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CONTEXTUALIZING THE *CELTIC TIGER*: THE IRISH LABOUR MARKET IN REVIEW

In common with her EU partners, Ireland has experienced considerable variation in levels of economic activity since the early 1980s. However, since 1994 economic buoyancy has resulted in the unprecedented performance of the Irish economy which has earned itself the label 'The Celtic Tiger'. This paper attempts to contextualize this development through a review of recent key determinants of Irish labour market policy. Economic performance, industrial policy, population and demographic trends, labour market participation, occupational structures, and participation in education and training are all discussed.

1. INTRODUCTION

Ireland is a late developing economy, with most industrial development occurring since the 1960s. As a small open economy, Ireland is highly dependent on foreign trade and sensitive to developments in the world economy. Since the mid 1960s, Government policy has focused on attracting foreign direct investment (FDI) to Ireland (using generous tax and financial incentives) and on building the physical and human-capital support infrastructures. At the macro level, up until the mid 1990s the single greatest challenge facing the Irish economy was the need to effectively tackle the persistently high level of unemployment. Despite a pervasive feeling that the fundamentals of the Irish economy were sound (low inflation, stable currency, balance of payment surpluses, good industrial relations, solid GNP growth), the country had increasingly struggled to provide jobs for its young, well-educated workforce. However, since 1994 economic buoyancy has resulted in the unprecedented performance of the Irish economy which has earned itself the label 'The Celtic Tiger'. This paper attempts to contextualize this development through a review of recent key determinants of Irish labour market policy. Recent national economic performance successes are highlighted, including GDP growth, export growth, falling unemployment and expanding industrial production, and the provisions of current economic and industrial policy are summarily presented. Key labour market trends which

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have likely facilitated the impressive turnaround in the Irish economy are reviewed. Recent important demographic trends, migration patterns and labour force participation rates are set down. The remainder of the paper reviews education and training and labour market performance. Education and vocational education and training participation rates are reviewed and the national training infrastructure is explained.

2. ECONOMIC PERFORMANCE, EMPLOYMENT AND UNEMPLOYMENT

A cursory examination of Ireland's economic performance is critical to the development of an understanding of how and why the labour market operates as it does and the consequent implications for labour demands, sectoral stratification, occupational segregation and the general appeal of Ireland as a work location. This section summarily reviews the performance of the Irish economy in recent years as a backdrop to structured labour market policy and interventions.

Like most of her European counterparts, Ireland has experienced considerable variation in levels of economic activity over the past twenty years. Throughout much of the 1980s economic growth was sluggish, inflation was high, unemployment escalated as manufacturing employment was almost halved, and Ireland's financial debt became unsustainable. As the recession receded and the global economy became more buoyant, some improvement in Irish economic activity was recorded prompted by a devaluation of the Irish pound (1986) and a reorientation of fiscal policy to curb capital expenditure. The end of the 1980s saw some improvement in output growth rate, unemployment began to fall and both the inflation rate and the public sector deficit fell below the European average.

However, from 1994 onwards, the performance of the Irish economy has been unprecedented. Labelled the 'Celtic Tiger', a number of commentators (Sweeney 1998; Gray 1997; CBI 1997/98; FÁS 1998/99; OECD 1997) have variously identified a range of key performance indicators of Ireland's economy over the past four years:

- Expansion of the domestic economy continues with the growth rate of real GDP averaging out at over 8% a year (9.5% in 1998) which represents a growth rate of three to four times the EU average and makes Ireland's economy the fastest growing one in the OECD. In 1998, Ireland was ranked 11th in the World Economic Forum Competitiveness League, up from 15th in 1997 and 22nd in 1996. Some slowing down is expected for 1999 although the

Central Bank of Ireland (CBI) estimates that the economy will grow by a further 6.5–7% in 1999.

- Growth in the Irish economy has been fuelled by a very rapid growth in exports of goods and services so that Ireland's export growth rate far exceeds EU and OECD averages and is surpassed only by those of Korea, Mexico and Poland and reflects the stronger growth in European export markets and continuing inward investment.

- The numbers at work are growing by at least 4% a year (7.2% in 1999) and the standardized unemployment rate has fallen below the EU average (10.2%) and currently stands at 5.7% which is the lowest it has been since 1979. The main increases in labour supply are concentrated among people with higher levels of qualification, while the numbers in the labour force who have not completed secondary education continue to fall. Estimates for 2000 suggest that employment will increase by approximately 4.5% while the unemployment figure will drop to below 5%.

- Industrial production in Ireland has been impressively high when compared to other EU countries. The bulk of total manufacturing production, which increased by 16.9% between 1997–98, can be attributed to the strong performance of a small number of high technology sectors dominated by foreign multinationals, particularly pharmaceuticals (production almost doubled between 1996–1997), electrical engineering, office equipment and the production of data processing machinery (including computer components). It is estimated that manufacturing output for 1999 will show a further increase of 12.5% over 1998 figures.

- Traditional indigenous sector growth is more modest at approximately 4.3% (CBI, 1998) although some manufacturing production industries continue to fare poorly reflecting, perhaps, the shift in recent years to high valued-added industries for European and global export.

The transformation from a relatively under-developed economy in the late 1950s to one capable of supporting industrial expansion and economic growth involved major changes in the structure of employment and a substantial relocation of the labour force. Trends in the sectoral distribution of employment indicate a progressive decline in agricultural and in traditional industrial employment, and a dramatic rise in the service sector, particularly private services. Between 1980 and 1996, Irish non agricultural employment growth of 26% exceeded that of the EU 12 (7%) and the US with 15% growth (ESRI, 1997:39). Of the current labour force of 1.5 million people, approximately 10% are employed in agriculture, 28.8% are employed in industry and the remaining 61.2% are employed in services.

Table 1
Total employment in Ireland, 1987–1999

Year	Total at work	Change	Change in non-agricultural
1987	1,090,000	+9,000	+13,000
1988	1,090,000	0	-1,000
1989	1,088,000	-2,000	+1,000
1990	1,134,000	+46,000	+39,000
1991	1,134,000	0	+14,000
1992	1,145,000	+11,000	+10,000
1993	1,152,000	+7,000	+17,000
1994	1,188,000	+36,000	+38,000
1995	1,248,000	+60,000	+59,000
1996	1,297,000	+49,000	+54,000
1997	1,338,000	+41,000	+45,000
1998*	1,385,000	+47,000	N/A
1999*	1,418,000	+33,000	N/A

* estimates

Source: CSO, ESRI Quarterly.

During 1995 and 1996 the largest share of employment creation was accounted for by the expansion of the services sector with increases of 48,000 and 43,000 recorded respectively. This pattern was reversed somewhat in 1997 when employment creation was largely attributed to the industrial sector and particularly to the manufacturing sector (growth in employment of approximately 17%) and to the building and construction sector (10,000 job increase), although employment in the services sector did also increase by 14,000. The 1997 labour force survey suggests that the overall picture of employment growth indicates that jobs in the service sector are increasing 10 times faster than in industry, and almost 50 times faster than in manufacturing. However, the EIU (1998) report cautions that there is a danger that the Irish economy is approaching full capacity and that there are already bottlenecks and skills shortages appearing in certain sectors. During the same period total numbers of unemployed fell (see Table 2). The Irish unemployment rate in 1991 (14.5%) was almost twice the then rate for the EU overall (8.2%) but today, Ireland's unemployment rate of 5.7% is well below the overall EU average.

