulted, including associations representing the Catholic and Protestant churches, the unemployed, women, young people, and community groups.

With respect to pay, the new agreement allows for an annual increase of 2.9% for each year in the agreement. The 9.3% cumulative rise over the three year period includes a centrally set increase of 7 ¼ % and a 'local bargaining' clause which allows unions to negotiate additional increases up to a ceiling of 2% of the pay bill. Other initiatives encompass:

- a national anti-poverty strategy focusing on long-term unemployment, educational disadvantage and low incomes;
- a new focus on gender equality and a government strategy for the development and delivery of child care;

²⁰ As discussed in OECD (1997) pg 43-45.

- additional spending of £525 million to be spent on indexation to inflation and other social inclusion initiatives over the three year period;
- income tax cuts of a cumulative £900 million between 1997-1999, and business tax reductions of £100 million.

These initiatives must be addressed whilst keeping to pledges of the debt to GDP ratio falling below 70%, general government deficit remaining below 1 ½% of GDP, and growth of public spending staying below 2 percentage points in excess of inflation.

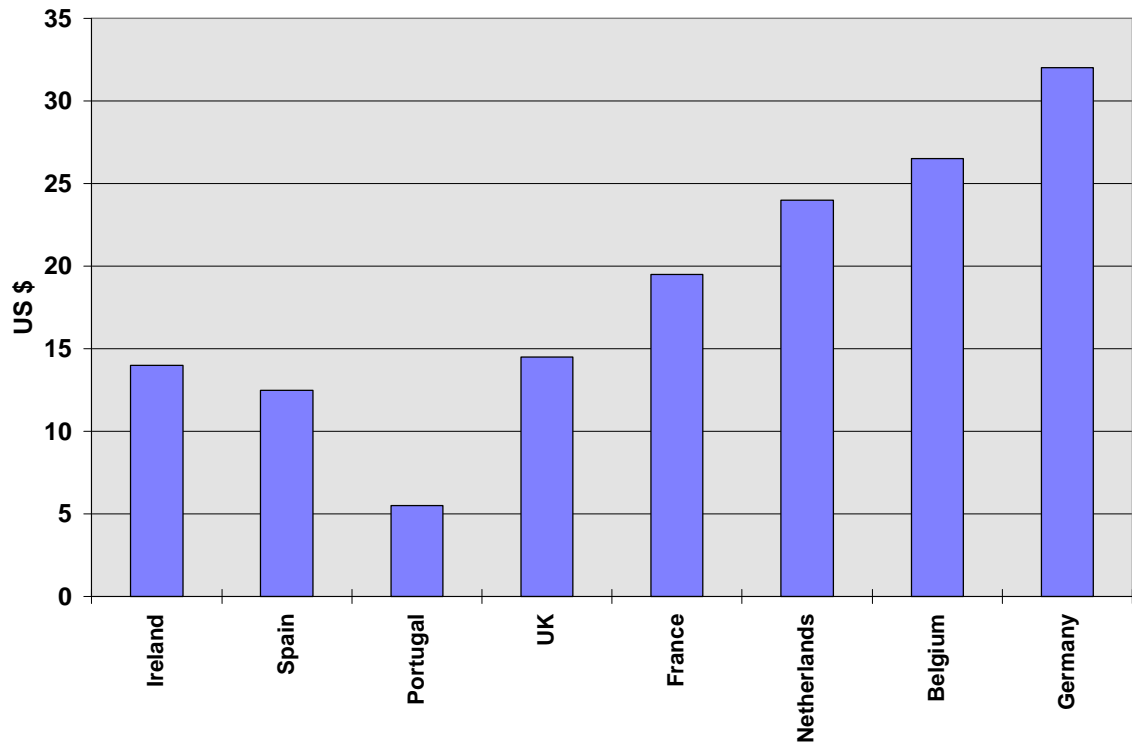
There is pressure on this corporate wage negotiating model, particularly since the agreements only seem to be followed in the public sector. Much of the private sector ignores the national wage agreement, as most of their workers are non-unionised. Rather they use short-term contracts. This situation has led to increased calls from the public sector for wage settlements to match those seen in the private sector. The expected acceleration of inflation leading up to the next round of negotiations for a new programme are likely to increase these tensions further.

Effects of Wage Control...

Leddin and Walsh (1997) comment that the centralised wage bargaining may have contributed to relatively subdued domestic inflationary impulses in the economy, but that persistent high unemployment is also very relevant in subduing inflation. They say that the test of Irish corporatism will be reconciling falling unemployment with moderate wage inflation and/or dealing with a major adverse shock, where the rigidity of the labour market due to this method of wage setting could inhibit its ability to adapt. While growth in wages may have been controlled, labour inflexibility remains, and this could act as a constraint on the economy. However, it may be impossible in the future to maintain this type of corporate model anyway, given that the majority of the private sector utilises short-term contracts.

Keeping wages under control may have helped to attract FDI. The IDA website displays a graph of the cost of payroll, which shows hourly compensation including additional costs, in \$US for 1995, for a number of countries in Europe. The data is sourced from the Swedish Employers Confederation, and clearly shows Ireland's level of wages to be quite low relative to most of the other countries.

Figure 15: Cost of Payroll - Hourly compensation, 1995



Source: IDA website

There is a lack of literature on the effects of these wage agreements. What is clear however, is that a dual labour market is operating, and it is beginning to put strain on the bargaining model.

6. FOREIGN DIRECT INVESTMENT

The level and type of Foreign Direct Investment (FDI) has been identified by many commentators as being a crucial element in the success of the Irish economy in recent years. Ireland has had a history of free markets, and since the late 1950's Irish governments have actively encouraged foreign capital into the country, predominantly through the use of grants and tax concessions. In this section the focus is first on the features of FDI inflows into Ireland, with the role and structure of the incentive system following from this.

FDI Inflows

A 1994 OECD study of FDI in Ireland showed that foreign firms accounted for half of Ireland's industrial output and employment, and three-quarters of its manufactured exports and imports²¹. Indeed, the fastest growing sectors in the Irish economy since the early 1980's have been foreign owned. Most foreign investment has been concentrated in the 'modern' sector of computers, semiconductors, office equipment, software, pharmaceuticals, electrical engineering and soft drink concentrates²². The financial services sector has also been a recipient of large investment inflows, with the advent of the International Financial Services Centre in Dublin.

The underlying conditions determining the incoming investment, as noted in the 1997 OECD Ireland country study, included the cumulative number of foreign firms (perhaps reflecting an agglomeration effect), skilled labour availability, a relatively high rate of return (likely partly due to the low tax environment), and the fact that the education system is seen as being relevant to the needs of business. FDI into Ireland was also encouraged by Ireland's entry into the then EC in 1973. Many US firms have opened subsidiaries in Ireland as a way of accessing the European market and, overall, 70% of the manufacturing companies operating in Ireland as at 1994 had set up since Ireland joined the EC²³.

There were no statistics in the Balance of Payments accounts on direct investment flows at the time of the OECD FDI study, although a new system was under construction which would include such statistics. In the absence of this kind of data, statistics were drawn from the Irish Industrial Development Authority (IDA). However, the IDA only records investment eligible for grant assistance, which includes most investment in manufacturing and

²¹ Foreign firms operating in Ireland seem to import most of their raw materials and componentry, thereby accounting for quite a large proportion of total Irish imports.

²² OECD (1997) pg. 13

²³ OECD (1994) pg. 7

internationally-traded services but not all²⁴. The IDA comments that although the data is incomplete it does account for a high (although decreasing) proportion of total fixed asset investment by foreign-owned companies.

Surprisingly Small Inflows?

From 1974 to 1980 the amount of foreign fixed asset investment in Ireland was relatively stable, averaging 3.15% of GDP per year²⁵. However, FDI inflows as recorded by the OECD have been rather uneven since 1983, and are relatively small with respect to the size of Irish GDP. According to the OECD data, New Zealand's FDI inflows as a percentage of GDP have exceeded Ireland's since the mid-1980's; in the period 1981-91, the average percentage of FDI to GDP in New Zealand was 1.4, while in Ireland it was 0.5. In 1991-92 the difference was particularly pronounced, with the average for New Zealand being 4%, while Ireland achieved only 0.2%²⁶. This seems to present a puzzle, as FDI is consistently advanced as one of the leading drivers of Ireland's recent strong economic growth.

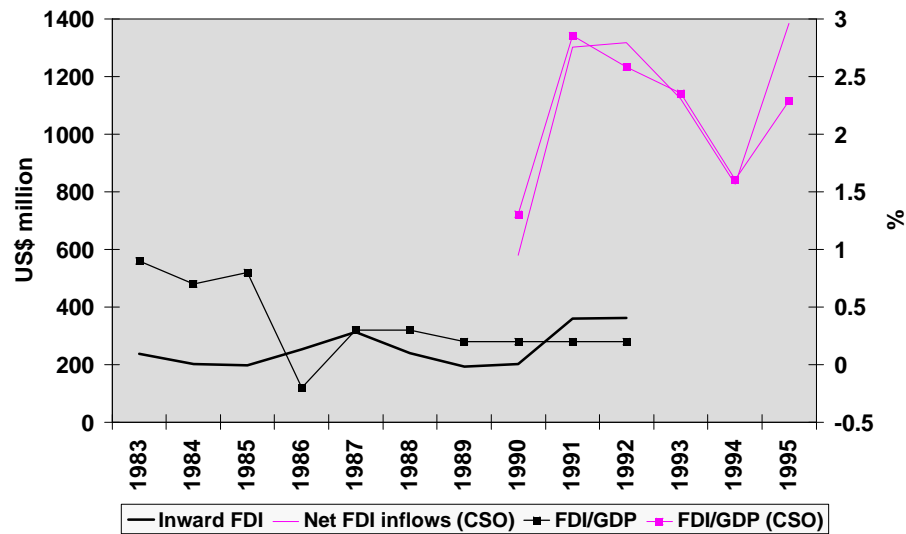
However, using recent data from Ireland's Central Statistics Office (CSO) yields a different story. Net inward FDI, including reinvested earnings, gives a figure for FDI as a percentage of GDP that is much higher. The chart below illustrates the OECD and CSO data together. Clearly the CSO data accords better with the notion that FDI has been a major driver of growth in Ireland, and the figures themselves are far more complete by virtue of including reinvested earnings.

²⁴ The data does not include investment in fixed assets which are not grant aided; investment in working capital; investment by foreign companies which are not IDA clients; and investments for mergers and acquisitions.

²⁵ Bacon, Durkan & O'Leary (1982) pg 24

²⁶ OECD (1994) pg

Figure 16: Foreign Direct Investment Inflows



Source: OECD (1994), CSO.

Green Fields and Exports...

The majority of the investment in Ireland has been in greenfield investment and expansion with very little merger or acquisition activity; again a different experience to that of New Zealand. The OECD study suggests the reason for this is that Ireland's relatively small initial industrial base, and hence potential for growth, would present many more opportunities for new start ups than in a larger more mature economy²⁷. However, it may also be due to the structure of investment incentives, since the IDA offers special industrial sites and buildings to potential investors.

Most of the foreign investment in Ireland is concentrated in the export sector, again unlike New Zealand, particularly that investment in the modern sector. Foreign firms operating in Ireland export over 85% of their gross output, with 72.8% of these exports going to EU members. US-owned firms export 96% of their output, with 74% of that going to the EU²⁸. In 1991 the share of total exports of the modern sector increased to 62%, with computer hardware and software alone accounting for 29%.

Who Is Investing?

