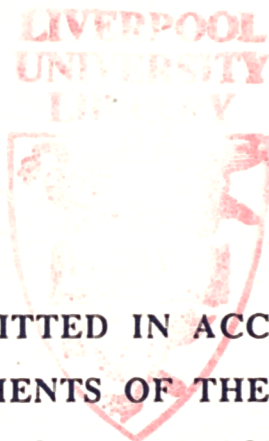


FOREIGN DIRECT INVESTMENT AND LABOUR MARKET  
CHANGE: A CASE STUDY OF INTERNATIONAL CAPITAL  
INVESTMENT AND LABOUR MARKET COMPOSITION  
WITHIN THE SHANNON INDUSTRIAL ESTATE



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## ABSTRACT

### FOREIGN DIRECT INVESTMENT AND LABOUR MARKET CHANGE: A CASE STUDY OF INTERNATIONAL CAPITAL INVESTMENT AND LABOUR MARKET COMPOSITION WITHIN THE SHANNON INDUSTRIAL ESTATE.

PETER SHIRLOW

The aim of this thesis has been to highlight the role of foreign direct investment upon the labour market of Shannon Industrial Estate. The thesis is given coherency through its analysis of the extent and form of the relationships that exist and have existed between labour and capital. The perpetuation of these relationships is set within a 'Regulationist Framework'. This framework promotes a general Marxist analysis of labour control and reproduction. Within this framework the capitalist accumulation system is identified as the dominant mode of economic growth and social distribution in Shannon. The elements of the accumulation system which are identified as predominant have included the condition of production (capital/branch plant economy) and the condition of labour reproduction.

The analysis undertaken highlights the failure of development policies in Ireland which are based upon international capital location to promote significant social benefits. The vagaries of international capital and the structural needs of contemporary capitalism are cited as contributing to a significant Disequilibrium that exists within the Irish economy. The thesis argues that the international Organization of capitalism contributes to the peripheralization of the Irish economy.

However the thesis stresses the point that there is a need to promote locationally based analysis which comprehends the effect of technological and social control within localised labour markets dominated by foreign capital. The engenderment of contemporary capitalism has been based upon the intrinsic proclivity of specific localized regimes of accumulation and localized modes of social reproduction. From the general analysis promoted it is clear that foreign capital investment in Shannon has been involved in a process of control and direct management, a mechanism which is conditioned and enhanced through the instrumentalisation and social construction of production.

## CHAPTER ONE: TRANSNATIONAL CORPORATIONS: THE THEORETICAL FRAMEWORK

### 1.1 Introduction

This thesis acknowledges that globalization of economic activity has produced a high degree of spatial interconnectedness in regard to production, consumption and capital flow. However, it argues that the growth of spatial interconnectedness has not been accompanied by a geographically uniform distribution of resources, finance and economic opportunity. Moreover, the failure to produce socio-spatial uniformity has its basis in the evolution of industrial capitalism, the contingency of supranational based economic activity and the nature of capital accumulation (Andreff, 1984; Brooks and Guile, 1987; Hymer, 1972a, 1972b, 1976; Taylor and Thrift, 1982; 1986).

Two predominant phases within the development of supranational economic activity are identifiable; 'internationalisation' and 'globalization' (Dicken, 1992). Although both of these phases were based upon the accumulation of capital, they are characterised by differing levels of manufacturing activity, industrial location and processes of production. Internationalisation, which became a coherent phase in capitalistic relationships between the sixteenth and eighteenth centuries, was largely based upon international trade through the exchange of raw materials and foodstuffs (Knox and Agnew, 1989; Peet, 1991; Wallerstein, 1979, 1984). Within this phase commodity extraction and trade were predominant and manufacturing activity, which increased in importance, was firmly based within distinct national (mostly European) economies. A secondary role of non-manufacturing countries was to act as a reserve market for goods produced within industrial manufacturing countries. In spatial terms the distinct profile of economic activity, within the period of internationalisation, produced a binary division structured around politically and industrially hegemonic core nations and economically weak and non-industrialised peripheral nations.

Capital has operated internationally from the earliest days of capitalism. Merchant capital, engaged in long-distance trade, pre-dated the emergence of the capitalist mode of production in Europe. In the 19th century finance also became increasingly internationalised as Britain, and to a lesser degree France and Germany, invested abroad in government and municipalities and shares in railways, trams and public utilities. In contrast to the direct foreign investment associated with TNCs, this was primarily portfolio investment centred upon acquisition of foreign securities without any control over, or participation in, the management of the companies concerned (Jenkins, 1987).

By the late 19th century certain developments in transport, storage and communications had paved the way towards the creation of a more integrated

international economy. The first TNCs to invest outside of the metropolitan core were concentrated in the primary sector. Although there were earlier foreign investments in raw material production outside of the metropolitan core, the emergence of modern TNCs with substantial operations in these areas dates from the turn of the century. These included oil and mineral investment in Central America, copper extraction in Latin America and Western Africa and oil extraction in the South China Sea.

The expansion of these extractive TNCs was triggered by the rapid growth of demand for certain crucial raw materials which outstripped domestic production capacity in the advanced capitalist economies. New and lower cost resources of supply were eagerly sought by established producers and these were frequently located in the Third World. At about the same time, a number of TNCs also began to emerge in agriculture. Both in agriculture and in minerals, production had often already been developed by local small-scale producers so that the growth of TNCs constituted a process of monopolisation and vertical integration.

According to Dunning (1983) by 1917 the majority all foreign direct investment was concentrated mainly in the primary sector and only 15% was in manufacturing. The 1950s saw an unprecedented expansion of TNC activity. This was initially led by US capital, but since the 1960s the European and Japanese levels of investment have grown at a faster rate (Peet, 1991).

These changes in the structure of capital, and thus the relations of production, are reflected in changes in the organisation of production systems. Since World War 2, production systems have grown in physical scale as a result of the changes in the structure of capital. Vertical integration has increased, especially in the durable consumer goods sector. Most growth has come in the form of diversification, however, with firms owning subsidiaries, or directly producing a complex array of goods.

The globalization of production undertaken by TNCs after the Second World War relied upon the 'new international division of labour'. This refers to productive tasks being broken down into activities which can be done by less skilled workforces where labour costs are low in relation to advanced economies. As noted by Froebel et al (p.9)

However, perhaps the clearest expression of the structural changes in the world economy...is the relocation of production. One form of this relocation is the closing down of certain types of manufacturing operations in undertakings in the industrial nations and the subsequent installation of these parts of the production process in the foreign subsidiaries of the same company" (1978, p.9)

The concept of globalization, by contrast, still recognises international trade as a fundamental factor within overall economic activity, but the previously insular orientation of industrial location has been fundamentally altered due to the geographical relocation of production and the creation of a globalized division of



labour. As is noted by Root (1990) the emergence of a truly global economy has been emphasised by:

"the traditional international economy of traders giving way to a world economy of international producers" (1990, p.7)

The division of labour within the phase of internationalisation was underpinned by the distinction between industrial manufacturing countries and non-manufacturing based countries (Dicken, 1992). Globalization through the decentralisation of production has removed the appropriateness of the simple binary divide between core and periphery nations through creating a more diverse and complex set of space-spatial relationships. Overall, the period since the 1950s has produced new areas of industrial production within formerly peripheral non-manufacturing based countries (eg. Taiwan/South Korea) through the spread of technology and processes of production (Aglietta, 1979).