Table 2
Employment and unemployment 1996, 1997, 1998 and 1999

(annual average 000's)	1996	1997	1998 (estimated)	1999 (forecast)
Industry	362	411	440	463
Services	809	877	928	963
Agriculture	137	135	134	130
Total Employment	1,308	1,423	1,502	1,556
Unemployment (labour force basis)	188	155	126	109
Labour Force	1,496	1,577	1,628	1,665
Standardized Unemployment Rate (SUR)*	11.5%	9.75%	7.75%	6.5%

* based on International Labour Office (ILO) definitions

Source: Central Bank of Ireland, Winter, 1997 and 1998.

It is estimated that Ireland's strong fiscal position is primarily a result of buoyancy in tax revenue, reflecting the continued high rate of job creation and consumption growth. The sustained level of economic success in recent times is evidenced in changes in personal incomes over the last 10 years or so. In 1987 incomes in Ireland were 63% of those in the UK and Ireland was recognized as one of the poorest countries in the EU. Today, Ireland has surpassed the UK and stands close to the EU average.

The main provision of current economic policy, geared towards sustaining growth and development, is detailed in the most recent programme for government and includes provision for:

- a reduction of the tax rates, both personal and corporate;
- a cap on both net current and capital spending;
- the elimination of exchequer borrowing in order to cap the public debt;
- a commitment to enter the final stage of EMU;
- adherence to the terms of the current national wage agreement, Partnership 2000; and
- the introduction of a national hourly minimum wage - at current earnings levels this would imply a minimum rate of £4.40 an hour.

A critical objective for government now concerns the maintenance of social partnership which arguably has been the pivot upon which economic success has been wrought (EIU 1998). As well as having a moderating effect on wage

increases, these social partnership agreements in Ireland have promoted considerable uniformity in pay arrangements (Morley et al 1999). However, rumblings of discontent are being heard as the perception that the benefits of economic growth are not being evenly distributed gains momentum. There is some evidence of wage drift away from Programme 2000 agreements – even allowing for the local bargaining clause. CSO figures for 1998 estimate that average hourly earnings for 1998 were up by 6.8% – the corresponding increase for 1997 was 3%. CBI (1998) forecasted that the upward pressure on private sector wages, reflective of labour market shortages, will result in earnings per capita rising by a further 6.5% in 1999 which will intensify pressures for public sector pay rises.

3. INDUSTRIAL POLICY AND THE IRISH LABOUR MARKET

In the period following the foundation of the Irish Free State until the late 1950s, the Irish economy was inwardly focused, with industrial policies concentrating on the imposition of trade barriers and the preservation of indigenous ownership of industry. However, the 1950s witnessed considerable debate concerning Ireland's poorly developed manufacturing and industrial infrastructure and a persistent call for greater liberalization of trade and commerce and resulted in the development of a coherent industrial policy that focused specifically on creating a more open economy and actively pursued direct foreign/overseas investment to Ireland. Critical to this industrial strategy was the attraction of foreign, particularly US, investment which was actively encouraged through a progressive series of tax incentives, capital investment grants, advance factories, and so forth.

The net effect of much of this industrial policy is evidenced today in the locating in Ireland of close to one quarter (24%) of all available US manufacturing investments in Europe, and close to 14% of all FDI projects locating in Europe, even though Ireland accounts for just one per cent of the European population (The Economist 1997). This has led to the establishment of a significant cluster of related firms sufficient to supply each other with services (from development to distribution) and to the creation of a pool of suitably skilled labour – a further incentive for increased foreign direct investment (FDI) whereby new firms can draw upon this established integrated industry network. Since 1980, 40% of all new US inward investment in European electronics has come to Ireland while nearly one third of all personal computers sold in Europe are now made in Ireland (The Economist 1997). Together, the computer software industry employs more than 15,000 people and expansion of this sector is likely to continue. Part of the reason for such high inward investment concerns the volume of government aid on offer such as a generous subsidy programme based partly on

the promise of jobs but also including, where appropriate, rent subsidies, offsets against capital investment, and a low tax rate for profits derived from "manufacturing and qualifying services" of just 10%. The Irish economy is further attracting considerable new investments in international banking and financial services, food processing, pharmaceuticals and telemarketing. Foreign owned firms are now said to account for 30% of the economy and nearly 40% of exports (The Economist 1997).

Payne (1997) commenting on the call-centre sector, notes that one third of all US call centres in Europe are now located in Ireland. The call centre market was actively targeted since it was felt that it would slot in well with the explosive growth which is taking place in both the computer and software sectors in Ireland. Call centres are a focal point that can handle everything from computer and software inquiries, to banking, hotel and airline reservations. Currently there are approximately 50 domestic and foreign call centre companies based in Ireland that employ more than 4,000 people and it is estimated that this sector will continue to expand.

It is evident that foreign direct investment (FDI) has made a significant contribution to the development and modernization of the Irish economy particularly since much of our recent high growth has been driven by exports from the foreign-owned sector. It is arguable that foreign owned firms have had a positive impact on the development of indigenous companies through the purchase of goods and services, although critics of industrial policy make a strong case for the concomitant neglect of indigenous industry. It is also apparent that FDI has played some role in the upgrading of Ireland's infrastructure and skills base. Commenting on overall economic performance, the CBI (1998) cautions that reduced corporate profitability in the US and increasing skills shortages in Ireland will likely impact on this level of FDI in Ireland over the next number of years.

4. CHARACTERISTICS OF THE IRISH LABOUR FORCE

An editorial in the Economist in May, 1997 suggests that foreign companies cite a number of specific attractions of having Ireland as a European base including the combination of having English as the spoken language with a recognized pro-European outlook, and of having a well educated workforce, particularly at the upper end. Over the past decade the Irish workforce has become increasingly better educated and a higher proportion of young people are remaining in further education/training. Arguably, these and related labour market characteristics have a significant explanatory power in accounting for the recent successes witnessed in the Irish economy, and they are examined in detail here.

4.1 Demographic trends

The population of Ireland has remained somewhat static through the 1980s and early 1990s and, although there is evidence that the population is beginning to grow again, it remains, at circa 3.66 million people, the second lowest country population in the EU. Ireland has a relatively young population but, as in other EU member states, the number of children is falling due to a declining birth rate (see Table 3) although Ireland continues to have an above EU birth rate. Since 1991, the overall decrease in the 0–15 age category is recorded at 34%. This overall fall in Irish birth rate has had an effect on the dependency ratio which is estimated at about 57% and is expected to fall to between 45 and 50% over the next 10 years (CSO 1995) and has some appreciable implications for some increases in overall living standards i.e. fewer individuals in the economically inactive age group depending on those who are economically active.