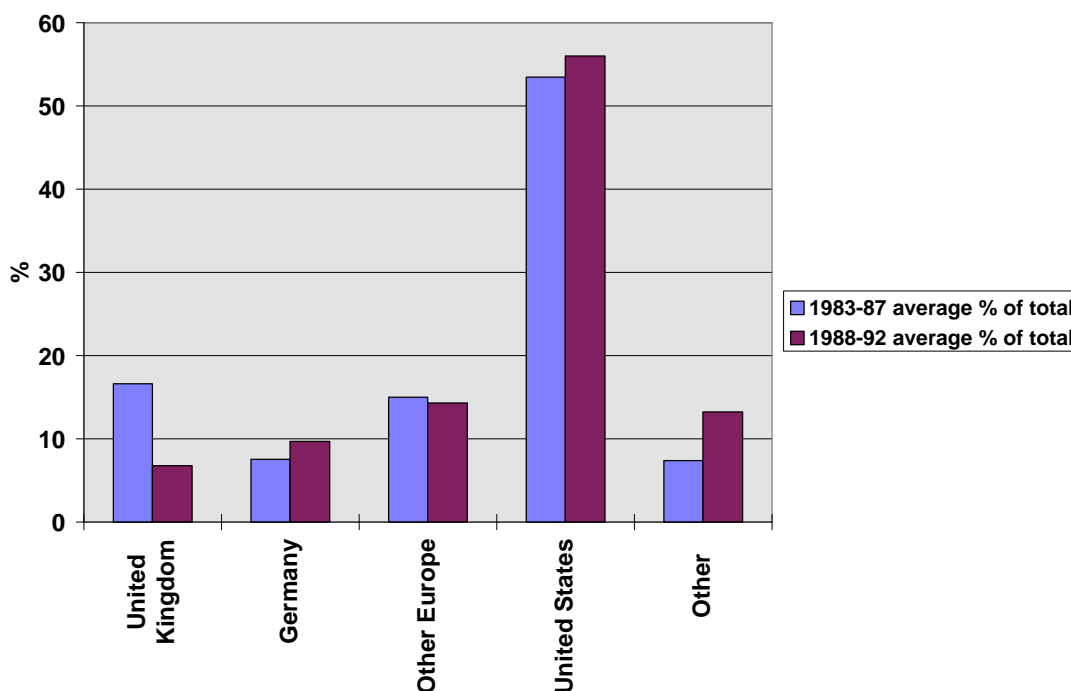
United States firms are the most important investors with respect to the value of investment, number of firms, and number of people employed. This may well

²⁷ OECD (1994) pg. 14

²⁸ Barry and Bradley (1997)

be a function of the number of Irish people that have moved to the US in the past. There is certainly a strong cultural link that has been forged between these two countries. The US firms entered the Irish market relatively early, in the 1970's, with investment in the electronic and pharmaceutical industries. Half of the total foreign investment since 1983 has been by US firms. The United Kingdom and Germany are the next biggest investors, followed by the Netherlands and France. This suggests that access to the EU is not the only driver of FDI inflows to Ireland, as these four countries are already able to access that market due to their membership status. Nonetheless, Ireland's membership of the EU is important as these European countries may well have invested elsewhere had Ireland not had duty-free access to the European market²⁹. Indeed, Ireland has now become part of an EU-wide integrated manufacturing system.

Figure 17: Foreign fixed asset investment flows by country, 1983-92



Source: OECD (1994)

Note: Excludes Shannon Free Airport industrial zone

²⁹ It is interesting to note that the OECD's reasons for negligible Japanese investment include Ireland's small domestic market and its location on the periphery of the European mainland. They then comment that Japanese investors seem to give particular value to being close to large markets, which seems at odds with their previous statement. Japanese investment in the EU constituted 18.3% of total outward Japanese FDI in 1992 (Bora 1996). It may be that Japanese investors focus on longer term issues rather than short term incentives, or perhaps they have had bad experiences in the past?

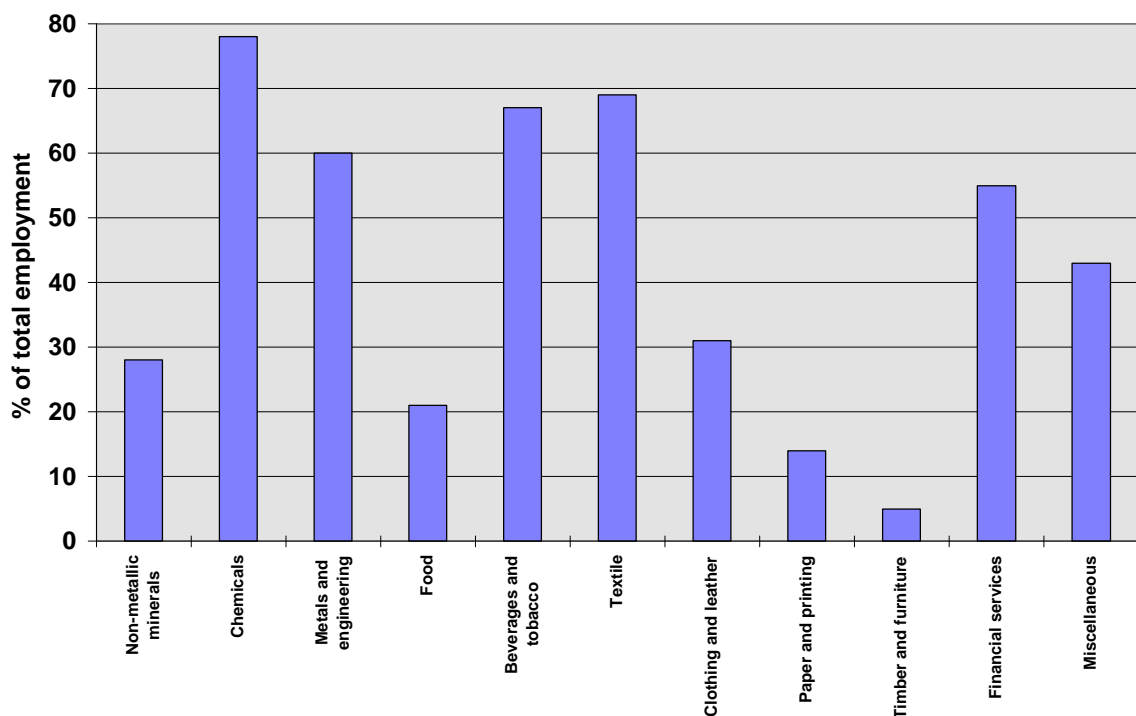
In terms of numbers of firms, in 1992 the US dominated with 387 firms operating in Ireland, equating to 38.2%. The UK had 19.8%, Germany 14.6%, Netherlands 5.5%, and Other countries accounted for the residual 21.8%.

Employment in the Foreign Sector...

Regarding employment, the OECD notes that the level of employment in areas such as financial services may be quite small, as they are at an early stage of development. In more mature industries where there has been FDI over a longer period of time, there is a higher level of employment. For instance, in the electronics sector there are over 250 firms employing more than 25000 people generating a quarter of Ireland's manufactured exports.

Industrial employment in Ireland is very dependent on foreign owned companies: as at 1992 half the employment in the industrial sector and 75% of its output were attributed to foreign firms. The following chart shows the percentage of employment in various sectors that is accounted for by foreign firms.

Figure 18: Employment by foreign companies by sector, 1992 (%)



Source: OECD (1994)

The average level of foreign firm employment in these sectors in 1992 was 44.8%, with 94200 out of 210400 employees working for a foreign firm. Barry and Bradley (1997) note that a large proportion of employment in the foreign owned sector of Irish manufacturing is in high technology sectors, and this fits with the fact that skill levels are higher in foreign industry than in indigenous industry.

It is worth noting that any expansion of activity in the modern sector has a flow-on effect in the service sector due to the linkages created by such activity. Multinational companies' purchases of Irish inputs are only a small proportion of their total sales, but in terms of purchases of domestic services per employee, it is higher than for indigenous firms. The OECD notes that the number of jobs in the service sector indirectly linked to those in the modern manufacturing sector was estimated to be 105% of direct employees in the modern manufacturing sector. This compared with only 80% in traditional manufacturing industries. In addition this link has become stronger over time while it has fallen or stayed the same for the other sectors.

O hUallachain (1984) commented that foreign firms seem to be predominant in sectors where linkages are relatively low in any case, and that the low level of integration of foreign firms may be quite typical. His study focused on the purchase of inputs, and his results showed a consistent lack of relationship between sectoral growth and inter-industry backward linkage. He therefore concluded that concern for improving linkages may be shortsighted given more pressing policy objectives. Perhaps a more important concern is that FDI may be squeezing out domestic entrepreneurship, as it seems more profitable to work for a foreign firm than to start up a firm.

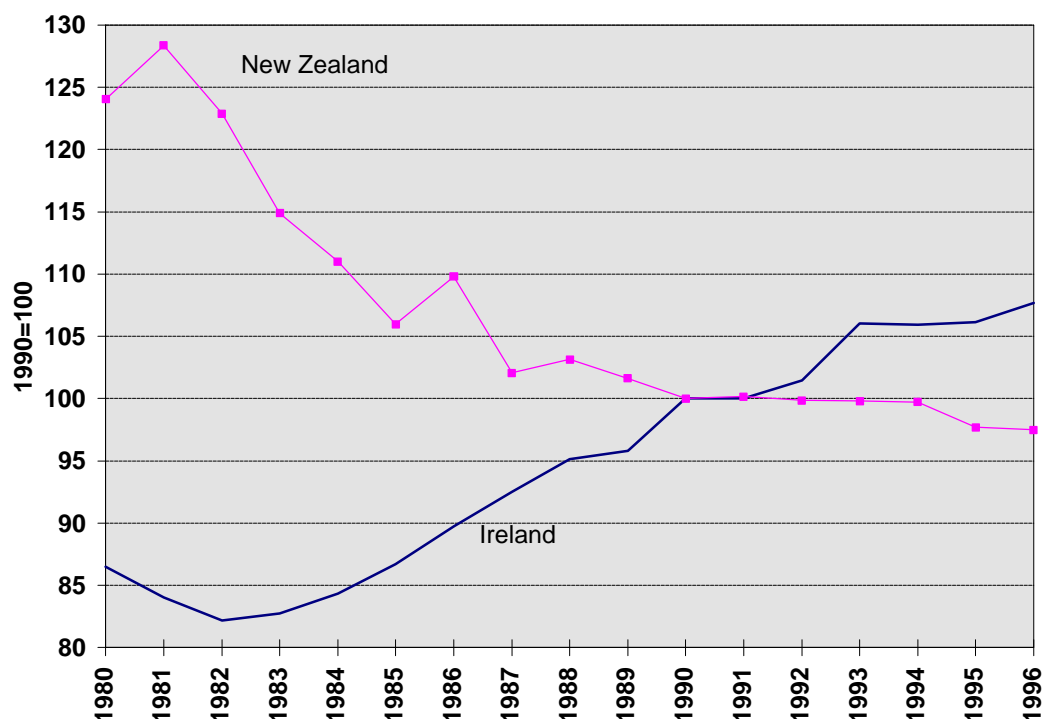
Earnings in the Foreign Sector...

The average wage in foreign industry yielded an annual pay packet of £16,000 in 1993. This was approximately 25% higher than in indigenous industry. Looking just at industrial workers, the average wage in the foreign dominated sectors of beverages/tobacco, segments of textiles, chemicals, and electrics and optics (including computers) was £14,000 compared to an average for the rest of manufacturing of around £12,000³⁰.

Growth in manufacturing wages in general has been steady. The average Irish manufacturing wage is Ir£14,400, which equates to approximately NZ\$36,900. This compares to an average New Zealand manufacturing wage of NZ\$34,100. The chart below illustrates the growth in real hourly manufacturing earnings in Ireland, compared with a steady decline in New Zealand.

30 Barry and Bradley (1997)

Figure 19: Real Hourly Manufacturing Earnings, 1980-96



Source: Calculated from OECD database, PCInfo

The following table examines manufacturing plants by nationality of ownership, and clearly shows the divergence between indigenous and foreign firms in wages paid, average size of plant, and output per employee.