Throughout the consolidation of internationalisation and the emergence of globalization TNCs have evolved as distinct forces within the world economy. TNCs are identified as company based organisations with financial interests and economic activities located beyond their country of origin <sup>1</sup>. The development of TNCs has been achieved through the centralisation of capital, the increasing size of firms in the advanced capitalist countries and important changes in the structure of capitalist production.

The scope and organisational structure of these new corporations created the opportunity to administer and control manufacturing on a continent-wide basis. The administrative capacity of TNCs was underlined by the ability of capital to use geographical differences (wage levels, export platforms and government incentives) to reproduce capital investment and ultimately stimulate competitiveness (Smith, 1986a). Furthermore, the ability to exploit geographical differences became contingent upon the feasibility of shifting capital resources and structures of production between locations.

The last twenty-five years have seen enormous changes in the ownership of productive assets and financial capital. The small firms' share of industrial output has continued to decline. The 50 largest companies' share of value-added in the world economy has risen by nearly 50% since 1947, and the share of the largest 50 has risen faster than the combined share of the other firms that make up the largest 200 (Dicken, 1986). In addition 34 financial institutions control between 20 and 25 percent of all corporate assets; the five largest shareholders (including institutions) control more than 60% of the Ford Motor Company, Shell, Du Pont and Sohio. While market concentration has increased in consumers' goods industries and remained about the same for producers' goods in the post-war period, the size of most markets and the requirements of entry and operation have risen substantially in absolute terms.

The economic dominance achieved by TNCs has been immense in both capital and employment terms according to the United Nations Centre for Transnational Corporations (UNCTC). For example, in 1991 the 600 largest manufacturing based TNCs (in employment terms) controlled 27,000 foreign subsidiaries and 32% of world GDP. Over the period 1980-1991 the same 600 TNCs increased their share of world sales from 33% to 44%. This was accompanied by an increase in total world manufacturing employment from 41% to 48% (UNCTC, 1992). This escalation of industrial globalization has been accompanied by a significant growth in Foreign Direct Investment (FDI) (ILO, 1981, 1984).

FDI is conceptualised as investment by foreign owned firms in a domestic economy through either the purchase of an indigenous company or the establishment of branch plants or subsidiaries. The growth in industrial FDI has largely been a post World War Two phenomenon. It has been estimated that the monetary value of FDI rose from \$65 billion in 1955 to \$521 billion in 1988 (UNCTC, 1992). The majority of this investment has been controlled by TNCs as they have evolved into:

"..the single most important force creating global shifts in economic activity" (Dicken, 1992, p.47).

There has been a considerable growth in manufacturing employment over the last 25 years within previously non-industrialised areas. This growth in manufacturing based employment has been accompanied by a significant rise in the share of world manufacturing trade emanating from formerly non-industrialised nations. The share of trade from previously non-industrialised countries more than trebled (4.1% to 14.4%) between 1962 and 1990 (UNCTC, 1992).

It is evident that the growth of FDI has promoted a decline in the importance of traditional locational patterns. As noted above industrial location patterns during the phase of internationalisation were characterised by the establishment and growth of large industrial conurbations within core countries. TNCs have in effect reconstructed these former relationships through extending productive relationships over international boundaries.

What is also new about globalization is that restructuring internal to any given territorial unit has been combined with spatial shifts in investment and a massive expansion of both the radii of organisational control associated with the growth of TNC. It is precisely this combination of the increased use of space together with the expanded transnationalisation of corporate structures that has given the current restructuring process its global character and dynamic.

## 1.2. Competing Theoretical Approaches to Understanding TNCs

Capital creates a restless drive to expand, to develop the forces of production, and generally to rearrange the social structure of accumulation. Because of this, it is forever altering the basis of the industrial space-economy, regardless of its original distribution of resources and production. The corporate survivors of each crisis and merger wave are a new breed in terms of products and processes. Conversely, obsolete processes and uncompetitive plants and firms disappear.

This process of industrial restructuring means alterations in product mix, production technique, organisational structure and consequent spatial reorganisation of production. What this means for industrial geography is not only a different landscape to describe, but a new logic of industrial location to comprehend. Recently, global production systems and global market competition have been extended to many industrial commodities. The theoretical nature of such change has been the subject of extensive debate; but whatever its theoretical nature, global capitalism creates a new logic of industrial location, because it creates new locational capabilities. The argument here is that global capitalism has wrought some fundamental changes in the absolute availability and relative importance of the supply of a number of factors essential to industrial production.

The labour factor has in the past frequently been overshadowed as a locational force by the pull of natural resources, market centres, or agglomeration economies. With the trend toward greater locational scope, labour is drawn to the forefront because of its continuing high level of spatial differentiation. Indeed, under the pressure of competition, the capability of locating in a pattern more dispersed and more in tune with labour force differences becomes necessity.

As such the performance capacities, degree of compliance, and even the purchase of labour are produced and must be continually reproduced. A certain portion of this reproduction happens in the workplace, through the active participation and social interaction of the workers there. The process of labour reproduction presents both opportunities and barriers to employers. On the one hand, there must be a degree of social stability for useful workers to be found, and the variety of sites of reproduction means a variety of subpopulations can be made available to the widely differing demands of the division of labour.

The issue to be examined is not solely the quantitative nature of TNC based location in non-industrialised areas. A significant element in the analysis of TNC-based FDI is concerned with issues of economic impact and accountability.

At this stage it is necessary to distinguish the polarity between those writers who have emphasised the positive benefits of TNC location within formerly non-industrialised economies and those who have stressed the economic and social costs engendered by TNC based location.

Table 1.0 illustrates the different schools of thought and their general attitude toward TNC-based development. The clearest opposition exists between Neo-Classical proponents and Dependency, New International Division of Labour (NIDL) and Regulationist advocates. Sandwiched between these two apparently mutually incompatible schools of thought are TNC Impact theorists who have adopted a more general behaviouralist analysis.

Table 1.0: Theoretical Schools and TNCs

<p><b>NEO-CLASSICAL PROPONENTS: (PRO-TNC)</b></p> <p>CENTRAL ANALYSIS OF NEO-CLASSICAL PROPONENTS</p>	<p>TOYE HOWELLS MEIER ROSTOW RUESCHEMEYER CASSONS</p> <p>TNCs PROMOTE STABILITY AND TECHNICAL COMPETENCE WITHIN HOST ECONOMIES. TNCs ATTEMPT TO INCREASE SUPPLY AND DEMAND OF GOODS</p>
<p><b>TNC IMPACT PROPONENTS (TNC CRITICS):</b></p> <p>CENTRAL ANALYSIS OF TNC IMPACT PROPONENTS</p>	<p>DICKEN NEWFARMER DUNNING</p> <p>TNC DO NOT PRODUCE CONTINUAL GROWTH. TNC BEHAVIOUR REFLECTS NATURE OF HOST COUNTRY</p>
<p><b>NEO-MARXIST PROPONENTS (ANTI-TNC) *:</b></p> <p>CENTRAL ANALYSIS OF NEO-MARXIST PROPONENTS</p>	<p>DEPENDENCY: BLOMSTROM FRANK WEAVER JAMESON</p> <p>NIDL: PALLOIX CASTELLS</p> <p>REGULATIONIST: AGLIETTA BENKO BOYER ELAM</p> <p>TNCs AID SOCIO-ECONOMIC UNEVENNESS. CRISIS TENDENCIES PRODUCE TNC LOCATION PATTERNS</p>

Source: Table 1.0 is based upon a summary by Jenkins (1984a, p.17) \* Table 1.0 excludes what Jenkin's terms 'neo-fundamentalist' approaches (Warren 1973, Schaffer, 1979) which propose that TNCs stimulate class consciousness through their activities and as such actually engender revolution.