Table 3
Population classification by age group 1971–1996

Age Group	1971	1979	1981	1986	1991	1996	Change (%) 1991–1996
Under 1 year	64,886	71,353	73,379	61,172	53,044	48,854	-7.9
1–4 years	250,769	272,122	279,625	262,906	220,699	201,540	-8.7
5–9 years	316,940	350,140	349,487	350,650	318,503	282,943	-11.0
10–14 years	298,557	336,293	341,238	349,973	348,328	326,087	-6.4
15–19 years	267,727	317,368	326,429	331,100	335,026	339,536	+1.3
20–24 years	215,251	266,271	276,127	286,424	266,572	293,354	+10.0
25–29 years	172,993	239,425	246,053	258,439	246,321	259,045	+5.2
30–34 years	151,351	220,116	231,958	242,689	249,071	260,929	+4.8
35–39 years	149,107	178,478	193,829	229,740	237,889	255,676	+7.5
40–44 years	152,729	159,407	165,924	191,751	225,683	240,441	+6.5
45–49 years	160,124	152,441	151,850	161,740	187,762	225,400	+20.0
50–54 years	159,082	151,686	149,680	147,511	156,806	186,647	+19.0
55–59 years	154,847	154,065	149,606	142,215	142,549	153,807	+7.9
60–64 years	134,066	137,676	139,266	139,978	134,566	137,946	+2.5
65 years +	329,819	361,375	388,924	383,855	402,900	413,882	+2.72

Source: CSO Census Figures.

The Irish workforce will continue to expand in the medium term as those currently of school-going age enter the labour market. However, as in many other EU countries there is evidence of some ageing of the population beginning to emerge – i.e. that the average age of the population is increasing. Between 1981 and 1996, the Irish population aged nearly three years leading to an average age of 33.6 in 1996 compared with 30.8 in 1981 (CSO 1998). This is unlikely to have any impact on the short term but, as the average age of the working-age population moves closer to the 60s, then this will have significant implications for personnel policies, particularly in terms of succession planning, training/retraining, rewards and so forth. Furthermore, as the population ages, and, where the birth rate continues to fall, the dependency ration will increase as greater numbers depend on the shrinking economically active cohort. The figures here suggest, however, that a significant ageing (or ‘graying’) of Ireland’s workforce will not occur for at least another 20 years.

4.2. Migration

Net outward migration has traditionally constituted an integral feature of the Irish labour market where more than 1.2 million people have left Ireland since the foundation of the State in 1921. While the 1970s witnessed a periodical reversal of this trend, net emigration resumed through the 1980s, rising from 9,000 in 1984 to 46,000 in 1989. However, recession in the world economy, particularly in the US and the UK, stemmed the outflow in the early 1990s, and the considerable upswing in the Irish economic environment more recently has reduced the numbers migrating abroad. Indeed, latest CSO migration figures (1997) indicate that the number of immigrants into Ireland has been steadily increasing in recent years and reached a high of 44,000 in 1997. FAS, the National Training Agency calculated a net inflow of 18,500 between April 1998 and April 1999.

Based on the 1996 census figures, FÁS (1996), noted the following migration trends:

- There was a cumulative net immigration of 3,000 between 1991 and 1996 – a sharp reversal of the cumulative outflow of 134,000 between 1986–1991.
- The average net inflow in the early 1990s was 600 – the average net outflow in the late 1980s was 27,000 with a peak outflow of 44,000 in 1988–89.

- Most of the increases in inflows and decreases in outflows relates to movements between Ireland and the UK.
- Immigrants typically are comprised of Irish nationals who are returning migrants.
- Whole family emigration has almost ceased.
- A fall of almost 60% has occurred in the level of movement to the UK, with a significant increase in the flows (in both directions) between Ireland and Continental EU countries.

Overall economic buoyancy has thus resulted in a reversal of external migration – it is estimated that, in the absence of external migration, the Irish labour force has the capacity to expand by between 20,000 and 25,000 persons each year (1.5% of the total labour force). Sweeney (1998) suggests that, since the 1990s, there have been many non-Irish people seeking work in Ireland and also seeking that ‘quality of life’ which has often been cited as compensation for lower living standards. He indicates that this ephemeral ‘quality of life’ – meaning the good social life, proximity to countryside and local amenities – is often given as the reason for staying in a country which traditionally offered few opportunities for well qualified people to change jobs.

4.3. Labour force participation

While aggregate changes in the Irish labour force over the past 15 years have been at times erratic, the overall trend has been upward. In particular, over the period 1993-1999 Ireland’s labour force grew from 1.4 million to 1.7 million - an increase of 21.9%. Figures for 1997/1998 show an increase of 9.7%. A number of diverse developments underpin this trend:

4.3.1. Female labour force participation

Overall employment expansion in the 1990s has seen very rapid growth in the numbers of women working in Ireland. Expressed as a proportion of the total female population of working age, the number of females in the labour force has increased from 34.1% in 1992 to 48.5 in 1999 (FÁS 1999; CBI 1998; Baker et al. 1997). Female employment in Ireland grew by 30% between 1991 and 1996, while women’s employment in the EU as a whole was static over the same period. Over the entire period since 1981, female employment growth (with an increase of 184,000 or 56%) has greatly outpaced the expansion in male employment (up by 17,000 or 2% over the

same period). Speculation on the causes of this increased participation has focused on factors such as smaller family size, changing structure of employment demand, institutional factors, and improvements in educational attainment. FÁS (1998) note the emergence of changes in the occupational pattern of women's jobs in Ireland where within the professional occupations, for example, women's share has increased most rapidly in the business professions and (from a much smaller base) in engineering and science. Their share has also risen, but more slowly, in education and has declined sharply among religious professionals. However, while female participation continues to increase in Ireland, the current degree of participation, estimated at about 47%, remains lower than that in other EU and OECD countries.

4.3.2. Labour force growth

The Irish labour force grew by an incredible 21.9% in the six years between 1993 and 1999 (FAS, 1999). Rapid growth in the labour force is predicted to the year 2005. The latest ESRI report (1998) predicts labour force growth of over 2% between 1996–2005 and of 1% thereafter. The factors underlying these increases in the Irish labour force, as detailed earlier, are:

- demographic changes, resulting in a strong inflow of young people into the labour market. Significant changes are evidenced in the age structure of the population where, in 1981, 30% of the Irish labour force was aged 15–24; the corresponding figure in 1997 is less than 19%;
- increasing female labour force participation which has risen from 39% of the 15–64 age cohort in 1990 to 48.5% in 1999;
- changing patterns of migration with the substantial net outflows which characterized much of the 1980s contrasting with the estimated net immigration of 15,000 in the year to April 1997.
- growth of the services sector more generally, and in personal services particularly, has provided greater opportunities for labour force participation. For example, the number employed in recreational services increased by 60% between 1991–1996, while there was a 39% increase in those working in personal services during the same period (CSO 1996).

4.3.2. Growth in non-standard employment

The growth of non-standard work forms has been observed in Ireland since the mid to late 1970s (Morley et al 1995). The latest Irish Labour

Market Study (1997) indicates that while the incidence of part-time work, as a proportion of total employment in the Irish economy, is relatively low when compared with other EU countries, it has increased significantly in recent years. From 1983–1993, virtually all employment creation related to part-time work which is, perhaps, reflective of the shift to service sector employment during this period. Part-time work remains much more common among women than men (just over 5% of employed males were working part-time in 1997). Just under a quarter (23%) of all women in employment work part-time, and part-time work has accounted for about one-third of the increase in female employment in recent years. Almost 50% of females engaged in part-time work are to be found in service type occupations, with a further 20% engaged in clerical work. Nearly all of the additional part-time jobs for women have been in three sectors – personal services, distribution, and health and education. The increase has been more limited in sectors such as manufacturing, building and transport. The Labour Force Survey (1997) indicates that almost 9 out of every 10 persons working part-time are not looking for full-time work.