Table 10: Manufacturing Plants: Characteristics by Ownership

	(1) Net O/P per person (Ir£000)	(2) Profit per person engaged (Ir£000)	(3) Wage (1) - (2) (Ir£000)	(4) Total persons engaged	(5) Total wage bill (3) * (4) (Ir£000)	(6) Average size of plant - persons engaged
Irish	30.8	17.7	13.1	111167	1456288	28.8
Other EU	55.3	39.3	16.0	33345	533520	104.9
- UK	71.2	52.8	18.4	12763	234839	114.0
- Ger.	30.7	17.3	13.4	10866	145604	108.7
Non EU	116.4	100.1	16.3	55491	904503	149.2
- US	126.2	109.8	16.4	42806	702018	160.3
Total foreign	93.5	77.3	16.2	88836	1439143	128.7
Total	58.6	44.2	14.4	200003	2880043	44.0

Source: Barry and Bradley (1997)

Foreign plants are generally much larger than their Irish counterparts, with higher net output per person and higher wages. Of the foreign firms, those originating in the US seem to have the largest plant size and highest output per person.

Role of Government Incentives with FDI

A Pro-active Approach...

The Irish government has for many decades taken a pro-active approach to attracting foreign direct investment. After a rather inward looking period from 1921 to the mid-1950's, Ireland turned to an outward-looking, export oriented strategy of economic development, with the attraction of FDI stated as a national economic policy objective³¹. The Irish authorities believe incentives are needed to attract foreign investment into Ireland because of its peripheral location and small domestic market. While they acknowledge that sound economic policies, reliable infrastructure and a competitive workforce are important, they feel that Ireland must offer a competitive investment package if it wants to attract internationally mobile capital. This is especially so in light of increasing competition between nations for foreign investment³².

Supportive Irish Agencies...

There are a number of Irish agencies that focus on the development of industry, which deal with incentives and support. The Industrial Development Agency (IDA Ireland) is an institution that concentrates solely on foreign investment promotion. This body was created under the Industrial Development Bill 1993, out of an agency called simply IDA which had been established in 1969 to promote general industrial development in Ireland³³. The refocusing of policy was very influenced by work from such contributors as Michael Porter. The new IDA seeks to attract "internationally mobile projects which can operate competitively and profitably from Ireland".

Priority sectors identified by the IDA are:

- electronics (semiconductors, PC systems, peripherals, communications);
- engineering (automotive components, aerospace, industrial electronics);
- healthcare (including pharmaceuticals, chemicals, medical devices and hospital products);

31 Cunningham, W.T. (1996)

32 OECD (1994) pg. 33

33 OECD (1994) pg. 39

- consumer products (sports and leisure, personal care products, fashion);
- financial services (banking, mutual funds, corporate treasury, insurance); and
- international services (teleservices, software, multimedia, centralised administration).

The first three priority sectors are high-tech areas, where the IDA hopes that the transfer of technology and skills will be large. The other three sectors are encouraged more for their employment creation effects. Particular firms within these six sectors are also evaluated for their export potential.

The IDA markets Ireland as an attractive location for foreign investment through its network of offices at home and abroad, with 14 overseas offices in 8 countries and 8 regional offices in Ireland. They emphasise the stability and growing competitiveness of the Irish economy (stable political and economic environment, stable currency, low inflation), the favorable tax regime, financial incentives, good skills base, and active participation in Europe, that is, accentuating the fact that they are on the periphery of a huge market and can access it duty free. The IDA currently has an annual budget of Ir£120 million (US\$165 million), of which around Ir£50 million (US\$69 million) goes to new foreign firms in the form of grants.

Another facet of the support for foreign industry is the Shannon Free Airport Development Company. This company administers the Shannon Free Zone, an industrial zone which includes an airport. This company aids export oriented businesses by offering packages to those firms setting up in the free zone. There are certain conditions for operating within the zone however, and firms need to get a license from the Minister of Enterprise and Employment.

An important centre is the International Financial Services Centre (IFSC), which was set up in 1987 mainly to attract investment in the financial services area, but also partly as an attempt to assist the re-development of the Dublin docklands area. Firms operating within this centre are eligible to take advantage of the variety of incentives offered to foreign investment in Ireland. The advent of the centre has significantly increased the number of banking and financial institutions operating in Ireland. In 1994 Dublin was the base for 237 international financial companies.

Recent Refocusing Of Incentives...

There has been a reorientation of industrial policy towards indigenous enterprises since the early 1990's, due to government concern that local businesses were lagging behind the international sector. Indeed Ireland has found itself in a dual economy type situation where there is a dynamic foreign owned sector and a slower growing traditional sector comprised of small Irish firms. There is increasing anecdotal evidence that foreign investment is squeezing out domestic industry, due to skills shortages and resource

constraints. Nevertheless, FDI continues to flow in despite evidence of labour shortages, wage pressures and an overheating economy. For example, Xerox has recently entered Ireland and employed 2000 people.

The reorientation of policy comprises of a plan to use repayable equity rather than grants for local firms, and an 'industrial cluster' idea where the government identifies 'promising niches' in which Ireland 'seems to have a comparative advantage' and directly supports firms entering those niches³⁴. Schemes which 'pick winners' have the potential to be very distortionary and inefficient, with evidence from several countries showing that governments can often be incorrect in their assessment of 'promising niches'.

Nevertheless, in order to facilitate these ideas, an agency called Forbairt was established at the same time as the IDA, with the purpose of providing state support services to indigenous Irish industry. Its aim is to help Irish firms become more competitive and achieve growth, and to encourage the establishment of more Irish firms. Support is provided across a range of commercial activities including management, product development, finance, and technical services.

The Irish authorities have said that this new focus on Irish enterprise development will not negatively affect foreign enterprises wishing to establish or expand in the Irish market, and that foreign firms will continue to receive support, particularly where the prospects for new job creation are high.

Tax Incentives...

Tax incentives have been one of the main carrots for overseas investors considering putting their money in Ireland. In 1956 Ireland introduced a corporate tax exemption of 50% for exports of goods manufactured in the area. By 1957 this had been extended to full exemption, with firms being able to access this benefit for up to 20 years under the applicable legislation. However, when Ireland joined the then EEC they were pressured to end the scheme, and so it expired in 1990 under the legislation. A look-alike scheme for the Shannon Free Airport Zone was subject to the same treatment.

Nevertheless, there are still sizeable tax reliefs available, notably the 10% tax rate which has existed since 1981, and in essence replaces the export sales tax exemption. The 10% rate is available for:

- "manufacturing" as defined in the legislation;
- "relevant trading operations" carried on within the Shannon Airport Zone; and
- international financial services carried on in the Dublin Custom House Docks Area.

³⁴ OECD (1994) pg 30

The Irish Government has just reached an agreement with the European Commission to introduce a single corporate tax rate of 12.5% by January 1, 2003. This rate will apply to all firms, foreign and domestic, and so will eliminate the preferential treatment given to foreign corporates under current corporate tax rules. However, the agreement can be viewed as a victory for the Irish Government as there were concerns that the EU would demand much higher tax rates.

Both Shannon and the Financial Centre offer tax depreciation on plant and machinery at rates of up to 100%, so tax depreciation can be offset against profit to reduce taxable earnings. There are also property tax advantages from setting up in the IFSC. Additionally, a foreign branch exemption was introduced in the Finance Act of 1995 which allows profits earned outside Ireland by branches of qualifying Irish resident companies to be exempt from tax. This was in order to encourage large international groups to establish regional operational headquarters in Ireland. There is also a 400% tax deduction for qualifying expenditure on research and development, which is available to those companies eligible for the 10% tax rate, and which can be utilised over a three-year period. There are conditions however, relating to capital and employment.

And Grants Too...

There are of course non-tax incentives as well. Grants are the most common incentive used, with almost 80% of foreign firms' new startups in Ireland being grant-aided. The IDA targets industries on the basis of growth potential especially in international markets, technological content, and quality of employment. Individual projects are then assessed for grant purposes according to the number and kind of jobs created and maintained, the value added, and the product's general export potential. In addition, the IDA must be satisfied that the project needs state funding, is commercially viable, and that the firm has an adequate equity base and a suitable company development plan. Projects must provide new employment or maintain employment that would not be maintained without public assistance, and increase output and value added in the economy.

Capital grants provide cash towards the cost of fixed assets for start-up and expansion projects. In areas of the country designated as 'disadvantaged' the grants can fund up to 60% of the fixed asset start-up costs, while in other parts of the country up to 45% support is available. For expansion projects the limit is 15% nation-wide, although special incentives may be negotiated for very large projects. Grants are non-repayable except in special circumstances such as wind-up of the firm or disposal of the grant-aided assets. The project's return to the economy is taken into consideration when deciding the level of grant aid. Qualifying assets include buildings, site development, building modification, and other project related equipment.

Training grants are usually given for greenfield projects. They allow 100% of the costs of training operatives to be funded in start-up companies, and up to 50% for existing firms. The grants can cover the cost of trainees' wages during their training in Ireland, and can cover the travelling expenses, wages and living costs of workers trained outside Ireland. Management training and the cost of instructors may also be covered, as are the costs of approved training courses. Training grants are not usually given alongside employment grants.

Employment grants allow employers in the manufacturing, services or agriculture industries to obtain a payment for increasing their workforce over a base level of employees. These grants are available for up to 24 weeks at a time, with the level of grant varying with the kind of employment being created.

Research and development grants give financial aid of up to 50% of the expenditure on consultants, wages, travel, living costs, patents, prototypes and technical assistance, with a maximum of IR£250 000 per project or Ir£500 000 per company.

Feasibility study grants give financial aid of up to 50% of expenditure on wages, expenses, travel, consulting and prototypes on projects such as market research, input sourcing studies, and the preparation of financial projections.

This wide range of grants are administered at the discretion of the IDA, and their level has ensured that Ireland has been one of the most intensive givers of grants to industry in the EC³⁵. The OECD suggests that over the 1980's the Irish government distributed a cumulative Ir£960 million (or nearly US\$1.5 billion in current dollars) in grant aid.

Other assistance...

Apart from the attractive tax rate and the grant system, the IDA also provides other incentives to encourage foreign investors to establish or expand in Ireland. These incentives include the provision of office and building sites, situated on the IDA's some 2500 acres of industrial sites nation-wide. The IDA also constructs factories and offices so that accommodation for new manufacturing and service industries is available. Rent subsidies are available as alternatives to capital grants, with the current maximum level of aid being a 60% subsidy for up to five years. Reduced rentals may also be negotiated. In addition, foreign firms have access to support programmes which provide industrial promotion and assistance including technical and marketing support.

Cost competition...

³⁵ OECD (1994) pg 34.

The wide range of grants and assistance programmes certainly enable foreign firms to offset or reduce many of their costs in the early years, and provide attractive incentives to invest in Ireland. It is interesting to note that for much of the 1950's-80's, grants were focused on capital rather than labour. This meant that those labour-intensive firms that did arrive during this period, for example assembly firms, often left due to the higher cost vis-a-vis Asia. Once grants became more labour focused this problem was partly resolved.

In the future though, Ireland will face increasing competition for FDI from emerging economies in Eastern and Central Europe, such as the Czech Republic and Hungary. As wage costs rise in Ireland due to labour shortages, and congestion rises, these emerging economies will look more and more attractive as low cost European producers. This is particularly so for the Czech Republic and Hungary as they are near the front of the queue to join the EU, and they already have bilateral agreements with the EU nations. It will be interesting to see if Ireland can maintain the flows of FDI that it experiences at the moment into the future.

The New Zealand Approach...

New Zealand operates a fairly hands-off policy towards foreign investment. The Overseas Investment Commission has statutory powers to regulate foreign investment, but the majority of applications are approved. There are special conditions related to the sale of land, and 'strategic' assets are out-of-bounds, as detailed in the Coalition Agreement. Beyond this though, New Zealand has no real mechanisms operating to influence either the type or the sectoral destination of foreign investment inflows. There are certainly no official incentives for firms entering New Zealand. There is thus a marked difference between Ireland and New Zealand's treatment of foreign capital.