### 1.2.1 Neo-Classical Theory

Neo-Classical economists begin with the assumption that the main characteristic of capitalism is to use available resources in order to provide for human needs and wants (Toye, 1992). Neo-Classical theory assumes that economic systems tend toward equilibrium and that this equilibrium is benign through its promotion of harmonious relations between capital and labour. Neo-Classical theorists also place a strong emphasis upon the utility of individual life and the

sphere of exchange and price determination (Peet, 1991). Because utility derives from consumption of goods bought and sold in the market, it is possible to specify a relationship between prices and quantities of goods and consumers' utilities taken at the margin (Downey, 1991). Utility is maximised when the ratio of marginal utilities to price is equal. As such the Neo-Classical view is characterised as leading from individual consumer utility functions to the prices of finished goods. In effect value is determined not from where the product originates but from where it eventuates in exchange. In a more specific sense consumption leads to the individual being the basic unit of analysis, whereby the sphere of exchange determines the relationship among those individuals (Chomney, 1991).

According to Neo-Classical economists the market place and exchange are critical in order to provide economic utility. Through selling services or buying consumption goods, autonomous individuals are impelled to engage at the level of the market place (Giddens, 1991). The precise nature of the relationship among individuals at the market place is one of competition. Human activity and action is identified as being voluntarist and centred upon purposeful behaviour and constant decision making among alternative choices. Such voluntarism means that society becomes the sum of the individuals who comprise it. In contrast to the neo-Marxist theories outlined below Neo-Classical economics presents a theory of individual agency as opposed to a theory of social structure (Giddens, 1979).

In terms of examining the spatial aspects of economic life Neo-Classical theorists assume that variations within and between spatial units is explained by differences in technical progress and in the rate of growth of both capital and labour. Such imbalances it is argued can be removed through the mobility of factors of production and exchange. Moreover, it is argued that factors of production will not only shift between spatial units which offer more competitive price to profit ratios but in so doing produces an equilibrium in growth rates and output. As noted by Clulow and Teague:

"...a characteristic of the neoclassical model is that wage levels will be high in regions with a high capital/labour ratio but the rate of return on capital will be low. The high wage region will experience an inflow of labour and an outflow of capital, vice versa for a low-wage region" (1993, p.75).

The Neo-Classical nostrum that the mobility of factors of production supports spatial equilibrium has been tied to an examination of the benefits of TNC-based location for low wage and low growth rate economies. TNCs are identified as distinct market mechanisms which in attempting to increase the supply and demand of finished goods maximise profit efficiency and spreads economic growth. Moreover, FDI is identified as the result of rational market decisions to shift industry to less industrialised areas where financial returns are greater.

This rationality is underpinned by the assumption that FDI encourages increased regional equality through the transfer of growth-based industrial structures. For example, early Neo-Classical attempts to evaluate the effects of FDI were based around an analysis of the flow of capital from core to peripheral regions, which it was assumed increased the volume of capital necessary for economic development within recipient economies (Hirschman, 1958). This flow of capital was envisaged as stimulating increased incomes, local consumption and a general augmentation of economic growth. The spread of TNC investment was popularly conceived as a process of capital transfer and local socio-economic stimulation through a policy of capital and technology adoption and adaptation (Rostow, 1960). Moreover, early Neo-Classical assumptions argued that FDI was generally based upon the re-allocation of fiscal and productive resources from core to peripheral areas.

The shortage of investment capital in non-industrial nations was identified as a major impediment to economic development. In order to overcome this distinct impediment it was argued that TNC-based fiscal input was necessary in order to reorientate low income agricultural economies through a process of industrialisation (Meier, 1971).

Neo-Classical models of capital flow have in more recent accounts been modified to include other significant benefits of TNC-based FDI. The most important of these are assumed to be an increase in technological and managerial know-how within peripheral areas due to FDI. As Howells has noted:

"The internal labour markets of multinational corporations are having an increasingly positive impact on the global movement of scientific and technical personnel toward peripheral areas" (1990, p.84).

Rueschemeyer and Stephens (1992) and Toye (1992) have also argued that FDI stimulates additional investment in three ways. Firstly, FDI fully complements domestic resources and stimulates growth within local production. Secondly, market growth perfects a highly competitive and rational market which stimulates additional economic growth. Thirdly, resources generated by TNCs stimulate growth within existing local resources as well as creating markets for previously unutilized resources. Furthermore, enhanced technological competence produces a growth in labour market skills, a feature which either encourages entrepreneurship amongst individuals in host countries or stimulates technical competence amongst indigenous firms (Casson, 1983).

Overall, it is argued that the attraction of FDI and TNC based location stimulates a rise in per capital incomes through an increase in skilled employment. Per capita income increases are envisaged as further concentrating national capital and reinforcing the overall pattern of growth (Kaplinsky, 1988; UNCTAD, 1985). Within Neo-Classical assumptions, the economic growth of a non-industrialised area is based upon the degree and volume of capital and technical

acquisition. In order to sustain economic development a peripheral area must initially obtain external productive forces, promote external capital usage and stimulate labour market availability. There are, four main conceptual and theoretical weaknesses in Neo-Classical theory:

- 1) it conceptualises development in a functional and unilinear manner.
- 2) it fails to understand fully the processes of globalization and its effect upon contemporary economic structures. Its failure to focus on such processes reflects its a-historical nature.
- 3) it does not recognise that US and European directed development was based upon perpetuating a particular spatial division of labour which strengthened core-periphery relationships.
- 4) the rationalisation of capitalism as a stable and socially equilibrating force lacks any understanding of the effect of crisis tendencies upon industrial location. It fails to recognise instability and the disequilibrium inherent in capitalist economic development.

One of the central failings of Neo-Classical economics is the assumption that labour can be industrially produced, purchased at a constant price and standard quality, owned outright and employed in a strictly technical manner, however and whenever the owner wishes. Its purchase and use can thus approach a standard performance versus cost and they are susceptible to a geographic levelling process, as noted above (Downey, 1991). Because of this the labour factor is constantly overshadowed as a locational force by the pull of natural resources, market centres or agglomeration economies. In reality the pressure of competition and the inequality in labour conditions on a global scale means that industrial location patterns are necessarily tied to labour-force differentiation (Chomney, 1991).

The reasons for labour's persistent geographic distinctiveness lie in the unique nature of labour as a factor of production. While this may appear obvious, its significance has been lost on neo-Classical economists who have persisted in treating labour in the same terms as true commodity inputs and outputs. By reducing labour to the commodity terms of price (wages) and quality (skills), they have repeatedly underestimated its importance in location decisions.