The current proportion of part-time work in Ireland is 12.3% indicating that part-time working is still less prevalent here than in many other EU member states. In 1996, for example, almost 70% of women workers in the Netherlands, and 45% of those in the UK, were working part-time. However, since 1993, the unprecedented growth in the Irish economy has resulted in the creation of mainly full-time jobs. This about-swing may be as a result of the experienced expansion of manufacturing employment and the current ‘boom’ being experienced in the building and construction industry. Overall, the increased propensity towards part-time employment may be indicative of increased flexibility in the Irish labour market. However, it remains exceptionally low by EU standards and there remains continued scope for an upward trend to continue. Temporary work, as a proportion of overall employment, currently stands at just 7%.

4.4.4. Occupational trends

Changes in the occupational structure of the labour market are inherently associated with technological developments, product market variations, sectoral composition, and the general nature of employment practices (in terms of work structuring, composition of employment, flexibility and so forth). In 1997 a report on occupational employment forecasts to 2003 was completed jointly by FÁS and the ESRI (Duggan et al. 1997) in an effort to

determine the changing pattern of occupational segregation in the Irish labour market and to identify possible variations in skill requirements across 14 broadly identified occupational classifications.

Over the period 1997–2003 it is expected that significant changes in broad occupational groupings will occur which will have appreciable impacts on the distribution of overall employment. Using data generated in the report, Table 4 provides details of where the strongest changes in employment distribution is expected to occur.

Table 4
Changes in employment distribution

Occupational groups	Employment change 1995–2003	Distribution of total employment % change	
		1981	2003
Agricultural occupations	–18	15.6	7.3
Managers	+38	5.0	7.7
Proprietors in services	+31	3.3	3.4
Professional workers	+37	9.4	14.2
Associate professionals	+32	4.3	5.8
Clerical	+27	13.9	14.3
Skilled maintenance	+25	4.8	4.7
Other skilled manual	+24	9.6	8.1
Production operatives	+15	8.7	7.8
Transport and communications	+21	4.4	3.9
Sales workers	+34	6.5	8.7
Security workers	+19	2.7	2.8
Personal service workers	+31	5.4	7.9
Unskilled labourers	+7	6.4	3.3

Source: Derived from Duggan et al. (1997), *Occupational Employment Forecasts 2003*, Dublin: FÁS/ESRI pp. iii–iv.

The data presented here predict that agricultural employment will continue to fall over the intervening years to 2003. The largest increases are predicted for managerial and professional occupations (categorized in the report as those workers who hold degree level qualifications). Strong growth is also forecast for associate professions (diploma/sub-degree qualification level), for sales and personal services type employment, and for clerical work. Projected growth is also featured for skilled manual workers (both those involved in maintenance and in core production). The

forecasts indicate however that jobs that do not require prior specialized qualifications, and that rely more on on-the-job training, or are unskilled, are less likely to experience the same level of growth as those occupations that are qualification based/driven. When the data is viewed over a longer period of time i.e. between the years 1981 and 2003 in this instance, it is strongly evident that managerial and professional occupations have increased, and will continue to increase, their share of total employment – concomitantly manual work is on the decrease.

Female employment is predicted to continue to rise over the next number of years by as much as 35%, which represents a rate of expansion more than double that forecast for men. There is evidence to suggest that female participation in employment is extending out from the traditional occupations of clerical work and health associated professions and into more business and commercial professions where they have been, and continue to remain, under-represented.

Although the data presented here represent forecasts of likely changes over the next number of years we are already witnessing some of the impacts that will be more keenly felt in times to come. Skills shortages are being reported in many technical fields, in the construction trade, in marketing/sales and in the tourism/hospitality sector. Skilled crafts-persons are in considerable demand, and participation in third level and professional education remains buoyant. It is suggested here that general education and professional education/qualifications will become, even more than hitherto, the pivot upon which the performance of the Irish labour market is determined in the years to come.

5. EDUCATION AND TRAINING AND LABOUR MARKET PERFORMANCE

Education and training are critical in creating and sustaining competitiveness since investment in education, training and learning add to the national stock of human capital and promote growth and employment expansion by raising national productivity (Heraty, Morley 1998; Garavan et al. 1998). Tansey (1998) cites a number of specific advantages of improved investment in the areas of education and training:

1. Investment in education and training raise the productivity of labour directly where more skilled workers produce greater levels of output per unit of labour input and in a more efficient manner.

2. Productivity and efficiency gains act to reduce costs of production thereby improving the competitiveness of exports.

3. Additional relevant education can also improve the flexibility and adaptability of the labour market and thus reinforce initial productivity gains.

4. The availability of a large pool of highly qualified labour acts as a magnet in attracting new mobile foreign investment to Ireland.

5. Additional inputs of education and training act to prevent specific skill shortages and to minimize structural unemployment.

6. Investments in training, by raising productivity, lead to improvements in business profitability.

7. Education and training, targeted at those most at risk, can stem inflows into unemployment.

Given the considerable perceived benefits associated with investment and participation in education and training, the remaining sections of this paper focus on the current institutional education and training arrangements in Ireland and the participation rates associated with them.

5.1. Participation in education

The Irish education system has undergone significant change in the past 25 years due, in no small part, to the strongly interventionist role adopted by the Irish State in pursuit of economic development from the early 1960s onwards. In recognition of the fundamental value of a good education system to the economic and social development of a nation, free second-level education was introduced in 1966, and compulsory schooling was extended from age 14 to 15 years. Today, in Ireland, full time education is compulsory for children aged between 6 and 15 years, and there is evidence that a new Education bill is set to raise the school leaving age to 16 years.

Three distinct levels of schooling exist within the Irish educational system: primary level, post-primary/secondary level and tertiary or third level education. The structure of this educational system is provided in Figure 1.

Typical ages	Levels and institutions of education		
	Third level		
23/24 22/23 21/22 20/21 19/20 18/19 17/18	Universities	Institutes of technology	Private colleges
	Initial vocational education and training		
19/20 18/19 17/18	Post leaving certificate courses	Apprenticeship training	
	Second level senior cycle		
17/18 16/17 15/16	Voluntary secondary schools	Community and comprehensive	Vocational schools
	Second level junior cycle		
15/16 14/15 13/14 12/13	Voluntary secondary schools	Community and comprehensive	Vocational schools
	First level		
11/12 10/11 9/10 8/9 7/8 6/7	National schools		Private and special schools
	Pre-primary		
5/6 4/5	National schools		Private and special schools

Figure 1: The structure of the education system in Ireland.

Source: Department of Education and Science Statistical Reports 1996/97.

Primary education covers a period of eight years (4–12) and is typically provided by national schools which are state-aided parish denominational schools established under diocesan patronage. The national school curriculum typically provides instruction in Irish and English language, mathematics, social and environmental studies, art and craft, music, physical education and religious instruction. Pupils normally transfer to post-primary/secondary education at the age of twelve and as a matter of course (there are no state examinations at this level).