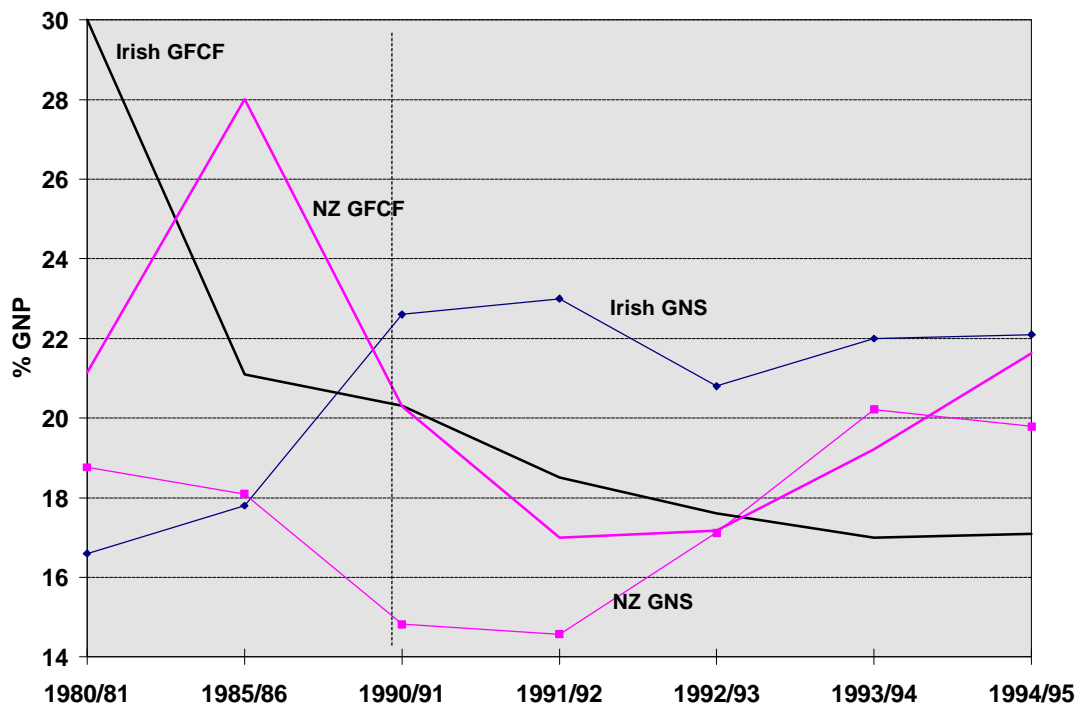
7. SAVINGS AND INVESTMENT

Total Economy...

The early 1980's in Ireland was characterised by a shortfall of domestic savings relative to capital formation, as reflected in the large current account deficit. By the end of the decade the savings less investment (S-I) relationship had turned positive, mainly due to a decline in investment rather than an increase in aggregate savings.

The chart below depicts savings and investment for the whole economy for both Ireland and New Zealand. It is notable that Irish gross fixed capital formation has been declining since 1980. Savings increased by 6 percentage points between 1980-90, but has remained fairly steady from 1990 onwards. For New Zealand the story is rather different. Gross fixed capital formation has consistently, with the exception of one year, exceeded savings, although the relationship has become closer towards the end of the period³⁶.

Figure 20: Total Economy Savings/Investment



Source: Irish Central Statistics Office, and PCInfos

Note: GNS (Gross National Savings), and GFCF (Gross Fixed Capital Formation)

³⁶ It is worth noting that savings data in particular is often unreliable. However, these statistics are the IMF's best guess.

It is interesting to note that gross fixed capital formation in New Zealand has generally exceeded that in Ireland since the early 1980's, yet Ireland has experienced such rapid growth. Indeed, surprise has been expressed by some that the growth in Ireland followed a decline in investment. Leddin and Walsh (1997) suggest the puzzle may be explained by the altered structure of the investment, with the share of private investment, predominantly FDI, in total investment growing. The higher productivity of this private investment is reflected by a lower incremental capital/output ratio, as compared to public sector investment.

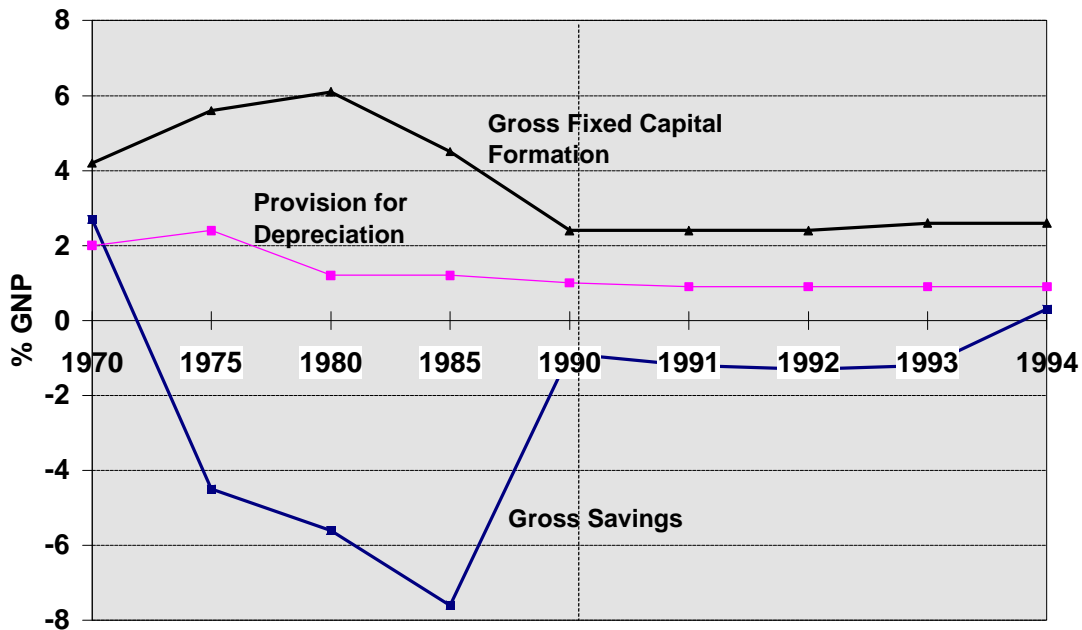
Leddin and Walsh also suggest that perhaps the earlier public investment in infrastructure, both physical and social, had a long gestation period and is now enhancing the private sector investment productivity. Certainly public investment in the late 1970's and early 1980's was high, and was focused mainly in infrastructure and utilities. Manufacturing investment in that time tended to be capital-intensive, and the heavy investment in utilities has left a legacy of excess capacity that is not yet fully utilised. The IMF (1996a) note that recent investment is less capital-intensive, especially that in the modern sector, and is far more productive, particularly with the increase in skilled workers.

It therefore seems that the quality of investment is an important issue to think about when analysing the saving/investment behaviour within an economy. Looking only at the levels of investment may over-simplify the relationships between investment and other variables, for example the current account. With investment in New Zealand higher than that in Ireland, yet growth much lower, it could suggest that the quality of New Zealand investment may be lacking. The sectoral composition of investment and the availability of other resources such as skilled labour, are obviously other important factors though. The figures also suggest that perhaps the focus on the savings/investment behaviour of New Zealanders is overemphasised, since the numbers are relatively close to those of Ireland yet the outcomes are quite different.

The Government Sector...

The figures for the total economy mask the behaviour of savings and investment for particular groups within Ireland. Looking first at government investment, it is notable that as a percentage of GNP it fell from 6.1% in 1980 to 2.4% in 1990. The Irish government reduced investment expenditure in line with attempts at fiscal consolidation, both in the early 1980's and in 1987. The 1987 consolidation was more effective at reducing the deficit due to the expenditure constraint approach rather than the tax increase approach, thus decreasing public sector dis-saving quite sharply.

Figure 21: Government Sector Savings/Investment



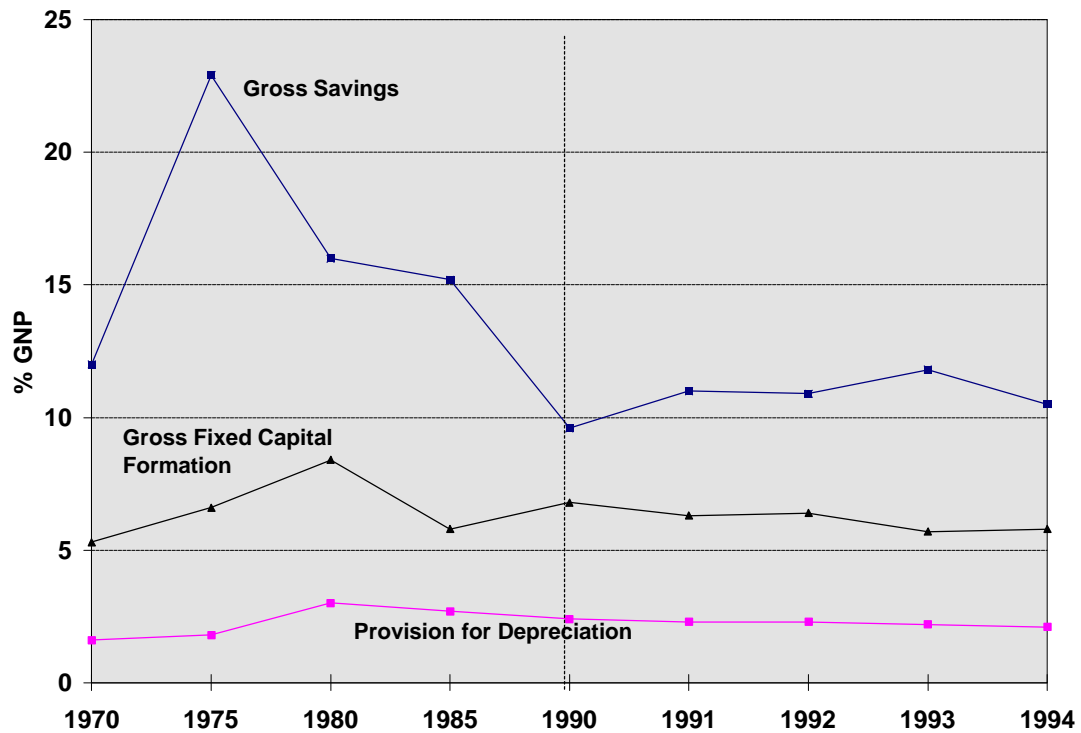
Source: Central Statistics Office

The Household Sector...

It is noticeable that as public savings have increased (that is, the public sector deficit decreased) the private sector savings fell. For instance, in 1980 the government sector savings were -5.6% of GNP, while household sector savings were 16% of GNP. In contrast, in 1990 government sector savings were -0.9% of GNP while household sector savings were 9.6% of GNP. This suggests a Ricardian Equivalence type relationship between private and public savings,

whereby private sector savings fall in response to an increase in public sector saving as it suggests lower tax liability in the future. The moderation of growth in real wages (perhaps via wage agreements) is also suggested to have had a negative impact on savings. The chart below illustrates the fall in savings in the household sector, along with the relatively static trend of investment.

Figure 22: Household Sector Savings/Investment



Source: Central Statistics Office

Household saving is higher in Ireland than in New Zealand, but it is interesting to note that the OECD talks about the historical Irish preference for holding property assets. In fact, the high rate of home ownership has been identified as one of the reasons why the Irish stock market is relatively undeveloped³⁷. Demand for housing has also been fuelled by tax system incentives. The recent growth in Ireland has additionally increased demand for housing mortgages, with the real estate and construction sector accounting for more than half of the increase in credit to the domestic private sector³⁸. Residential construction as a percentage of GDP was hovering around 5% for both Ireland and New Zealand in 1995.