Human labour is the irreducible essence of social production and social life. Labour is not the same as a true commodity for a number of reasons: the worker is not the same as the objects of work, production is not a purely technical exercise as it is more a system of machinery, and workers participate and contribute to it directly (Peet, 1991). The production process comprises social relations and social life that affect worker behaviour.

### 1.2.2 TNC Impact Theorists

TNC Impact theorists are not identifiable as a distinct school of thought but can be separately identified as being relatively agnostic about general evaluations of TNC location and FDI. Although they generally accept that core nations have created structures which favour home as opposed to host economies, they maintain that there are differing aspects involved within TNC based FDI. As is noted by Dicken:

"the crucial point is the particular combination of external and internal forces" (1992, p. 444).

Central to Dicken's account is the contention that, although FDI is based upon capital's desire to achieve competitive advantage, it also reflects the inability of the capitalist system to produce continual growth (Dunning and Cantwell, 1987; Dunning and Norman, 1983). In challenging the rationality of market mechanisms, TNC Impact theorists disagree with the general rationale of Neo-Classical assumptions (Dunning, 1973, 1977, 1979, 1980; Newfarmer, 1985). For example, Dunning (1983, 1985, 1988a, 1988b) has argued that in some instances TNCs cannot be construed as rational disseminators of wealth through industrial location due to the complexity of TNC scale, market monopoly and non-accountability.

Moreover, Dicken (1992) has stressed the extent of market domination by TNCs, which he argues derives from a range of oligopolistic advantages, including access to capital, technological control, product differentiation and raw material market control. These oligopolistic strategies are construed as generally creating imperfect market conditions due to:

- 1) the monopolistic control of TNC based capital;
- 2) the repatriation of profits from host to home countries;
- 3) the removal of fair competition between TNC and non-TNCs through the displacement of local capital and entrepreneurship.

However, in criticising the negative features of oligopoly, both Dicken (1992) and Newfarmer (1985) still promote an analysis of TNC-led FDI which takes into account many of the positive features of industrial location in non-industrial areas. Although it is not automatically assumed that FDI produces a significant growth in social welfare, neither is it assumed that underdevelopment is a predictable outcome within non-industrialised areas<sup>3</sup>. It is generally argued that a range of scenarios exist relating to the type of technology located within non-industrialised areas, the composition of R+D and the general level of integration between TNCs and indigenous capital.



In moving away from more generalised accounts, TNC Impact theorists are concerned with adopting a realistic alternative to other theoretical schools through promoting an understanding of the specific cases of FDI. For example, Newfarmer (1985) has promoted the notion that host countries produce distinctive TNC-based location patterns through adopting differing policies concerning the question of fiscal entry. Combined with this is the belief that the nature of the host economy, the levels of corporate taxation, the success of previous FDI and the possibility to repatriate profits all combine to produce non-generalisable location patterns (see also Dunning, 1989).

In relation to policies designed to eradicate features of disequilibrium, TNC Impact proponents argue that governments and supranational bodies can encourage TNCs to reduce their tendency toward transfer pricing and sectoral monopolisation. In effect governments should be encouraged to negotiate new trade terms with TNCs in order to increase their share of royalties, taxes and capital ownership. As is noted by Dicken:

"In the end the issues are not merely academic. The global economy and all its participants, from transnational corporations and national governments to individual citizens, face a major global challenge: to meet the material needs of the world community as a whole in ways which reduce, rather than increase, inequality and which do so without destroying the environment" (1992, p.463)

TNC Impact proponents argue that economic growth and societal development can be achieved through the location of TNCs in non-industrialised areas. However, there is a need to ensure economic growth with equity through encouraging more paternalistic and accountable TNCs. This thesis does not reject these propositions, but disagrees with the theoretical base used within TNC Impact analysis. Especially its rejection of the Marxist contention that technical relations of production and consumption can only be fully understood by reference to social relations. Furthermore, this thesis argues that the possibilities of engendering more paternalistic forms of TNC based behaviour are generally incompatible with the socio-technical composition of contemporary capitalism. The thesis also places greater emphasis upon class conflict as a determinant of industrial location patterns.

### 1.2.3 Marxist Theories

Different lines of enquiry and critiques of TNCs have been pursued by Marxists. Early developments within Marxist Geography were based upon a backlash against the ideology of Neo-Classical theory and its assumptions regarding the perpetuation and self-regulation of free market mechanisms (for a discussion of this reaction from a non-Marxist viewpoint see Chisholm, 1990). Combined with this was the Marxist belief that capitalism was neither welfare-maximising nor wholly democratic (Aglietta, 1992; Browett, 1981, 1984; Peet, 1977, 1983a, 1983b, 1984, 1987, 1990).

Within the Marxist perspective, the increased flow of TNC-based capital to non-industrialised areas is construed as creating distinct forms of global exploitation. Industrial location within non-industrialised areas is envisaged as being stimulated by the highly unstable nature of capitalism. The incorporation of non-industrial economies into the contemporary capitalist system is identified as a calculating force attempting to establish and maintain economic inequalities (Andreff, 1984; Peet, 1991). These authors consider the forms of development outlined by Neo-Classical theorists (and to a certain extent TNC Impact theorists) to be the actual instruments and structures which perpetuate a process of underdevelopment.

Within this perspective, spatially uneven development within capitalist society is not simply unavoidable but is a necessary feature of capital accumulation. Furthermore, the spatial patterns of economic activity produces quantitative and qualitative differences in the levels and types of production, distribution and consumption. Marxist analysis was a response to the failure of Neo-Classical and TNC Impact theorists due to their failure to recognise and analyse the real character of social relationships. Above all, the Marxist approaches have promoted an analysis concerned with the social processes that underlie the spatial patterning of socio-economic structures (Peet, 1991).

#### 1.2.4 Dependency Theory and Uneven Development

Early Marxist analysis of FDI concentrated on the theme of 'dependency' (Frank, 1967, 1969, 1972; Amin, 1974a, 1974b). The basic hypothesis of the dependency school is that development and underdevelopment are interdependent structures within the global economic system. The relationship between centre and periphery assumes the form of a dependence in which some countries achieve self-sustaining growth while others can grow only as a reflection of the dominant countries. It was initially argued that reliance upon FDI lead to a reduction in the sovereignty and autonomy of host countries and that any over reliance upon FDI would remove national economic control and create conflicts between proposed national goals and TNC-based accumulation needs.

Marxist-based dependency theory has analysed the external factors of development through promoting a spatial analysis of the production of surplus value (Wallerstein, 1979a, 1979b). The extension of the industrial mode of production in non-industrialised areas, was based upon international capital's desire to promote a rise in the rate of accumulation and to effect a flow of surplus from peripheral to core nations (Blomstrom and Hettne, 1984). Furthermore, the continued globalization of economic activity produces a form of economic and social change within the periphery which is directed, constrained and mediated by TNCs located within the capitalistic core (Corbridge, 1986).

A central process that is identified within Dependency theory is the role of the geographical transfer (by TNCs) of surplus value from peripheral areas (Weaver

and Jameson, 1981). Dependency theory has played an important role in the critique of conventional theories. As a theory it accounts for the historical experience of peripheral societies through proposing how contact with capitalism led to socio-economic underdevelopment.