Table 5
Distribution of students receiving full-time primary and secondary level education

Type of institution	Total
FIRST LEVEL	
<u>Aided by Dept. of Education and Science</u>	
National Schools	469,628
<u>Non aided Primary Schools</u>	7,004
TOTAL PRIMARY LEVEL	476,632
SECOND LEVEL	
<u>Aided by Dept. of Education and Science</u>	
Junior Cycle	199,571
<i>Secondary</i>	122,846
<i>Community and Comprehensive</i>	30,375
<i>Vocational</i>	46,350
*Senior Cycle (General)	151,907
<i>Secondary</i>	98,460
<i>Community and Comprehensive</i>	21,989
<i>Vocational</i>	31,458
**VPT	19,706
<i>Secondary</i>	833
<i>Community and Comprehensive</i>	1,164
<i>Vocational</i>	17,709
Horology College (watch-making)	30
Other Courses (Institutes of Technology)	1,124
<u>Aided by Other Departments</u>	
<u>(Agriculture/Justice)</u>	1,565
Non Aided Commercial	1,615
TOTAL SECONDARY LEVEL	375,518

* Comprises Leaving Certificate, Leaving Certificate Vocational Programme, Senior Certificate and Transition Year Option

** Comprises Vocational Preparation and Training 1(VPT1) and Post-Leaving Certificate (VPT2)

Source: Department of Education and Science Statistical Reports 1996/97.

A distinctive feature of the Irish educational system remains that, while the State bears the bulk of the cost of running schools, the vast majority of both primary and second level schools are denominational. At primary level this is almost universal, while at second level, there are secondary schools which are privately owned (in the main by religious orders), and vocational, community and comprehensive schools which are publicly owned. Today, three in every five students attend secondary schools, only one in four attend vocational

schools, and one in seven attend a comprehensive or community school (Govt. White Paper 1997, p. 45). Two state examinations exist at second level – the Junior Certificate which is taken after three years of study and, in general, marks the end of compulsory schooling, and the Leaving Certificate (upper secondary/senior cycle) which is typically completed two years later. Traditionally, second level education was largely characterized as classical-academic in orientation and was generally intended to prepare students for third level education and white collar occupations (Garavan, Costine and Heraty 1995). Vocational schools were seen to provide a more technically oriented education and practical training in preparation for subsequent employment. However, economic growth in the 1970s and 1980s highlighted the necessity to match education with the needs of the economy. Evidence of some movement away from the traditional perspective on education is emerging with a range of schools introducing what is termed a transition year after the Junior Certificate. This transition year is an interdisciplinary programme designed to cater both for those terminating their education after the transition year and for those progressing to senior cycle. One core objective of the transition year is to provide students with an opportunity to develop work based skills, improve personal and interpersonal development, and explore various career choices.

Following the publication of the White Paper on Education (1995) which echoed a persistent concern regarding the general suitability of the Leaving Certificate cycle for all students, a decision was taken to restructure the Leaving Certificate programme into three components: the established Leaving Certificate Programme, the Leaving Certificate Applied Programme and the Leaving Certificate Vocational Programme (detail on the latter of these programmes is provided in the next section under vocational education). However, the majority of senior cycle students continue to follow the mainstream Leaving Certificate Programme which retains an emphasis on general academic education, and continues to prepare students for entry to the labour market or to third level education. In 1996, students completing second level education numbered 373,665.

Provision of public sector education at third level in Ireland is divided between three institutional sectors: (a) Higher Education Authority (HEA) Institutions comprising the Universities, National College of Art and Design, and the National College of Surgeons; (b) Vocational colleges and Institutes of Technology; and (c) the Teacher Training Colleges. Arts, natural science, commerce/business and engineering are the most popular courses at undergraduate level, while post-graduate activity centres around the sciences. The distribution of students in full-time third level education is represented in Table 6.

Table 6
Distribution of students in third level education

Institution	Full-time enrolments	Part-time enrolments
STATE AIDED		
Universities	58,090	8,426
Teacher Training Colleges	547	
Technological Colleges	41,000	12,561
National College of Industrial Relations	567	1,808
AIDED BY OTHER STATE DEPARTMENTS	758	
NON AIDED		
Religious Institutions	1,254	
Royal College of Surgeons in Ireland	1,003	
Other	4,282	
Total	107,501	22,795
of which aided by State	100,204	

Source: Department of Education Statistical Report 1996/97.

Participation at third level is determined by a points system based on leaving certificate examination results and, while entry to some programmes of study is more difficult in terms of the number of points required, in general demand for third level education far outstrips the limited supply of places available at the various third level institutions. This high demand has led to the relatively recent addition of a further tier to the educational system – private commercial colleges (post leaving certificate colleges) that now also provide a range of State certified programmes in a number of disciplines, as well as their various other programmes, many of which are not state certified.

The total number of full-time students at third level has increased significantly over the last number of years (in excess of 40% since 1990) and a number of factors are seen to have contributed to this general upsurge in participation:

- The introduction in 1968 of grants for fees and partial maintenance for eligible third level students opened up access to third level education to many students that might otherwise not have been able to afford to go to University/College.

- The raising of the compulsory school-leaving age from 14 to 15 years in 1972 has kept more students within the educational system for longer. In 1964/65 51.5% of 15 year olds were in full-time education – the comparable percentage for 1996/97 is greater than 90%.

- The abolition of fees for post-leaving certificate courses in 1995 has allowed those that might not have the entry requirements for traditional third level institutions to gain an alternative third level qualification.
- The abolition of fees for undergraduate students in publicly funded third level colleges in 1995 further provided wider access to third level education.
- These developments have characterized the changing face of education in Ireland. The past thirty years have been marked by increased expenditure on education, coupled with greater numbers in education and higher participation rates. Indications of those changes include the following:
 - The share of publicly funded education in Gross National Product (GNP) has more than doubled, from 2.8% in 1961 to 6.1% in 1995 but still low by EU standards.
 - Between 1964/5 and 1996/7 the total number of students rose from 653,000 to 959,651 with a three fold increase in those in secondary education and five fold increase of those in tertiary education.
 - Young people are staying in the education system for longer across all levels of education, and particularly at higher education levels, and in some age groups participation rates have almost doubled in that 10 year period. For example 66.4% of 17 year olds and 39.9% of 18 year olds were in education in 1986/7 – the corresponding figures for 1996/7 are 80.6% and 63% respectively; 24.7% of 19 year olds and just 10.6% of those aged 20 years or more were in full-time education in 1986/7 compared with 47.7% and 19.1% respectively in 1996/7.

However, it is evident that considerable improvements are required to ensure that Ireland's educational system can provide the qualifications and skills required for economic growth, industrial development, and individual actualization through the millennium and beyond. In an evaluation of participation rates in full-time education it is evident that, while participation is virtually complete in the 5–14 year age group, outside of compulsory schooling Ireland rates relatively poorly at the higher levels of educational attainment, particularly in completion figures for upper secondary education (see Tables 7 and 8). A combination of limited third level places and, until 1996, the prohibitive costs associated with attending third level institutions (most notably tuition fees), may partly explain Ireland's lower representation at third level education, while the relatively young minimum school leaving age (15 years) might explain lower showings at second level. It must also be recognized that free second level education was only introduced in Ireland 32 years ago and thus many of the individuals represented in the figures here may not have been able to avail themselves of either second or third level educational opportunities. Furthermore, as indicated earlier, participation rates for younger people are higher than ever before and continue to increase.