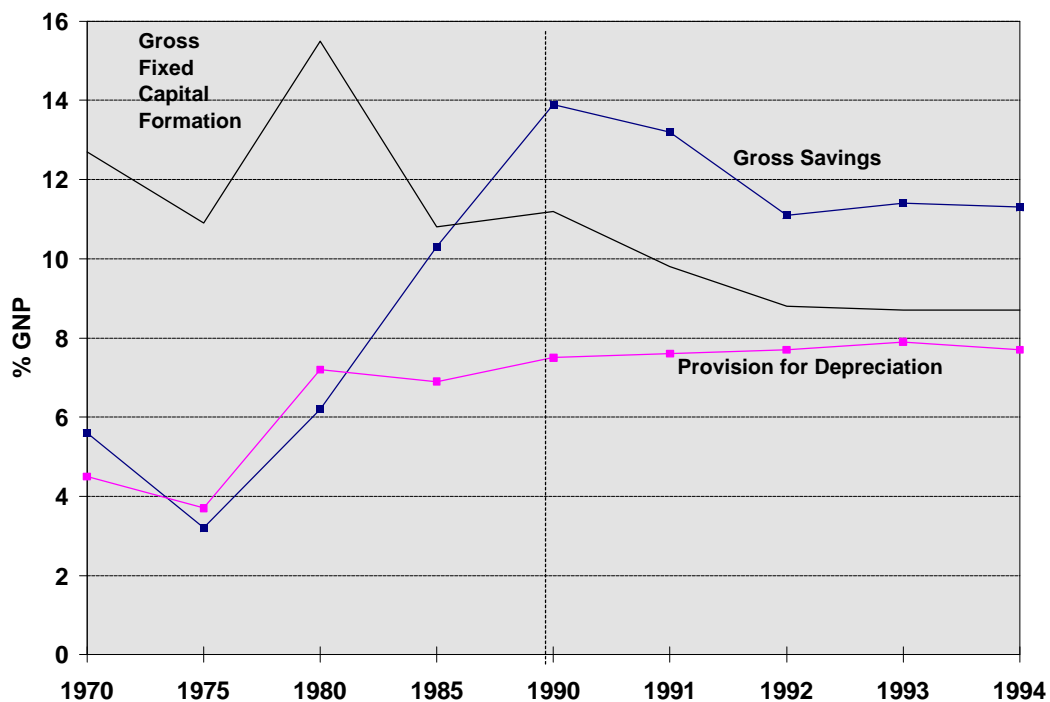
³⁷ OECD (1994) pg 43

³⁸ OECD (1997) pg 38

The Business Sector...

With respect to the business sector, Walsh (1996) states that private spending on domestic capital formation declined when the level of foreign direct investment in the economy was increasing, and that this meant Irish companies were investing more and more outside the country. Certainly investment has been on a downward trend, particularly since around 1980. The IMF suggest that this was partly a result of exchange restrictions being lifted and businesses being able to diversify and expand abroad in response to the small domestic market size and peripheral location. Rising real interest rates in the 1980's may also have deterred investment. Recently strong economic growth has arrested the sharp fall in investment, although it is still lower than the EU/OECD average³⁹.

Figure 23: Business Sector Savings/Investment



Source: Central Statistics Office

The increase in business sector saving can be attributed to a marked improvement in profitability, coinciding with wage moderation and productivity increases resulting from structural changes in the manufacturing sector. The IMF comments that the failure of investment to increase with profitability can

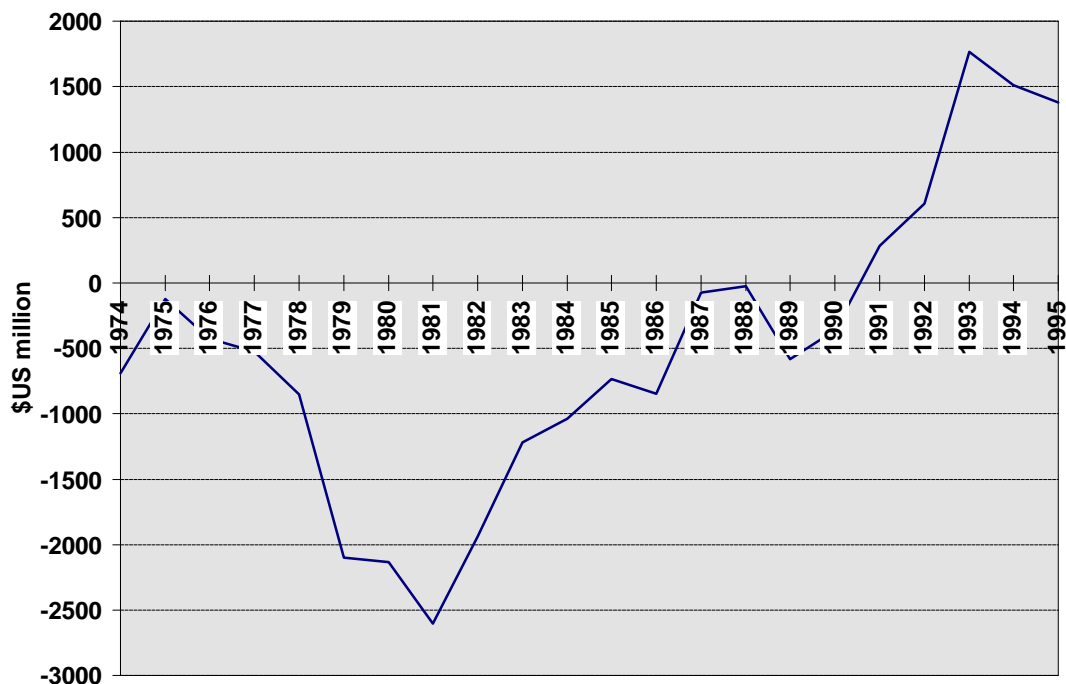
³⁹ IMF (1996b)

again be attributed to the small market size. This may be a problem that New Zealand faces also.

8. CURRENT ACCOUNT

The current account has been one of the major 'success stories' in Ireland. Coming from a large current account deficit in the early 1980's Ireland now has a sizable current account surplus. This sharp turnaround is illustrated in the chart below.

Figure 24: Irish Current Account Balance



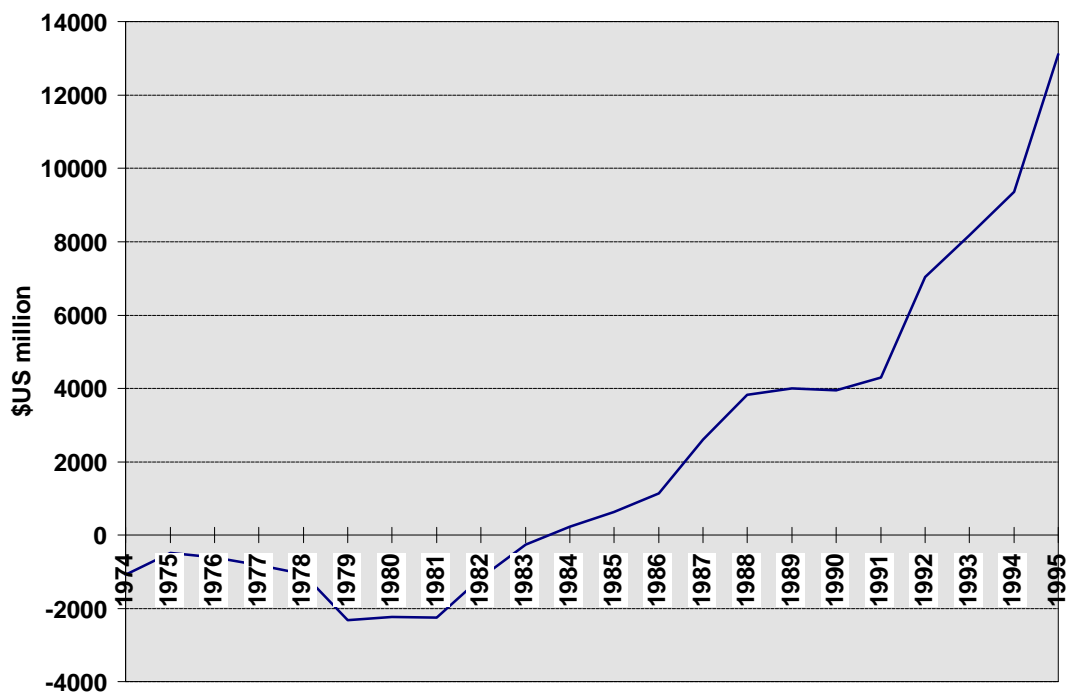
Source: World Bank database, PCInfos

However, one point to note with the Irish current account data is that the method of classifying the activities of foreign multinationals and firms in the IFSC may exaggerate the size of the surplus. The IMF suggests that these distortions may overstate the current account surplus by as much as one-third. Nevertheless, the sharp turnaround in the current account in the 1980's cannot be simply explained by this alone, hence the interest in the underlying components of the account.

Trade Performance...

The improvement in the current account stemmed partly from the dramatic improvement in trade performance, illustrated in the chart below. From 1979 to 1995 the visible trade balance moved from a deficit equivalent to 17% of GDP to a 19% surplus, due mainly to the growth of exports⁴⁰. This may be due to the government policy of attracting FDI, which was directed into dynamic, export-oriented sectors.

Figure 25: Merchandise Trade Balance



Source: World Bank database, PCInfos.

The composition of merchandise trade also altered, with high-tech sectors making a large contribution to the growth. In terms of the Standard Industrial Trade Classification (SITC) classes, while SITC 0 (Food and Live Animals) grew 93% between 1987 and 1995, SITC 5 (Chemicals) grew 322% over the same period. Pharmaceuticals, which comes under SITC 5, was a notable performer, with growth of 458% over the 9 year period. SITC 7 (Machinery and Transport Equipment) grew 201%, with one of its high-tech components, Office Equipment, growing at 179%⁴¹. Walsh (1996) notes that a small number of

⁴⁰ Walsh (1996)

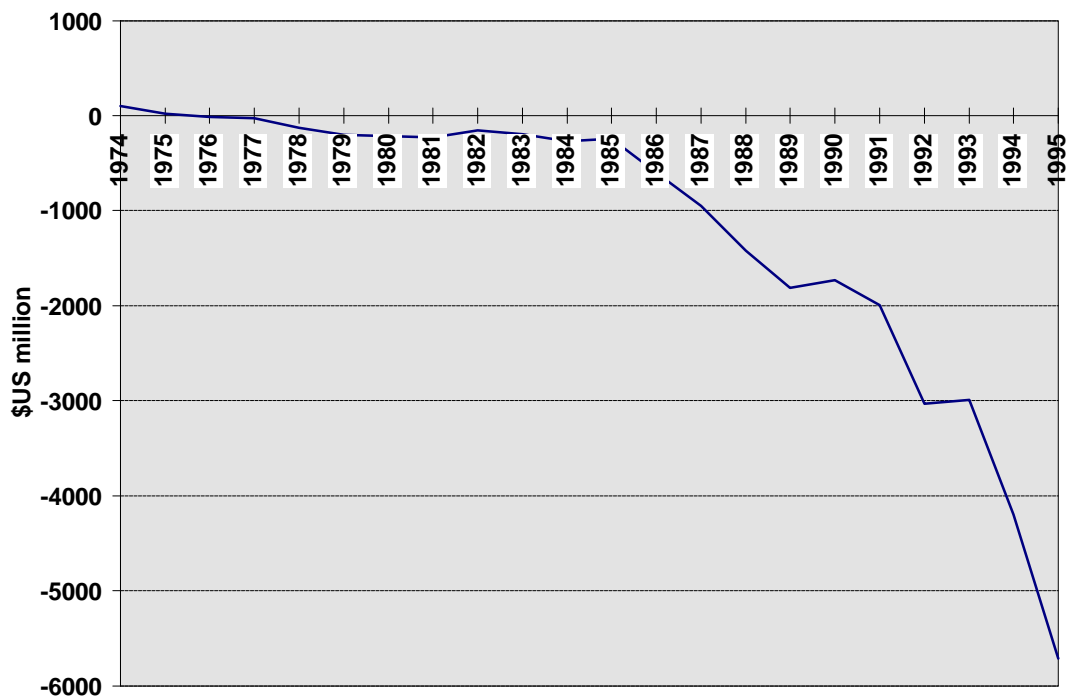
⁴¹ Growth rates calculated from data given in OECD (1997) pg. 174.

non-traditional, high-tech sectors, including organic chemicals and pharmaceuticals, contributed disproportionately to the boom in exports. He also comments that these sectors are controlled in the main by Irish subsidiaries of multinational firms, with 75.6% of all manufacturing exports originating from foreign firms in 1993.