These assumptions, it is now generally accepted, can now be assumed as over-generalised but an essential stage within Marxist theoretical development. In their defence it can be stated that they necessarily reflected the political climate of the late 1960s and early 1970s. The main criticism of Dependency theory remains its general failure to promote an analysis of labour process change and the extent of internal forces within the capitalist mode of production in engendering unemployment (Peet, 1991).

Dependency theory is holistic in that it attempts to place a country into the larger global system. It stresses the external causes of underdevelopment rather than those internal to a peripheral society. A strong emphasis is also placed upon economic rather than social interactions.

Dependency theory developed not just in reaction to conventional modernisation theory and the 1950s nationalist and reformist formulations of the Economic Commission for Latin America and of the ideologues of developmentalism but as a so-called neo-Marxism because traditional Marxism was inadequate due to the limitations of Lenin's theory of imperialism and the inability of the left generally to develop a coherent alternative to developmentalist reformism.

Dependency theory is particularly attacked for being excessively based on analyses of exchange and spatial relations rather than production relations. Munck (1994) has noted that dependency theory can be used to legitimate bourgeoisie nationalism, neglecting the class conflict through representing national competitive capitalism against monopoly capital. Warren has also challenged dependency theory for its nationalist mythology. Warren concludes that:

"the dependency approach while not formally excluding alternative answers, has effectively narrowed the intellectual focus of analysis of the dynamics of ...society and has foreclosed the posing of critical questions in the name of an irrelevant antithesis between diffusionist and dependency approaches" (1980; pp. 162-163).

For Warren dependency theory is seen as static because only the form of dependency changes and because it simply assumes the continuing validity of centre-periphery paradigm. Dependency theorists usually equate imperialism with the world market and also incorrectly assume that there is a latent suppressed autonomous historical development alternative.

As noted by Edelstein (1981), a dependency theory which purports to explain underdevelopment as a consequence of the transfer of surplus from backward areas to the metropolis fails to comprehend the central role of the labour process

in the formation of classes as well as class struggle. Moreover, dependency theory presents the poverty, and hunger of peasants as a consequence of a capitalism deformed by foreign monopoly. It imagines that an anti-imperialist coalition led by local capital could bring about normal capitalist development.

It is clear that dependency theorists have supported two distinct notions: dependency as a relationship and dependency as a set of structures. If dependency is viewed as a relationship between core and peripheral societies than as Quijano argues:

"the concept would have no other function than to replace, for certain purposes, the concept of imperialism without providing the necessary understanding of how the articulation of elements produced by imperialist domination, giving rise to a determinate socio-economic formation subordinated to it, is carried out" (1981, p.81).

Within the dependency perspective the most serious deficiency has been its rather heavy concentration upon economics and lack of emphasis on sociology. It has tended to exaggerate the determining impact of international political economy and to down play the importance, complexity and international impact of localised social conditions (Munck, 1991).

Capitalist accumulation in dependency theory is primarily the result of the redistribution of surplus product between developed and underdeveloped areas. This presupposes both the production of the surplus product and accumulation itself. Accumulation is not related to the social relations under which a surplus product is produced or appropriated, with the implicit view that a surplus product is a sufficient condition for accumulation. In materialist theory, on the other hand, accumulation is explained as the result of particular social relations in a society. In this way, it is not only possible to explain why accumulation occurred in what Wallerstein described as cores and peripheries, but also explain why it did not occur anywhere before the capitalist epoch. Dependency theory makes the prediction that the flow of capital should be overwhelmingly from developed to underdeveloped areas. In fact the overwhelming amount of direct foreign investment flows are among developed countries. This incorrect description of reality derives from an erroneous theory of accumulation and a failure to analyse the division of the world into countries.

Dependent capitalism is given the theoretical status of a mode of production, but its structure and meaning have not been defined and its grounding in a Marxist context is left unclear. Neither the concept of development nor underdevelopment was elaborated adequately in dependency theory (Downey, 1991). Often, developed countries were defined as those that were wealthy and underdeveloped nations as those that were poor; the definitions seemed to be imbedded in the terms themselves. Development meant growth and underdevelopment stagnation.

An alternative and more satisfactory analysis is supplied within the modes of production or articulation perspective. It is this explanation that improved upon dependency theory while providing a consistent theoretical framework within which to understand the reality dependency theory described. The modes of production approach begins with four premises (Chinchilla, 1980: Dietrich; 1978). First, though it is essential to analyse the functioning of capitalism at the world level, the fundamental unit of analysis remains the national economy. Each national economy is a concrete, historically created social formation which is formed by the articulation of two or more modes of production. The particular way in which these modes of production and their classes interface, in complementary as well as contradictory patterns, influences the structure, class nature, and direction of development of that society. The view of social change embodied in the mode of production approach thus explicitly rejects both the universal evolutionary view of orthodox economic paradigm and the simple Marxist perspective of a fixed, linear sequence of modes of production. It also avoids the forced simplicity of the dependency approach which theorises that there is one and only one dependent-based mode of production.

Secondly, the mode of production approach takes into consideration the stages of development of the different modes of production which articulate within any social formation. Modes of production have periods of ascendancy and decline that affect not only their tendencies and internal processes of reproduction but also the nature of their relationship to the other modes within the social formation. It is necessary to determine the stages of development of the different modes, to study the process of their reproduction and to discover the nature of the articulation between modes and the classes within the entire social formation. This view recognised that the capitalist mode of production has different tendencies and functions differently depending on its level of development and the nature of capitalism dominating the international system as a whole.

Thirdly, development is not understood in some abstract sense, but rather as the development of capitalist development, a process by which the capitalist mode and its classes come into contact with other modes of production. It recognises that capitalism is always underdeveloped in the ideal sense of development; that in rich and poor countries alike it brings progress only for a few at the cost of appropriating the labour, the control, the power, and creativity of the majority.

Fourthly, external control and influence, in this view, are modified and shaped by the internal struggle, and the nature of the State. Neither external relations nor internal ones, however are determining a priori; rather they exert different forces at different points in time and in different ways which must be studied in their concrete specific forms; the changes of a social formation are not based on general laws of development that are always moving forward unambiguously.

In relation to dependency theory the modes of production alternative provided an understanding of the realisation that there are parallel processes of development in advanced capitalist and peripheral countries. This makes it possible to begin to explain similarities and differences within the same theoretical framework without resort to ad hoc explanations. The similarities of capitalist development can be seen to derive from consistent, underlying logic and internal dynamic of the capitalist mode wherever it appears. The differences derive from the ways in which capitalism satisfies its need to reproduce itself through its articulation with other modes within a specific social formation.

### 1.2.5 TNCs and the New International Division of Labour (NIDL)

According to NIDL proponents the globalization of the world economy has created an:

"..all embracing system, namely a world economy which in fact is a single world-wide capitalist system" (Frobel et al. 1980, p.8).

The evolution of this interconnected world economy has, it is argued, largely been achieved through the creation of various forms of labour control. Central to the NIDL thesis is an understanding of the historical and analytical contrasts between a classical international division of labour (during the period of internationalisation) and a NIDL.