Table 7

Percentage of the labour force 25 to 64 years of age by the highest completed level of education (1995)

	Early childhood, primary and lower secondary education	Upper secondary education	Non-university tertiary education	University-level education	Total
North America					
Canada	19	29	32	19	100
United States	11	52	9	28	100
Pacific Area					
Australia	42	31	12	16	100
Korea	39	41	x	20	100
New Zealand	36	37	16	12	100
European Union					
Austria	24	66	2	7	100
Belgium	37	32	17	14	100
Denmark	33	44	7	16	100
Finland	30	47	10	13	100
France	25	54	9	12	100
Germany	12	62	11	15	100
Greece	52	26	8	15	100
<i>Ireland</i>	<i>45</i>	<i>29</i>	<i>12</i>	<i>13</i>	<i>100</i>
Italy	56	33	x	11	100
Luxembourg	63	21	x	16	100
Netherlands	31	43	a	27	100
Portugal	76	10	4	9	100
Spain	64	15	6	16	100
Sweden	24	47	14	15	100
United Kingdom	19	57	10	14	100
Other OECD countries					
Czech Republic	12	76	x	12	100
Norway	15	53	12	20	100
Poland	21	64	4	12	100
Switzerland	15	61	14	10	100
Turkey	76	15	a	9	100
Country mean	35	42	10	15	100

Source: OECD Database.

In a comparison of those who have completed third level education in the OECD countries, it would appear that Ireland fares positively against many of her EU counterparts. Here again there is evidence of increased participation among the younger age categories, perhaps as a result of the policy changes discussed earlier.

Table 8

Percentage of the population who have completed tertiary education by age group (1995)

	25-34	35-44	45-54	55-64
North America				
Canada	53	49	46	33
United States	34	m	m	m
Pacific Area				
Australia	25	28	24	17
Korea	29	16	11	7
New Zealand	24	28	26	21
European Union				
Austria	9	11	7	4
Belgium	33	27	22	13
Denmark	20	25	21	14
Finland	23	23	20	14
France	25	20	17	9
Germany	21	27	24	18
Greece	26	21	14	8
<i>Ireland</i>	<i>27</i>	<i>21</i>	<i>16</i>	<i>11</i>
Italy	8	11	8	4
Luxembourg	11	14	12	6
Netherlands	25	25	21	14
Portugal	14	14	10	6
Spain	27	18	11	6
Sweden	29	32	29	20
United Kingdom	23	24	21	16
Other OECD countries				
Czech Republic	12	11	11	8
Norway	32	33	27	18
Poland	15	13	14	9
Switzerland	22	23	21	17
Turkey	8	9	10	6
Country mean	23	22	18	12

Source: OECD Database.

It is interesting to note that OECD countries differ widely in the levels of educational attainment of their populations. On average, 60 per cent of adults in OECD countries have completed upper secondary education while the proportion of the population aged 25 to 64 who have completed tertiary education ranges from between 8 and 47 per cent across countries. A broad measure of the flow of students from and to OECD countries shows that the OECD countries with the largest number of students studying abroad are Greece, Iceland and Ireland. In some cases, insufficient provision of university places at home explains some of the outflow.

The pattern of educational attainment among men and women in the adult population is uneven in most OECD countries, suggesting that historically women have not had sufficient opportunities and/or incentives to reach the same level as men. However, these differences have been significantly reduced or reversed among younger age groups and current graduation rates no longer show significant differences between men and women. However, despite these gains in educational attainment, young women still earn less than young men with similar levels of education (OECD 1997). In all countries and at all attainment levels, the earnings of women are on average approximately one-half to three-quarters the earnings of men. In addition, there is only a relatively weak tendency for earnings differences between men and women to decrease with the level of educational attainment. Differences in progression rates, types of course and fields of study, and the relative incidence of part-time work may all affect the labour market opportunities of women relative to men. In OECD countries, persons with tertiary attainment can expect to spend more years in employment than persons with lower levels of education.

Today, with close to one million students participating in education in Ireland, there is little room for complacency in relation either to Ireland's educational system or indeed educational participation rates more generally. The link between education and employment is well documented where the attainment of educational qualifications critically impacts upon one's ability to successfully gain and retain employment. The latest OECD report on education (1997) argues that many of the benefits of education cannot be quantified and that social cohesion, rather than narrow economic gain, is the greatest prize for societies in which all citizens use learning to become more effective participants in democratic, civil and economic processes. Indicators from the OECD (1995) Education report associate higher levels of education with higher earnings, a lower chance of unemployment and more skills that yield social advantage. This link is evidenced in the most recent Irish labour force survey which suggest that individuals who possess no post-primary qualification are six times more likely to be unemployed than are those with a third level qualification. In the case of those who do find employment, the remuneration they receive is very often far lower than those with higher qualifications. Education and earnings are thus positively linked, and so the earnings advantage of increased education would appear to outweigh the costs of acquiring it.

5.2. Participation in vocational education and training

The history of vocational education and training can be traced back to the Guild system of the 1700s with the regulation of crafts and craft working. In later years, and particularly in Ireland, this guild system was regulated into craft apprenticeships. From an historic perspective it would appear that vocational education and training was largely limited to the apprenticeship system. Vocational educational committees (VECs) were established around the country in 1930 and were responsible for the provision of a system of continuing and technical education in their location. An emphasis was placed on „vocational training”, defined in terms of full-time second level training in literacy and scientific subjects, augmented by some concentration on manual skills. Some regulation of the national training system, and the establishment of a national training authority (FÁS), provided greater impetus for the development of particular vocational programmes to provide the necessary skills for particular industry and service sectors. A summary of the types of vocational and educational programmes available, and their participation rates is presented in Table 9.

Table 9
Vocational Education and Training Programmes 1993/94(105,000 participants)

Programme	Description
Apprenticeship (11.2%)	Administered by FAS; craft qualification.
Teacher training (0.1%)	Non-aided sector; qualifications in Montessori education, religious education
Business studies courses(1.4%)	Provided by private and privately funded institutions.
Specific skills training (13.2%)	Run by FAS; initial vocational education and training for employment.
Business/Technical/Secretarial (1.8%)	Private education/training institutes; variety of subjects.
VPT 11 (16.7%)	Follows completion of secondary education.
CERT craft courses (2.1%)	Vocational education and training qualifications in the catering/tourism industry.
Middle level and higher technical business skills (46.7%)	Run by public education system; 2 year cert/diploma courses at third level institutions.
Probationer education/training (1.4%)	Gardaí training colleges.
General nurse education/training (3.4%)	Nursing qualification.
Certificate in farming (1.7%)	Main education/training for those seeking a career in farming.
Farm apprenticeship scheme (0.2%)	3 year programme; Cert. in Farm Management.
Hotel management courses (0.1%)	Education and training for those seeking management positions in the catering/tourism business.

Source: European Commission (1997), Key Data on Vocational Training in the European Union, Luxembourg: Office for Official Publications of the European Commission.