Services...

Trade in services has also grown, although imports of services still far outweigh exports. Nevertheless, exports of services have picked up, particularly since 1989, which could be attributed to the International Financial Services Centre beginning to operate at a normal level, since it only opened in 1987.

Figure 26: Balance on Services

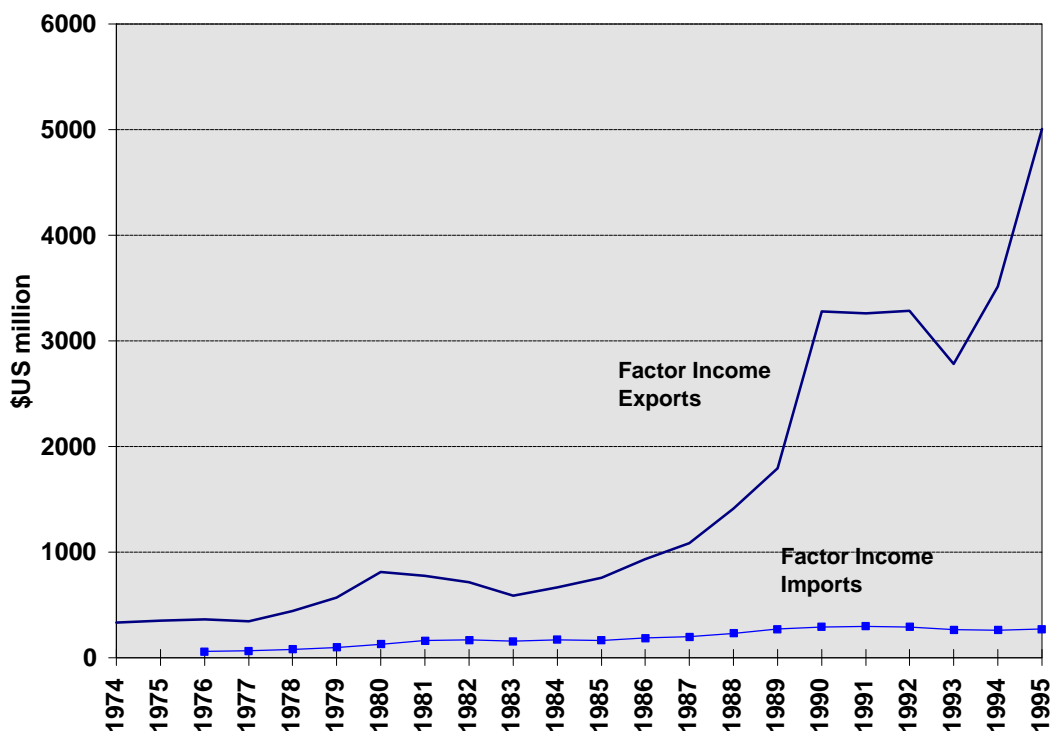


Source: World Bank database, PCInfos.

Factor Income Flows...

Apart from trade in goods and services, the current account also incorporates factor income flows. The new Irish system of national income accounting, which implements some of the methodological changes recommended in the new European System of National and Regional Accounts, treats the entire profits of an Irish-based multinational as a factor income outflow in the current account. Reinvested profits are then treated as an inflow on the capital account. Factor income outflows have been far greater than inflows in recent years, no doubt reflecting the level of foreign activity in the economy. Factor income inflows have been static however.

Figure 27: Factor Income Flows

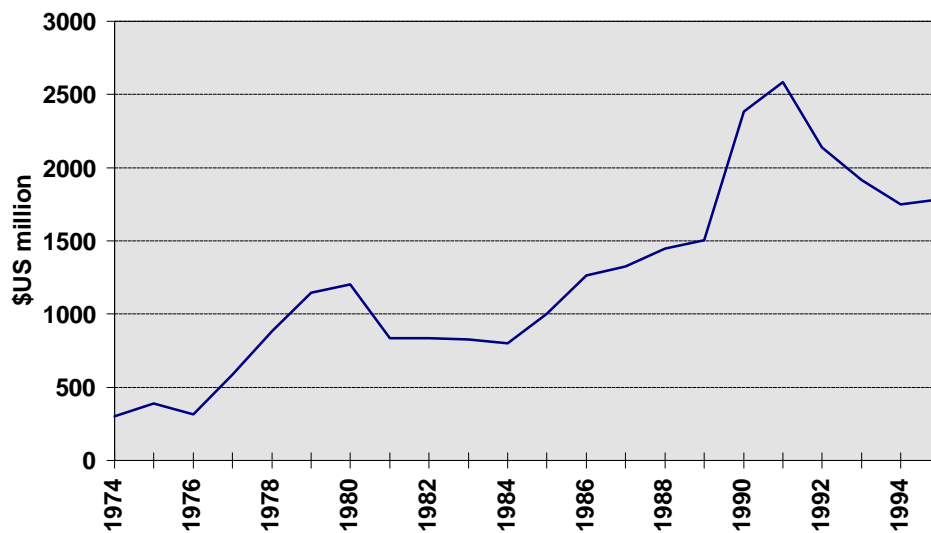


Source: World Bank database, PCInfos.

Transfers...

The final component of the current account is transfers, both official and private. The dominant feature of this category is transfers from the European Union, which include subsidies to particular areas such as agriculture, and payments towards infrastructure and regional development. These transfers are large, for example, in 1992 the total EU transfers as a percentage of GDP were 5.7%. However, Ireland's share of EU structural funds is likely to be reduced significantly in the next round of EU funding.

Figure 28: Total Net Current Transfers



Source: World Bank database, PCInfos.

Leddin and Walsh comment that there is evidence among a few small countries that have received an exceptionally large volume of aid (generally more than 15% of GDP) that there is a high correlation between aid and investment. That is, these countries are directing aid money into infrastructure projects and the like, rather than consumable items. They note the possibility that EU assistance to Ireland falls into this category of effective, growth promoting assistance⁴². However, since around 75% of the transfer money is channeled into the agricultural sector, in particular CAP subsidies, it seems unlikely that these transfers have had a large influence on growth. It is more likely that the transfer money has simply sustained the agricultural sector at a larger level than it

⁴² Leddin and Walsh (1997)

otherwise would be at. It may also have created some demand for sectors that serve the agricultural sector.

Current Account Components...

The 1997 OECD report on Ireland gives components of the current account as percentages of GNP as follows:

Table 11: The Current Account 1991-95 (% of GNP)

	1991	1992	1993	1994	1995
Trade balance	8.1	13.0	16.8	17.3	21.3
Royalties	-1.9	-2.4	-3.1	-3.9	-4.5
Other services	-0.8	-2.1	-1.6	-2.6	-3.4
Factor incomes					
Company earnings	-9.2	-10.7	-11.1	-11.2	-14.4
National debt interest	-4.0	-3.4	-3.5	-3.5	-3.0
Other factor incomes	2.3	2.2	2.4	3.2	3.2
Current transfers	6.3	4.6	4.6	3.7	3.3
Current account balance	0.8	1.2	4.3	3.1	2.7

Source: OECD (1997)

This highlights the importance of trade to the Irish economy, and also the size of the outflows of company earnings. The other point to note is that the Irish current account balance would be slightly negative without the current transfers (predominantly EU transfers). Nevertheless, the turnaround in the account has not been driven by transfers, since they have been at a high level for many years, not just since the mid 1980's.

Taking a Savings/Investment Perspective

One way to look at the current account is to regard the balance as national saving less domestic investment. The dramatic turnaround of Ireland's current account could therefore be interpreted as reflecting changes in the saving/investment behaviour within Ireland.

The previous section on saving and investment outlined the various trends that have emerged recently in Ireland. Most notable were the decline in public sector dis-saving accompanied by fairly static private⁴³ sector saving, and the drop in both government and business investment. The view of the IMF (1996b) is that fiscal consolidation, higher business sector saving due to higher profitability, and declining domestic investment were the main contributing factors in Ireland's current account turnaround.

The IMF further note that a number of structural factors that underlie saving/investment behaviour may be important in understanding the current account, including the stage of development, changes in the terms of trade, demographics, and fiscal policy. They find that the current account balance is positively related to the level of income in Ireland relative to that of the USA, that is, as Ireland has matured the need to run a deficit to build up capital stock has declined. The fiscal consolidation was also found to be a significant positive influence on the current account. With respect to demographics, a lower dependency ratio may have helped to improve the current account as it allows greater savings. Indeed, total economy savings have been on an upward trend since around 1980 (although admittedly this is mainly due to business saving and less government dis-saving).

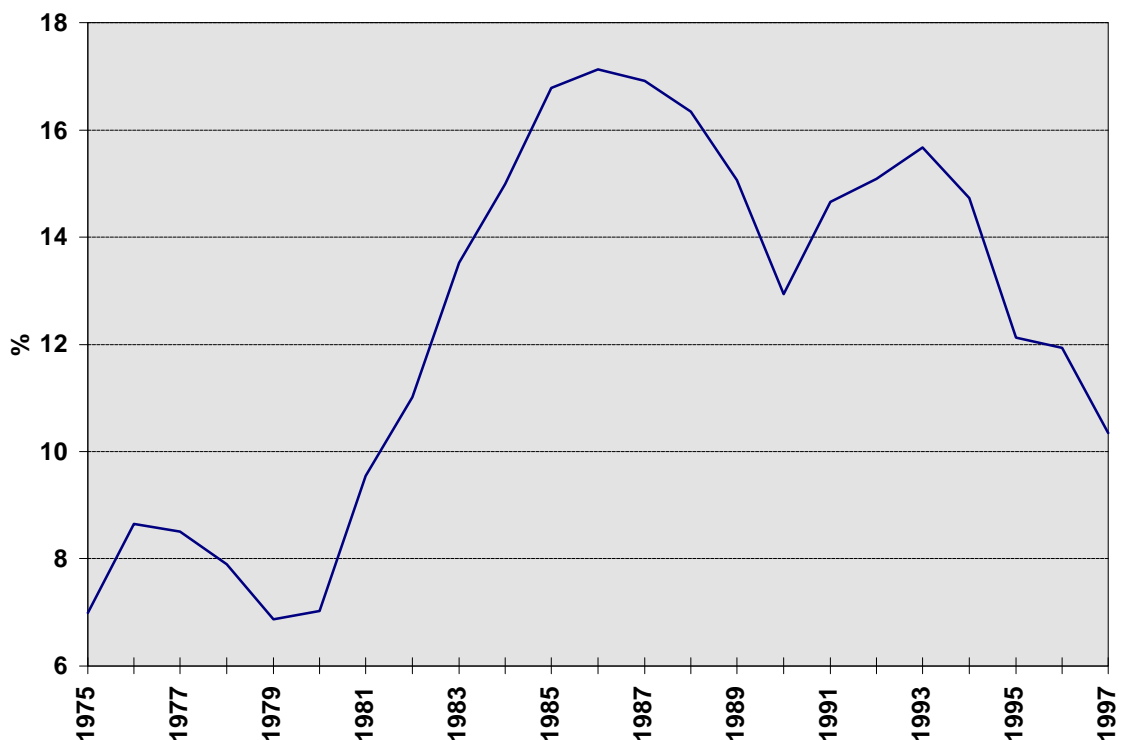
43 Household plus Business savings.

9. UNEMPLOYMENT

Walsh (1996) notes that even though Ireland experienced the fastest rate of expansion of employment in Europe between 1985-95, it was still not adequate to absorb all of the high natural growth rate of the labour force and the outflow from farming. With a birth rate peaking in 1980, the ratio of school leavers to population is much higher than in the rest of the EU. Female participation rates have risen substantially, and net immigration has been increasing. Nevertheless, these factors have served to increase the pool of available labour in the economy, and have been crucial in dampening down labour market pressures in recent years. However their influence is declining of late, and there are indications that labour costs are rising.