The NIDL which it is argued emerged in the 1960s created a new form of core dominance through the part industrialisation of previously non-manufacturing based peripheral countries. The transformation of these non-manufacturing based economies was largely achieved through the location of subdivided elements of the process of production to peripheral areas (Perrons, 1981).

However, the main force of change from a classical division of labour to the NIDL is not solely the impact of location or the possibility of fragmenting production but is also centred around the decline in valorisation, the needs of capital accumulation and extent of inter capitalist rivalry (Palloix, 1977). Central to this notion of increased inter capitalist rivalry and the relocation of subdivided parts of production is the assumption that capitalism failed in the post World War Two period to initiate a feasible process of rationalisation through mechanisation and wage control in order to increase capital accumulation. According to Frobel et al;

"this device (rationalisation) alone (along with other 'classical' devices) is no longer adequate. The development of the world economy has increasingly created conditions in which the survival of more and more companies can only be assured through the relocation of production to new industrial sites, where labour power is cheap to buy, abundant, and well disciplined; in short through the transnational reorganisation of production" (1980, p. 15).

The NIDL as a distinct conceptual framework evolved from an outline of successive stages of labour process modification and an understanding of the effects such change had upon increasing the fragmentation of work <sup>4</sup>. An essential element of the NIDL framework is the recognition that the labour process is a process of valorisation and capital ownership of the means of production. For valorisation to continue it is essential that capital and labour power are continually reproduced (Palloix, 1977).

However, instability due to competition and conflict between labour and capital forced TNCs to revise the labour process and the methods used to produce value. The bedrock of analysis within the NIDL is the assumption that the recasting and continual refinement of the labour process necessitates a distinct globalization of economic activity as previously non-manufacturing based countries are brought into the industrial world in order to stimulate the rate of valorisation and accumulation (Perrons, 1981).

Within the NIDL account the development of industrial capitalism is divided into three historical phases of international capital relations and four phases of labour process modification, a framework of analysis which developed Marx's initial industrial classification. The three phases of internationalisation are identified as the 'internationalisation of commodities, capital and production'. The four phases of labour process are manufacture, machinofacture, Scientific Management and Fordism and Neo-Fordism (it should be noted that much of the terminology used within NIDL theories is also used by Regulation Theorists).

Within the NIDL framework the emergence of TNC-directed FDI occurred toward the end of the phase of capital internationalisation and was accompanied by the creation of a labour process since denoted as Scientific Management and Fordism. Fordism, it was argued, emerged due to the fall in the rate of profit under manufacture. Therefore, in order to increase accumulation and raise the rate of profit new forms of labour process were adopted. These include Taylor's principles of scientific management <sup>5</sup> and Henry Ford's application of the flow line <sup>6</sup>. In both instances there was the promotion of job fragmentation in order to reduce skills and increase the propensity of the working day (Braverman, 1974). This in turn promoted a transference of most decision-making processes to management in order that they could allocate workers with pre-defined tasks. Ford's flowline also reduced the amount of time necessary for the reconstitution of labour power. Such techniques ensured a relatively efficient example of task fragmentation and the de-skilling of work practices (Braverman, 1974).

The capability to arrange production and fragment tasks was largely open only to larger capital (especially U.S.) capable of financing such developments. The development of Fordism allowed a growth in mass production and the augmentation of consumer markets. Furthermore, the globalization of production promoted a phase in core-periphery relationships which promoted a shift in FDI from capital internationalisation to production decentralisation

(Palloix, 1975, 1976, 1977). This process was set in the context of capital concentration, the failure of scientific management and Fordism to remove the antagonism between capital and labour and the development of a new form of the labour process termed neo-Fordism.

Within the NIDL framework the development of neo-Fordism as a distinct form within the labour process is based upon Palloix's (1975, 1977) assumption that two major structural difficulties existed within scientific management and Fordism. Firstly, the attempt to introduce new work techniques and workforce discipline was hindered by labour resistance within core nations. Secondly, especially with reference to the use of the flow lines, an imbalance existed in production due to time cycle variations within the production process (Burawoy, 1979; Komninos, 1992). In effect Fordism could not fully create a truly time coherent process of production. In order to overcome these difficulties capital was forced, in some instances, to seek out a more amenable and less militant workforce. Location was based upon the desire to employ non-unionised and industrially inexperienced workforces within non-manufacturing based areas. Secondly, in order to remove the time incompatibility of production it was necessary to further fragment production through a continued process of de-skilling and product standardisation. Such a process created an employment demand which was of a low skill and low wage nature.

Technological enhancement and the use of computerised production techniques permitted capital to relocate fragmented units of production within non-industrialised areas. The development of the globalization of production is identified by NIDL proponents as a continuation of the trends of de-skilling and fragmentation encountered under previous labour process forms (Perrons, 1981; Robbins, 1989). This new labour process form maintained the concentration of capital but produced a distinct decentralisation of production (Dunford, and Perrons, 1986; Jenkins 1984a, 1984b). As is noted by Castells and Henderson (1987):

"The world economy is undergoing a process of global restructuring that redefines capital labour relationships, and the role of the state, while furthering the asymmetrical interdependency of economic functions across national boundaries" (1987, p.1).

Frobel, Heinrichs and Kreye (1980) accounted for a NIDL which was arbitrated through the evolution of world events and the changes within the international division of labour. The present phase of core-periphery relations has involved the supplementation and diffusion of capitalist relations of production within the periphery. This was achieved through the instrumentation of progressive investment, whereby industrial production in the periphery is created under the regulated control of the core. The main bases of the NIDL framework is the contention that, as the capitalist system reaches a distinct historical limit in relation to valorisation, it is forced to re-consolidate its institutionalised structural logic and create new spatial forms of labour power control (Henderson and Castells, 1987). In creating new spatial forms of labour exploitation capital



recasts the character of production through augmenting managerial control and fragmented production (see for example Shaiken, 1984).

It is argued that capital restructuring has produced a distinct process of underdevelopment due to the overall goal of TNC based FDI to acquire a workforce which is both semi-skilled and low income based. Moreover, it is argued that the employment of low income groups prevents increases in local consumption, a feature which removes the possibility of true socio-economic development. This global factory hypothesis also depicts the emergence of underdevelopment due to the transfer of unsophisticated technologies to peripheral areas, a process which undermines any significant growth in the host countries technical competence. As is noted by Frobel et al:

"Only rarely do developing countries end up with the establishment of reasonably complex industrial branches...And even in the very few developing countries where such centres of partial industrialisation have been established there are no signs that they are being supplemented by a wider industrial complex which would enable them to free themselves from their dependency on the already industrialised countries for imports of capital and goods, and for the maintenance of their industrial installations. Instead, industrial production is confined to a few highly specialised manufacturing processes in world market factories with no connection to the local economy except for their utilisation of extremely cheap labour and occasionally some local inputs" (Frobel et al. 1980, p.6).