Vocational education has received considerable attention in recent years – many would argue that it is an area that was neglected for far too long. A 1993 NESC report argued for stronger vocational education at upper secondary level and an overall recognition of a vocational orientation at all levels of the education system to facilitate future employment growth and participation in the labour market. Some of the more pervasive initiatives are reported here.

5.2.1. Full Time Vocational Education

At present there are two full-time vocationally oriented education programmes that are available to students who do not wish to follow the traditional Leaving Certificate curriculum and that are designed to provide a more practical, vocational orientation to education. Both the Leaving Certificate Vocational and Applied Programmes (mentioned earlier) form one part of the Vocational Preparation and Training Programme (VPT-1). In the new Leaving Certificate Vocational Programme students follow a full Leaving Certificate programme including two mainstream Leaving Certificate courses in vocational/technical or business disciplines, a language, as well as work experience and enterprise modules. The Leaving Certificate Applied Programme provides greater emphasis on technical and vocational subjects with an emphasis on active learning approaches to prepare students for working life (Labour Market Study: Ireland 1997). In 1998 just over 1,700 students completed the applied leaving certificate programme while approximately 6,000 students completed the vocational stream. The second stream of the Vocational Preparation and Training Programme (VPT-2) typically consists of Post-Leaving Certificate courses which are designed to equip young people with the vocational and technical skills necessary for employment and progression for further education and training.

Established under the Department of Education and Science, TEASTAS is an Interim Authority that has been provided with a wide remit to develop a single and comprehensive certification framework for all non-university third level programmes, and all vocational education and training, and adult and continuing education programmes. Towards the end of 1997 TEASTAS completed a report to the Minister for Education and Science that set down its recommendations for the statutory establishment and development of a National Qualifications Scheme, a National Qualifications Authority and a National Qualifications Framework – it is expected that statutory provisions will follow in due course.

5.2.2. Adult and Continuing Education

Provision for adult and continuing education and training has traditionally lacked cohesive policy development and so has tended to develop in a rather unstructured and ad-hoc fashion. More recently however, a number of schemes have been developed to provide opportunities for those who wish to reactivate their formal education. In recognition of the importance of adult education for personal development and for overcoming disadvantage suffered during initial education, these schemes focus on the promotion of life-long learning and continuous retraining and updating of skills. For example, the *Vocational Training Opportunities Scheme* (VTOS), a European Social Fund supported intervention, is designed to enable unemployed individuals who have been on the Live Register for at least six months to access education and training with a view to progression to employment. VTOS provides participants with an opportunity to return to full time vocational education and training and the minimum age for participation in the scheme is 21 years. The VTOS programme is managed and delivered locally by the Vocational Education Committees (VECs) and the courses that are provided focus on the development of employment related skills, including technological and business skills, enterprise training, project work, and personal development. VTOS was introduced on a national basis in 1989 and participation has grown from an initial figure of 247 to in excess of 5,000 in 1997. *Literacy programmes* are also available through vocational educational committees and, while literacy and numeracy skills are required for access to education and training, they are also perceived as critical in facilitating independent living and fuller participation in society. *Area Based Partnerships* provide further opportunities for skills development and retaining, and adult participation in formal *third level education* is facilitated whereby special entry requirements for mature students are put in place for undergraduate programmes.

5.2.3. Apprenticeship System

Training programmes employed in statutory apprenticeships are regulated by FÁS, the national training and employment agency. Apprentices are normally recruited by employers and typically undertake a four year period of apprenticeship in one of a number of trades (see Table 10).

Table 10
Standards Based Apprenticeship Trades

Aircraft Mechanic*	Refrigeration Craftsperson*
Bookbinder*	Brick/Stone Layer
Carton Maker*	Stonecutter Wood Machinist
Construction Plant Fitter*	Metal Fabricator
Electrician*	Carpenter/Joiner
Floor/Wall Tiler	Electrical/Instrumentation*
Heavy Vehicle Mechanic*	Plumber
Instrumentation Craftsperson*	Fitter*
Originator *	Cabinet Maker
Plasterer	Painter/Decorator*
Printer*	Sheet Metal Worker
Toolmaker	Motor Mechanic*
Vehicle Body Repairer*	Agricultural Mechanic*

Note: A person wishing to become an apprentice in one of the above trades marked * must pass a colour-vision test approved by FÁS.

Source: FÁS.

The apprenticeship combines both on-the-job and off-the-job training, the latter provided by a FÁS training centre or educational college. Apprentices who successfully complete the programme are issued with a National Craft Certificate, a qualification which is recognized not only in Ireland but in other EU and non EU countries. A competency based or standards based model of apprenticeship has recently been introduced. This system consists of seven distinct phases (One trade exception) and is based on the achievement of certain pre-set standards of skill and competence rather than on time served. This system facilitates the progression of successful apprentices to further educational qualifications and to continue to technical level at a recognized national and international standard.

FÁS currently operates a policy that is designed to promote and encourage the entry of women into apprenticeship and have established a number of measures to facilitate female participation in apprenticeships. One such measure sees FÁS offer a bursary to both private and public sector employers who recruit female apprentices under the Standards-Based Apprenticeship system in the currently designated trades. Up to £2,100 is paid to the employer for each female apprentice recruited. FÁS, in conjunction with the education system, further provide preparatory training for females where necessary to prepare them to train and work in what has been a traditionally male environment.

The number of apprenticeships declined quite considerably in the 1990s. This decline in recruitment can be attributed both to demand constraints in terms of curbed public sector recruitment and industrial restructuring on the one hand, and to the increased incidences of subcontracting and outsourcing on the other (Labour Market Study: Ireland 1997). However, since 1994, there has been renewed interest in apprenticeships where, in 1997 5,300 people were registered in apprenticeships, compared with 4,200 in 1996 and about 3000 in 1995. Recent economic buoyancy and increasing skill shortages have created significant opportunities for qualified craft and trade occupations.

5.3. National Training Infrastructure

A cursory examination of the history of training and development in Ireland highlights a consistent focus on apprenticeship training, youth employment schemes and training for the unemployed. In view of the growing recognition of the value and economic necessity of training and development by all partners at the macro level, there is an increased impetus to provide organizational level training and development opportunities to facilitate improved organizational functioning. Green (1996) argues that in economics, skill is regarded as human capital. However, in organizational terms, this human capital is not just a technical datum about the enhanced ability of the employees. It can often represent a more favourable set of attitudes or behavioural norms, which lead employees to be more committed to the organization. He further suggests that when firms speak of 'skill shortages', the skills they refer to are frequently as much to do with punctuality, reliability and ability to work unsupervised, as they are to do with technical skills or qualification. Viewed in this way, training may represent more than just the acquisition of technical skills. Rather, organizational level training and development can best be analysed as part of a broader labour management strategy that seeks to improve organizational capacity along a range of firm specific objectives.