The fact that unemployment is still so high after 10 years of rapid growth points to a severe hysteresis problem in Walsh's view. This view is shared by Santaella (1994) in his paper on Irish unemployment. He comments that the unemployment rate has reached a new maximum at every business cycle trough bar one since the 1970's, and during peaks it has never fallen below the corresponding level for the previous peak. The fact that low points in the business cycle seem to have had permanent effects on the rate of unemployment is commonly taken as evidence of hysteresis.

Figure 29: Irish Unemployment (%)



Source: OECD Outlook, PCInfos

Long-Term Unemployment...

Ireland's main problem is with long-term unemployment, rather than short-term unemployment.

Table 12: Long-term unemployment (1995)

	Unemployed as % of labour force			Workers unemployed more than 1 year as % of total unemployment		
	Short-term	Long-term	Total	Female workers	Male workers	All workers
Ireland	4.7	7.5	12.2	49.4	63.7	58.2
New Zealand	4.9	1.4	6.3	18.0	26.8	22.9

Source: OECD (1997)

Long-term unemployment rose during the difficult years in the 1980's, rose further in recessions, and simply stabilised during upturns. Almost 60% of the unemployed in 1995 had been out of work for over a year, which reduces the probability of finding a job quite significantly.

Long-term unemployment is most prevalent amongst men, particularly older ones, as their relatively lower level of education does not favour them in the job market. Since traditional sectors have downsized, and more high-tech or service jobs are emerging, these older workers are at a disadvantage compared to the group of young well-educated workers entering the labour force. The long-term unemployed are unlikely to be able to ease Ireland's labour shortage, as their education and skills are simply insufficient. The long-term unemployed also contains a large group of people looking for their first job, and typically these people left school with no qualifications. Short-term unemployment is a relatively greater problem for youth though.

Table 13: Unemployment by duration (% of total unemployment), 1995

	Less than 1 year	1-2 years	2 years +
Male	33.1	16.7	50.2
<i>15-24 yrs old</i>	49.1	20.6	30.3
<i>25+ yrs old</i>	27.1	15.2	57.7
Female	47.7	20.3	32.0
<i>15-24 yrs old</i>	55.9	21.5	22.6
<i>25+ yrs old</i>	43.8	19.8	36.4
Total	38.5	18.1	43.4
<i>15-24 yrs old</i>	51.9	20.9	27.2
<i>25+ yrs old</i>	33.2	16.8	50.0

Source: OECD (1997). Note that the figure for long-term unemployment differs from the previous chart - this is due to different data sources being used by the OECD.

The long-term unemployment problem is geographically concentrated in certain areas of Dublin, Cork and Limerick, which also experience high rates of crime and drug abuse. However, unemployment rates for Ireland's eight regions were grouped within 3 percentage points of the national average in 1995.

Participation Rates...

In addition to high unemployment, Ireland also has relatively low participation rates. In 1995, 63% of the 15-64 age group was economically active, compared with the OECD average of 71%. This is predominantly due to the relatively low rate of female participation — 48% in 1995 compared with the OECD average of 62%. Young females have a low participation rate due to higher numbers gaining tertiary education, while older woman have typically taken early retirement. Even so, the female participation rate has risen, as more education encourages woman to seek work. Changing attitudes to woman at work, and declining fertility rates have also increased the female participation rate.

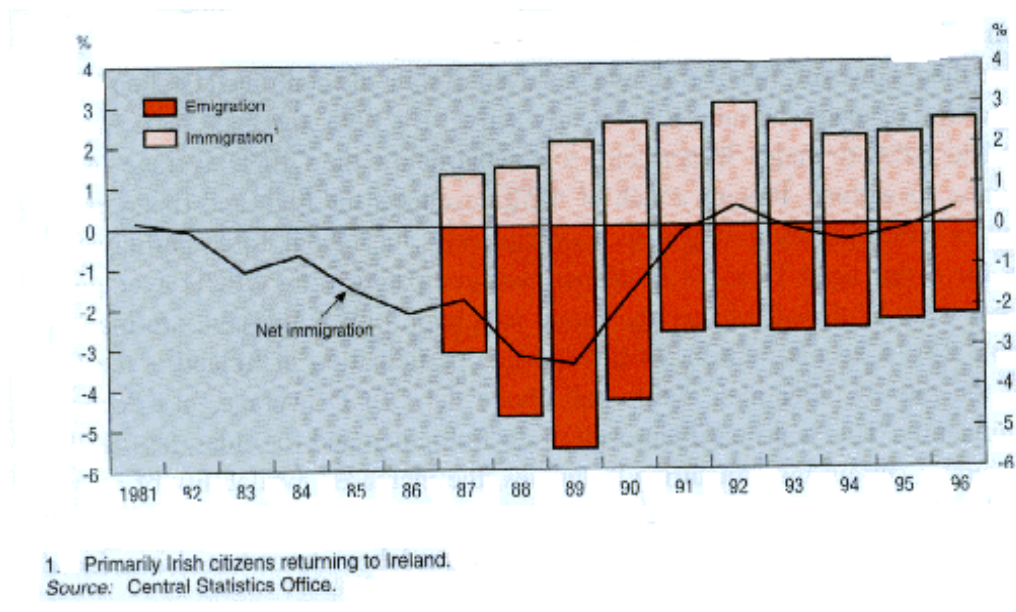
The male participation rate is a little below the OECD average, mostly due to the increasing numbers of young men seeking tertiary education. Older men have also retired early, due to declining demand for older less-educated workers and the increased availability of pensions and welfare as they approach retirement age.

Migration...

Ireland has also experienced large levels of emigration in response to conditions in the domestic labour market as compared to labour markets overseas⁴⁴. This of course means that the level or rate of unemployment does not accurately reflect labour market conditions in Ireland. The United Kingdom is a particularly popular destination for Irish workers, especially given the lack of controls and the proximity, common language, and number of Irish people already living there. As such, it seems that the Irish and UK unemployment rates seem to follow similar trends. The US is also a popular destination.

Most migrants that leave Ireland are young, educated people who go abroad to find work or take up employment, leading to the concern of 'brain-drain'. However, over half of migrants return to Ireland, and this is particularly encouraged by the fact that employers have appeared to like hiring graduates with overseas work experience, rather than recent graduates in Ireland. This may not be the case so much any more though, considering the increasing skills shortages in Ireland.

Figure 30: International Migration (% labour force)



Addressing Unemployment...

In order to help address the problem of unemployment the Training and Employment Authority (FAS) was established in 1988 under the Labour

44 OECD (1997) pg. 71

Services Act 1987. Its functions are to oversee the operation of training and employment/recruitment services, run an advisory service for industry, and to provide support for co-operative and community based enterprise. The agency is run by a wide collection of people representing trade unions; employer and youth interests; and the Departments of Education, Finance, Enterprise Trade and Employment, Social Community and Family Affairs. Active labour market programmes are also run by the Department of Social Welfare. Total expenditure by all agencies on these programmes totalled £698.2 million in 1995⁴⁵.

Looking at the impact of taxes and benefits on incentives is also a priority of the Irish government. Reducing the high marginal tax rate, changing the rules of the unemployment benefit to strengthen work incentives, reforming the child benefits system which currently favours the unemployed, and improving the system of housing related benefits, were all suggestions made to Ireland under the OECD Jobs Study in this area.

Another area which has been suggested as needing addressing is the institutional features of the labour market, in particular the method of wage bargaining, which some say has resulted in the Irish labour market becoming too inflexible to react to changes in the environment. Santaella notes that the wage agreements have helped to preserve a rigid structure of relative wages that may not correspond to productivity differentials and structural changes occurring in the economy. This could well prove to be a large constraint on growth in the future.

Unemployment and Education...

Sheehan notes that in 1980, those leaving school with no qualifications had an unemployment rate of around 20%, those with intermediate/group certificate (NZ School Certificate level) had a rate of just under 10%, while those with leaving certificate (NZ UE level) had an unemployment rate of around 5%. By 1991, the data looks a little different, with those with no qualifications having around 53% unemployment, intermediate/group certificate with a rate of just over 30% and those with leaving certificate with a rate of around 11%.

⁴⁵ OECD (1997) pg. 97

The OECD 1997 report on Ireland provides detailed information for 1995 on the unemployment rate by level of education.

Table 14: Unemployment and Education (% in 1995)

	15-24 years	25-34 years	35-44 years	45-54 years	55-65 years	Over 65 years	Total
U/e rate by level of education							
Primary	45.5	31.6	24.5	15.5	9.1	1.9	19.0
Lower secondary	27.6	19.1	12.6	10.0	9.7	6.4	17.3
Upper secondary	14.6	7.8	6.1	5.9	6.8	2.7	9.5
3rd level, non-uni	9.6	5.2	4.0	5.6	3.2	0.0	5.9
University	8.5	4.4	3.1	2.8	2.5	0.0	4.0
<i>Total</i>	<i>19.4</i>	<i>11.3</i>	<i>11.0</i>	<i>10.2</i>	<i>7.7</i>	<i>2.4</i>	<i>12.1</i>
Share of the u/e							
Primary	4.9	5.1	7.8	7.9	2.9	0.2	28.8
Lower secondary	12.1	11.1	7.8	3.9	1.4	0.2	36.4
Upper secondary	10.6	6.8	4.7	1.9	0.7	0.1	24.8
3 rd level, non-uni	2.2	1.9	1.1	0.7	0.2	0.0	6.1
University	0.9	1.5	0.8	0.5	0.2	0.0	3.8
<i>Total</i>	<i>30.6</i>	<i>26.4</i>	<i>22.3</i>	<i>14.9</i>	<i>5.4</i>	<i>0.5</i>	<i>100.0</i>

Source: OECD (1997)

The figures show that unemployment is concentrated among persons with only a primary or lower secondary school education, in fact 65.2% of unemployment comes from this group. Of concern must be the fact that this group accounts for about half of the labour force in 1995, as detailed in the table below.

Table 15: Unemployment and the rise in educational qualifications

	U/e rate	Highest level of educational qualifications				
	1995	1989	1991	1992	1994	1995
	% of labour force aged 25-64	% of population aged 25-64				
Primary	18.6	36.9	33.2	31.7	28.1	26.9
Lower secondary	14.7	25.2	26.6	26.1	26.7	25.9
Upper secondary	7.6	23.2	24.3	25.3	26.7	27.3
3rd level, non-uni	4.9	7.4	7.9	8.6	9.7	9.8
University	3.5	7.3	8.0	8.3	8.8	10.1
Weighted u/e rate		12.9	12.6	12.3	11.9	11.7

Source: OECD (1997)

Note: The weighted unemployment rate weights the 1995 unemployment rate for each education level by the share of the population aged 25-64 with that educational level.

It seems that despite the improvements in the education system in recent years, there is still a problem with youth unemployment, with 30.6% of 15-24 year olds being unemployed in 1995. Generally though, those persons that complete tertiary level education do experience a far lower rate of unemployment, particularly once they reach the 25+ age group.

The proportion of the labour force with only primary education fell dramatically from 36.9% in 1989 to 26.9% in 1995, reflecting the retirement of many people who completed their education before the introduction of free secondary schooling in 1968. The share with tertiary education had risen to nearly 20%, and the OECD report suggests that rising education levels have reduced structural unemployment in Ireland, together with other factors such as changes in the tax and benefit systems which increased work incentives.

10. EDUCATION

According to the IMD World Competitiveness Report, 1996, Ireland has an exceptional availability of skilled people, and has the most relevant educational system in Europe for a competitive economy.

The following table, extracted from a table in OECD (1997) shows the educational attainment in Ireland and New Zealand in 1994.