In recent years several NIDL proponents have attempted to widen their socio-economic analysis in order to steer away from the mono-causal link between labour process modification and industrial location (Henderson, 1989, Perrons, 1992). For example, they have argued that the contemporary nature of core-periphery relationships is not solely structured around labour process modification but also through the form and structure of host countries' development strategies. Moreover, they contend that it is incorrect to depict the core-periphery relationships as being structurally bound by the institutional innovation of capital. In supporting this viewpoint, they argue that FDI in peripheral countries is not solely based upon locating new opportunities for the extraction of surplus value but also upon technical upgrading and increased market share. In general terms they argue that a neo-Fordist labour process has in many instances been remodified within distinct branch plant economies through the payment of higher wages, the employment of technical staff and the location of advanced technological transfers. As is noted by Henderson:

"As a result, Frobel and his colleagues fail to recognise that production strategies of firms change over time subsequent to the initial internationalisation, and that they articulate in different ways, in different periods, with the economic, political, and social circumstances.." (1989, p.22)

This thesis acknowledges that the NIDL framework was dependent upon labour process modification as a context for analysis, although it still produced a framework which permitted a valid interpretation of the development of underdevelopment. As is noted by Henderson (1989) one of the conceptual limitations of the NIDL framework was its general proposition that deskilling

and the employment of low-skilled workers in peripheral countries was a major stimulus to industrial location. However, the thesis argues that the evolution of TNC-controlled labour markets has not necessarily produced a workforce which is low skill oriented. Moreover the evolution of such labour markets is directly related to the nature of inter capitalist rivalry, the composition of shopfloor politics and the reorganisation of production in order to both deskill and enskill.

Although the NIDL theory is not totally rejected, it is clear that in its present stage of development NIDL theory is clearly having difficulty in getting to grips with some of the key features of contemporary capitalism. Although not specifically related to the evolution of TNCs, Regulation Theory has produced a Marxist based macro-economic theory of capital restructuring which appears to have a great potential for developing the insights gained from NIDL theory, by taking over from the point at which the NIDL fails to explain contemporary patterns of industrial location and capital accumulation.

Although sympathetic to the NIDL approach, this thesis argues that this form of analysis is over-simplified. Thrift (1989) observes that the labour practices of TNCs in peripheral areas are too complex to be explained just by reference to a demand for cheap labour. The NIDL thesis also ignores other forces that shape production systems in peripheral countries, for example, the nature of the 'host' societies and state policies (Henderson, 1989). Nation states may intervene in a number of ways to foster sophisticated foreign investment; through fiscal policies, the provision of transport infrastructure and the reproduction of labour markets. The interaction of these factors influences the extent of industrialisation and the benefits that accrue to the 'host' nation.

### 1.2.6 The Regulation School and TNCs

As in the case of the NIDL, 'Theories of Regulation' were developed in order to explain processes of socio-economic stages of development that exhibit significant socio-spatial and historical variations. Underlying this theoretical school is the notion that each 'regime of accumulation' is broken up by a series of structural crises. Structural crises occur when the stable reproduction of social relations does not take place or when the development of the forces and relations of production are inconsistent with consumption patterns. Regulation theory is not a general theory of accumulation and crisis but an analysis concerned with the function of crisis in promoting economic adjustment. Therefore, within the Regulationist discourse socio-economic restructuring is not solely based upon the antagonism between capital and labour as is generally assumed within the NIDL discourse.

Regulationists have developed a historical-economic theory which analyses the effect of capitalistic crisis tendencies upon economic change. One of the central themes of analysis is the conclusion that the capitalist mode of production cannot be comprehended as a single set of unchanged laws. Accordingly, the

history of capitalism must be viewed as a succession of socio-institutionally based phases and patterns. As such Regulation theory was a reaction against the static reproductionist paradigm of Althusserian structuralism. For example, Lipietz (1985) and Aglietta (1979) argued that there was a need to develop new structural concepts which were capable of accounting for the dynamic transformatory nature of capitalism. Moreover, both writers conceptualised the economy and the overall structure of production as being effected by the evolutionary nature of the labour process.

The theoretical framework thus has clear connections with the NIDL framework, due to its periodization of labour processes. However, it must be stressed that labour process change is conceptualised in a more comprehensive manner through the application of 'regimes of accumulation'. These 'regimes of accumulation' are identified by Lipietz as a period of:

"stabilisation over a long period of the allocation of the net (social) product between consumption and accumulation; it implies some correspondence between the transformation of both the conditions of production and the conditions of the reproduction of wage earners. It also implies some form of linkage between capitalism and other modes of production" (1986, p.19).

But for the regime to be coherent and stable the behaviour of the agents concerned must be structured in a particular way. According to Lipietz, there must exist:

"a materialisation of the regime of accumulation taking the form of norms, habits, laws, regulating networks and so on that ensure the unity of the process, i.e. the appropriate consistency of individual behaviours with the schema of production. This body of interiorized rules and social processes is called the mode of regulation" (1986, p.20)

Regulationist theory points to a 'regime of accumulation' which is represented through distinct patterns of economic evolution. Within this framework five distinct relationships between productive organisation and waged labour are analysed:

- 1) capital formation and changes within the means of production;
- 2) the changing distribution of income wages, profits and taxes;
- 3) The changing nature of labour conditions as effected by variations within inter capitalist rivalry;
- 4) the role of competition within the international economy;
- 5) the relationship between state and economy and the facilitation of the accumulation process.

In general terms a 'regime of accumulation' refers to a set of distinguishable macroeconomic relationships (Amin and Robbins, 1990; Lipietz, 1977, 1982, 1984, 1987, 1986). However, each regime of accumulation is threatened by internal contradictions which affect the rate of capital reproduction. In an attempt to remove instability there is a need to introduce regulatory mechanisms which constantly alter the economic and social characteristics of a 'regime of accumulation'. These institutionalised mechanisms are denoted as 'modes of social regulation' (MSR). A key concept of a MSR function is to lessen the range of dispute between capital and labour. As is noted by Leborgne and Lipietz a MSR is:

"A stable system of domination, of alliances, and of concessions among different groups" (1991, p.28)

In overall terms a 'regime of accumulation' does not automatically appear but is formed through institutional based policy making. Moreover a coupling must exist between the MSR and the 'regime of accumulation' in order to permit social and capital reproduction. For example, during Fordism a hegemonic 'regime of accumulation' was coupled with a MSR which promoted a consensus between the state, capital and wage earners. The MSR in Fordism attempted to promote real wage stability through sharing productivity gains with wage earners. In a more structural sense the MSR was formed around collectivised bargaining and the creation of the welfare state. Furthermore the hegemonic nature of Fordism led to a massive increase in the role of the state, which increasingly intervened in the regulation of the economy in order to directly influence the mechanisms of capital growth. In accounting for the emergence of Fordism, Regulationists denote the 'regime of accumulation' as producing a distinct change in the conditions of production and work due to the growth in the consumer goods department. As Elam has noted:

"The Fordist wage-labour nexus meant that workers won the recognition of their employers for not only embodying labour power but also purchasing power"(1990 p.30).

In order to promote consumption the mass production of consumer goods was tied to increases in the real incomes of wage earners. However, the distinct nature of consumer led growth and the inflationary nature of wage policies created crisis tendencies during periods of economic instability (O'Connor, 1984). According to Regulationists a 'supply-side' crisis led to the demise of Fordism. This 'supply-side' crisis was underpinned by reductions in the rate of profit, a demise in market conditions and a low level of valorisation due to continual rises in constant and variable capital (Bairoch, 1982).