In Ireland, as in many other countries, the greater proportion of State support for human resource development is channelled into funding for initial education and for the training/re-training of unemployed workers. Training of the employed is seen to be the responsibility of the individual organization since returns on investment accrue largely to both the employer and employee. Industrial training has come under the microscope in recent years as the importance of skills development as a source of sustainable domestic economic growth and international competitive advantage gains credence. However, unlike some of their EU counterparts, Irish based companies are not required to invest a minimum proportion of annual turnover, or its equivalent, on updating

the skills and knowledge of their employees, nor are they obliged to make known the amount they spend annually on the training and development function. Fox (1995) argues that problems continuously arise in drawing up national statistics on training and development since organizations have differing perceptions of what constitutes training, and since many companies tend to rely on informal training strategies and mechanisms, the problem of quantifying training expenditure is further compounded. Notwithstanding such problems, attempts are made regularly, using survey based data, to broadly assess the rate of investment and participation in training and development activities. The ESF Programme Evaluation Unit is concerned with evaluating the effectiveness of all human resource development interventions that are supported by the European Social Fund. The Unit's survey of employers conducted in 1993 reported that while a considerable amount of training is being undertaken within organizations, much of which is on-the-job and run in-house, there appears to be limited structures or systems in place to substantiate or evaluate this training. Fox's (1995) survey of training and development activities provided further support to the contention that organizations accord priority to training and development. He reported that a total of 77% of companies indicated that they conducted some form of training. Training courses were found to be the most popular intervention (43%) followed closely by on-the-job training (37%), and, while all occupational groupings were involved in some form of job training, technicians and associated professionals were the most likely group to participate in training activities. There emerged a relatively equal split between company specific training, which included new technology, quality and world class manufacturing (44%), and general training concerned with marketing, customer services, health and safety (48%). Marked differences in the incidence of training was recorded for different company sizes where large and medium sizes enterprises engaged in training activity to a considerably greater extent than smaller concerns. The average number of days accounted for by off-the-job training courses per employee was 1.7 – the average in smaller firms was 1.2 while that for medium sized organizations was 1.8 and 2.0 for larger companies. Average expenditure on training and development amounted to 1.5% of total labour costs for all firms – again, however, this figure was proportionately related to organization size.

In its survey of the Irish economy, the OECD (1995) suggested that the Irish training rate was not as low as that suggested by estimates based on training costs, however Ireland fared particularly weakly in terms of the low emphasis placed on vocational education and training. Others such as Heraty, Morley (1994) and O'Connell and Lyons (1995) similarly caution that the level of investment in enterprise related training is insufficient in terms of Ireland's

ability to compete effectively with other industrialized countries, and this is despite the increased investment in HRD financed by EU structural funds.

FÁS, the National Training and Employment Authority, was established in January 1988 with its activities funded by the Irish Government, the European Social Fund and the European Regional Development Fund. In 1997 FÁS expenditure amounted to £478 million. A considerable amount of FÁS's activities are directed towards reducing unemployment and fostering community based initiatives, through programmes such as Youthreach (for early school leavers), the Social Employment Scheme (for adult long-term unemployed); the Enterprise Programme (new business start-ups by the unemployed); and the Community Enterprise Programme (for community and co-operative groups). However it also provides services to industry through a combination of schemes aimed at promoting training and skills development. The Training Support Scheme (TSS) was introduced by FÁS in 1990 to encourage and promote training in small and medium sized organizations (up to 500 employees) involved in manufacturing, internationally traded services and physical distribution. While the TSS provides graduated grant aid to eligible companies to purchase their training in the marketplace, over half of the allocation for TSS is targeted at firms with less than 50 employees. In 1995, 2,500 organizations were granted aid under the TSS – 32,400 employees were involved and the average duration of training amounted to just under eight days per trainee (Labour Market Study 1997). Training Grants are administered by the State development agencies and are directed at skill needs arising from location of overseas investment in Ireland. Grants of up to 100% of eligible costs are provided to carry out approved training for new employees. Average coverage of such training is about 4,500 employees per year. The Management Development Grants scheme is a further indication of a strong national commitment to training and is operated by the development agencies and supported by the State. Grants are available to improve the management performance of firms, particularly in aspects of management information systems, strategic and business planning. The size of grants awarded varies between £2,500 and £35,000 and approximately 600 companies participate in the scheme each year. In 1995, FÁS introduced its Training Awards Scheme and a new training quality standard Excellence Through People which are designed to reward and encourage high training standards and to demonstrate the link between training investment and improved business performance. In conjunction with FÁS's efforts, a new national certification authority, TEASTAS, is being established to facilitate progression to more advanced levels of education and training, as benchmarked against best practice in the international arena.

6. CONCLUSION

This paper has sought to provide some insight into how the Irish labour market is constructed and determined. Significant structural, social, political and economic changes have been debated that have characterized developments in the Irish economy in recent years, and which have resulted in considerable capital investment in the Irish labour market leading to sustained employment creation combined with falling rates of unemployment and an appreciable rise in the overall standard of living. The industry and services sectors have witnessed the bulk of economic and employment growth, and Ireland is host to a significant number of foreign-owned companies which account for a considerable proportion of overall exports and employment. The demographic profile of the Irish population is favourably disposed towards high labour market participation and it is unlikely that Ireland will experience the level of ageing of the labour force that will shortly be evidenced in many EU countries. More recently however, educational attainment and human capital investment are being viewed as critical determinants of positive economic growth and development. De la Fuente and Vives (1997) argue that, between 1985 and 1995, investments in human capital were the third largest identified contributor to Ireland's positive growth differential over the rest of the industrialized world, while Tansey (1998) indicates that each step up the educational ladder yields a significantly positive rate of return in terms of higher lifetime earnings, and the benefits of increased educational attainment are thus spread across the whole of the economy in terms of increased productivity, increased employment and a widened tax base for the State. The educational profile of the Irish labour force has changed considerably over the last number of years, particularly as a result of direct policy intervention to widen the provision and scope of second and third level education. Today the quality of the Irish labour force compares very favourably against those of other EU and OECD countries, particularly with respect to those holding a third level qualification. However, the evidence to date suggests that the provision of general vocational education is insufficient to meet the current demands of the labour market and of those participating in education; and while a number of initiatives have recently been introduced, it is too early yet to make any objective evaluation of their effectiveness. Projections of occupational trends over the next five years suggest that unskilled and semi-skilled jobs will be displaced and that educational attainment and qualifications will increasingly become the criterion upon which employability is determined. There is thus a considerable danger that those who drop out of the education system before completing their formal education will become increasingly marginalized and unemployable.

In a world where the extension of knowledge and learning capacity is viewed as critical to competitive functioning, there is considerable pressure on the organization to ensure that its internal capability can match external environmental requirements. The onus is increasingly being placed on the personnel/HR function or practitioner to ensure that the firm's labour pool has both the skills and abilities to meet organizational requirements and furthermore, the capacity to deal with possible changes that the external environment might demand. Through most of the 1990s, the Irish labour market was characterized by an over-supply of well educated and skilled individuals and thus organizations had considerable scope for action in terms of meeting their labour requirements. This characterization of the labour market no longer holds true. Skills shortages are being experienced in a number of industries and sectors and many organizations, but particularly smaller firms, are finding it increasingly difficult to fill vacancies. Wage inflation is on the increase, and employees are increasingly demanding greater opportunities for knowledge expansion and competence development and are looking to the organization to supply these opportunities. Available labour market analysis suggests that these supply and demand pressures are set to intensify in the short to medium-term.

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