Table 16: Educational Attainment (% of population 25-64 years of age by the highest completed level of education), 1994

	Ireland	New Zealand
Lower secondary school	55	43
Upper secondary school	27	34
Non-uni tertiary education	10	14
Uni-level education	9	9
Total	100	100
Govt spending on education as % GNP	5.6 (1998 Budget)	6.3 (1997/98 Budget)

Source: OECD (1997), The Treasury

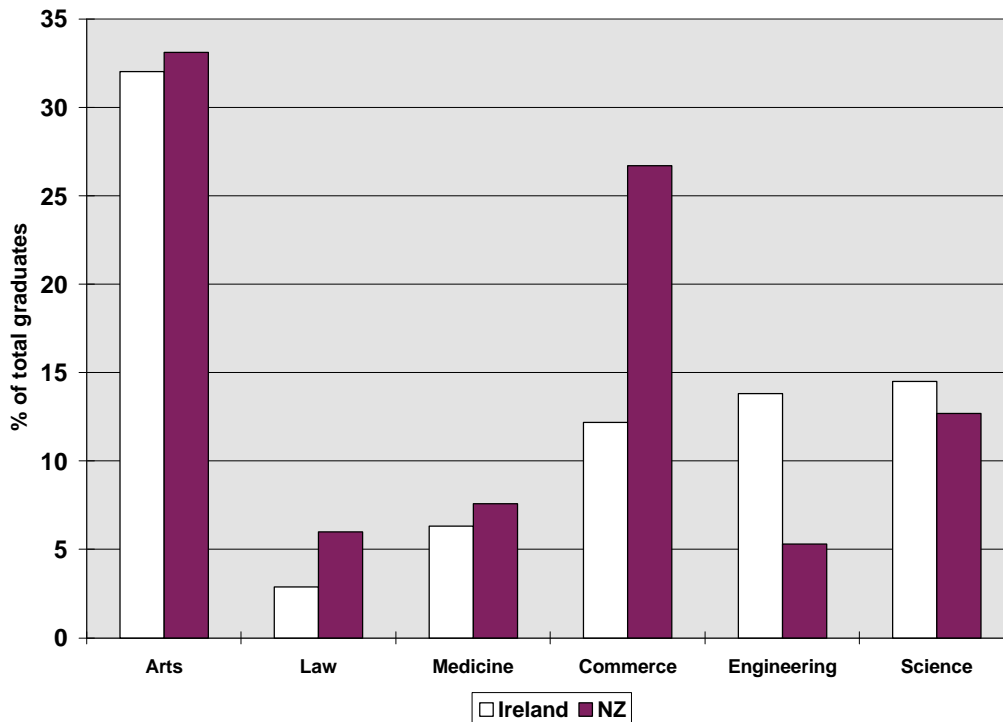
It can be seen from this table that the educational attainment in New Zealand is slightly higher than that in Ireland. Nevertheless, much emphasis has been put on education in Ireland, both by the government and by families. Private provision adds a great deal to the education of Irish people, through such means as private tuition, 'swot' classes and so on. Since education has traditionally been a passport to overseas opportunities, there has been a strong entrenchment of positive attitudes towards academic study. Young people work extremely hard to achieve good grades, in order to be accepted into sought-after tertiary places.

In the early 1980's a debate was emerging about the economic relevance of education, particularly its importance for employment. Some groups felt the education system was producing too many people trained in the 'liberal arts and traditional professions', with not enough emphasis being placed on vocational skills⁴⁶. However, a document produced by the government, the 1992 Green Paper on Education, took a broader view of what is vocationally relevant. It

⁴⁶ Sheehan (1992) notes these comments taken from the Report of the Industrial Policy review Group.

generally suggested that new subjects such as Business and Technology Studies should be encouraged, vocational programmes should be widened, and links with business should be further developed. Certainly there is now a strong emphasis on 'technical universities' and on developing industry-related courses.

Figure 31: Primary Degrees Awarded, 1980-88



Source: Sheehan (1992), *Education Statistics of NZ* (1993) pg79.

Clearly Arts has a large share of total graduates in both countries. Sheehan notes that Arts in Ireland experienced an increase in students in the late 1980's due to the tightening of budgets. This precluded the expansion of expensive laboratory and work-shop based programmes. He also notes that most of the increase was focused in modern continental languages, economics, and other 'vocationally relevant' areas. It is obvious however that Ireland is ahead of New Zealand in terms of students in engineering and science. In fact the IDA states that 6 out of 10 of Ireland's 3rd level students major in engineering, science or business studies subjects. As mentioned earlier, there is an emphasis in Ireland on technical subjects.

11. FUTURE PROSPECTS

Ireland's future is uncertain, but there are some indications of what may be round the corner.

With strong growth in the economy, Ireland is starting to see fairly large asset price bubbles. Workers are demanding higher pay, and there are signs of skilled labour shortages. In addition, the output gap measuring the difference between actual GDP and potential GDP is strongly positive. However, there are limited options for addressing overheating due to the imminent EU currency union. The job of restraining demand is left mainly to fiscal policy — tax increases and spending cuts would serve to quickly dampen down the economy. But in fact, planned spending is to increase by 6% this year, and taxes have been lowered. Nevertheless, it seems fairly likely that the Irish government will have to change its fiscal stance in response to the current environment.

Putting the relatively short-term issue of overheating to one side, there are other concerns that Ireland faces. The first revolves around the imminent currency union in Europe. As mentioned in the section on monetary policy, there are worries that geographically peripheral countries such as Ireland will be marginalised in policy decisions. This may lead to policies being put in place that will benefit the core, rather than the periphery. Now given that Ireland is fairly dependent on exports of hi-tech items, any slowdown in demand in this area will have severe negative consequences for the economy. Without the prospect of exchange rate movements to offset such a shock, and with interest rates likely set to levels that suit countries such as Germany and France, Ireland would have to rely on internal adjustment. This means that labour and goods markets must be flexible enough to cope.

Another issue mentioned earlier in the paper is that of labour market pressures. Not only are wage demands increasing due to the recent growth in the economy, but the favourable labour force growth trends exhibited in recent years are likely to subside in the medium term — meaning more pressure on wages. There are also growing shortages of skilled labour. In the future then it is likely that labour force growth will be much slower, and wages will rise to reflect the reduced availability of labour, both skilled and unskilled. This may affect the competitiveness of Ireland, particularly as compared to emerging East European nations.

Finally, it could be suggested that some of Ireland's economic policies will need attention in the future. For example, the tax system is very complex, with the array of tax incentives and allowances serving to distort decisions on savings, investment and production. Certainly tax arrangements in the housing area are helping to inflate the bubble even more. It may be too that Ireland will have to undertake microeconomic reforms to help enhance its ability to adjust without the exchange rate/interest rate tools. In particular, the labour market could be

made more flexible. Ireland seems to be moving in the opposite direction however, with plans to introduce a minimum wage in 2000.

Despite these concerns, the evidence so far suggests that recent strong growth is not a temporary phenomenon. The Economic and Social Research Institute in Dublin expects annual average growth rates of over 4 % until at least 2010, and in the immediate future, Consensus Forecasts predict growth of 6.7% and 5.6% in 1998 and 1999 respectively. While these figures represent a decrease from levels seen currently in Ireland, they are very strong relative to New Zealand's growth performance. This shows the continued importance of strong fundamentals, and the advantages of location. It seems that, given careful management and some prudent reform, Ireland can continue to grow strongly well into the future.

12. CONCLUSIONS

So what are the determinants of Ireland's impressive growth performance? It seems that there is no one factor — it is more a constellation of influences.

First of all, Ireland is an English-speaking nation on the edge of a huge European market. Their entry into the then EEC in 1973 served to solidify and further enhance the already open economy. It also set Ireland up as a prime investment destination for countries seeking access to the European market, but who found it easier to do so from an English-speaking country. This was particularly so in the case of the US — possibly also because of historical connections arising from past migration.

Coupled with foreign investment incentives such as special low tax rates and high-profile country marketing, Ireland's EU membership and geographic position attracted reasonably large amounts of capital into the country. Due to the investment incentive structure this capital was attracted into high-tech, export-oriented sectors, which created job opportunities for highly skilled workers in Ireland and pushed Ireland's current account into surplus. Foreign investment was one of the key drivers of growth and increases in productivity.

Ireland also had the advantage of macroeconomic stability. Low inflation was achieved in the mid-1980's, and the real exchange rate has remained within a 16 point band since 1984. Both these features were achieved with the help of membership in the ERM. In recent years Ireland has been benefiting from an exchange rate that is not 'overvalued'. Government expenditure reductions were undertaken in the early and mid-1980's, and fiscal moderation was practised with the goal of meeting the fiscal terms of the Maastricht Treaty. The complex tax system does not seem to have inhibited growth, although reforms are now underway to reduce the distortions created by relatively high marginal tax rates and selective tax allowances.

In the labour market Ireland has experienced high labour force growth due to favourable demographics. In particular, Ireland has a young population and has had increasing female participation, along with rising levels of immigration. Workers are generally very well educated and highly skilled, and there is an increasing focus on technical subjects such as engineering and science. Wages have been restrained by a series of agreements between unions, employers and the government, although tensions are building now as workers covered by the agreements seek increases closer to those seen in the non-unionised sector. However, the mixture of well skilled, relatively low waged workers, has enabled the growth of high value-added sectors within the economy.

Ireland received some assistance from the EU in the form of structural grants and agricultural support. This may have promoted some sectors that serve the agricultural sector, and possibly helped ease the transition from the farm to the

factory. It is unlikely that these grants had a large impact on growth, but nevertheless they had some positive effect.

Lastly, some people talk about the 'luck of the Irish'. Perhaps Ireland has been fortunate to have had investment in sectors where global demand is rising; to have had favourable demographics; to have had the chance to join the EU and the ERM. Perhaps they were lucky to have had all their policies 'come together' at a time when their markets were growing.

There are issues that Ireland will have to work through in the future, most imminent is the danger of overheating. There are also concerns about the operation of the currency union, the future competitiveness of Ireland, and structural change. Yet growth forecasts are bright, both for the short-term and for the longer-term.

So what can New Zealand learn from Ireland? We cannot put the country on a barge and ship it to a position just off the coast of Western Europe; we simply have to accept our geographical location as a small island on the edge of the world. Nor can we do much about our demographic structure, unless immigration plays a large role in reshaping our population. Perhaps New Zealand has to run twice as fast to achieve the same gains as other countries.

We already have low inflation, and have undertaken intensive fiscal reforms. These were achieved a little later than Ireland however — perhaps the gains are yet to fully be seen? The lack of microeconomic reform in Ireland does not seem to have proved a barrier to growth. For New Zealand though, following the 'run twice as fast' mentality would suggest that this economy may not get away with letting issues lapse. The stable macroeconomic environment may be something we can learn from though — is a stable exchange rate more conducive to growth in a small open economy? Are there different ways of looking at monetary policy that New Zealand needs to consider?

The quality of factors is also something New Zealand may need to think about. With foreign investment flowing into Ireland, the quality of investment rose — more emphasis was placed on high-tech, high value-added sectors. Does the tax incentive system matter? Should New Zealand be considering the merits of a competitive tax regime? Is our FDI policy a growth-maximising one? Could we market New Zealand as an investment destination more effectively?

The quality of labour in Ireland is also high, reflecting their attitudes towards and investment in education and training. Should New Zealand be focusing more strongly on developing workforce skills? It is unlikely that we can compete on price for our labour, but surely we can attempt to compete on quality. What can we do to our education system to improve the quality of our labourforce?

New Zealand is growing, but according to the OECD we will fall further and further behind the OECD average if the status quo performance is maintained. The message is that New Zealand must seriously think about ways to become

more competitive and more productive. If we can learn anything from Ireland it is that our potential is possibly much smaller given our location, and we need to put a lot of extra effort in to make our economy work better. That is why we cannot overlook any possible ways of improving the environment for growth.

APPENDIX

New Zealand Tax Rates

Data source is HES 1995/96, inflated to 1996/97 by Taxmod, The Treasury.
Average individual tax rate obtained by calculating each individual's tax as a percentage of their taxable income and then taking the average of this value across the population.

Tax Year	Lowest Effective Tax Rate (%)	Middle Effective Tax Rate (%)	Highest Effective Tax Rate (%)
1995/95	15	28	33
1996/97	15	24	33

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