In further accounting for the decline of Fordism Regulationists argue that the rigidity of the coupling between accumulation and the Fordist MSR led to a distinct accumulatory crisis in the 1970s. The highly rigid nature of Fordism was denoted both in terms of the relations of production and the need for continual growth in consumerism. This in turn led to an attack on such rigidities

throughout the 1980s through the promotion of more flexible productive and labour responses. In evaluating this shift away from the rigidity of Fordism, Regulationists have argued that there is a need to identify and explain trends within economic, social and spatial re-organisation. The key to this explanation is to comprehend whether or not significant changes in socio-economic relations are enough to constitute a 'new regime of accumulation' (Swyngedouw, 1989).

Regulationists have argued that the growth in flexible forms of production and employment has led to a distinct shift away from the previously dominant 'Fordist regime of accumulation', toward a new 'regime of flexible accumulation'. According to Regulationists, however, the eventual outcome remains a subject of debate (Boyer 1989). In overall terms Regulationists would agree that the high level of restructuring presently taking place is on-going and it is as yet too soon to delineate a new form of Post-Fordist relations.

Regulationists acknowledge that capitalism is becoming ever more tightly organised through dispersal and flexible responses in labour markets. The growth of neo-Fordism and TNC based location in peripheral countries also undermined the consumerist base of Fordism due to capital dis-investment and a decline in the consumer demand of wage earners as manufacturing employment declined in core nations (Dunford and Benko, 1991; Jenkins, 1985; Jessop, 1990). The crisis of Fordism is also identified as a major influence upon capital restructuring and the movement of productive capital from core to peripheral areas. However, the location of standardised production within peripheral areas has undergone a radical transformation in recent years due to the rigid nature of production within branch plant economies. Both core and branch plant economies have been forced to adopt new flexible patterns of work and production in order to stimulate accumulation and defend markets against inter capitalist rivalry.

Changes in flexible production have been reflected in the sphere of production through the use of new technologies which produce a more flexible product range. This form of flexibility is usually achieved through the incorporation of information technology onto specialised machines. For example, machines can be pre-programmed to perform a wide range of productive tasks. Moreover a machine's usage can be directly linked to time-specific consumer needs. Flexible machines also permit a restructuring of workpractices through modifying skills and intensifying the rate of production. The use of such machinery can in many instances produce economies of scale (which is the productive basis of Fordism) or more flexible consumer driven economies of scope. The use of new technology has in turn promoted 'functional flexibility'. This refers to the capacity of a firm to adjust the tasks performed by the workers it employs according to changes in demand, technology or marketing policy. It has also been argued that the use of such technologies promotes a reliance upon a group of skilled, polyvalent core workers with full-time permanent status (Harvey, 1989).

The reliance upon a core workforce has further promoted 'numerical flexibility' which refers to the ease and speed with which a firm can adjust the number of peripheral workers employed in relation to fluctuations in demand. Included within the peripheral category are employees who do not have career status and who can be laid off or re-employed according to economic conditions. These workers would generally hold temporary employment contracts, be part-time or casual staff, and would have jobs with high turnover rates where the numbers employed can easily be reduced by a policy of non-replacement. Within branch plant economies such forms of numerical flexibility are capable of re-casting the content of the reserve labour army.

A contrary viewpoint is held by 'Flexible Specialisation' proponents who have argued that the dominant mode of Fordist production has largely been replaced by Post-Fordist relations of production. Underlying the notion of flexible specialisation, are a number of analytical features which are necessarily linked in order to constitute a new post-Fordist era of production. These include flexible technologies, vertical disintegration, small scale (craft) production, market-based and competitive inter-firm relationships and general labour force enskilling (for a description of these terms see Gertler, 1986, 1988, 1991). These new relations of production are based upon the perception that there is a more general trend toward 'functional flexibility' and workforce enskilling (Bylinsky, 1983). Moreover it is argued that labour market processes have an important role in generating renewed tendencies of industrial agglomeration. According to Scott, Post-Fordism is identifiable through:

"The creation and upgrading of labour skills which is also a major concern in flexible production..." (1992, p.225)

The adoption of such technologies, it is argued, has been accompanied by the growth in consumer-led production through the adoption of scope as opposed to scale based production (Perez, 1985). Flexible Specialisation proponents argue that the demise of Fordism is largely a 'demand-side' crisis reflected by the failure of mass production to produce consumer goods which were compatible with consumer demands. This demand-side crisis was also reflected in the fall in consumer demand due to the collapse of welfare state mechanisms necessary for market growth. The reaction to this demand side-crisis has led to flexible specialisation theorists adopting a transaction costs approach which stresses the importance in contemporary capitalist production of intrafirm and market transactions. Four distinct phases are identified:

- 1) the demand-side crisis has promoted a need for augmented flexibility within production systems due to consumer divergence;
- 2) there has been a dynamic shift toward vertical disintegration as firms seek to improve their product flexibility;

3) The complexity of reorganisation and the new employment demands of augmented flexibility promotes closer links between capital and labour;

4) The new requirements produced by labour reconstitution and 'deverticalisation' produces 'new industrial districts' .

The thesis of 'flexible specialisation' has been primarily concerned with the identification of a production system organised within industrial districts (such as Third Italy, Route 128 and Orange County U.S.A). These industrial districts are claimed to be based upon small, vertically disintegrated and highly specialised firms, knitted together in a dense network of market based interactions within a clearly defined territory or industrial district. In theoretical terms the structure of industrial districts sets them apart from the hierarchical and market-power based relations traditionally associated with Fordist large-scale, vertically integrated oligopolistic firms (Piore and Sabel 1984). According to Scott:

"To an ever-increasing degree, the economic geography of the modern industrial world can be represented as a patchwork of dense production agglomerations linked together by an extensive system of interregional transaction. Within this system, individual agglomerations tend to be held together in one place by a web of internal transactional relations and to be further locationally anchored by an adjacent constellation of local labour markets. In this simultaneously global and local structure of production and exchange, industrial agglomerations are interdependent yet self-sustaining, in the sense that their individual dynamics of growth are often the very source of their competitive economic advantages" (1992, p.219)

Moreover, Best (1990) and Murray (1991) have claimed that the 'de-verticalisation' of TNC-based production structures has recast the possibility of economic growth and socio-economic advancement in peripheral areas. De-verticalisation it is argued is capable of removing the lop-sided nature of branch plant based economic development characteristic under the Fordist era through stimulating linkages between TNC and small indigenous capital. A concept of production change promoted by the UNCTC:

"Production in localities is no longer footloose and based on non-local linkages. Manufacturing decision making and production are all decentralised with closer ties locally. No longer do a small number of metropolitan regions and oligopolistic corporations dominating the development of less developed regions" (UN, 1988, p.34).

Furthermore the proponents of flexible specialisation have continually argued that the demise of the externally controlled branch plant has led a new configuration of employment practices (Scott, 1992; Storper and Scott, 1989). These practices include promoting the employment of qualified skilled employees within branch plants as a competitive strategy (Scott and Angel, 1987; Storper and Scott, 1989). The overall skills mix within the periphery is upgraded. The growth in such forms of flexibility has prompted Scott (1991) to argue that TNCs are less destructive within the world economy than they had previously been due to their facilitation of:

"global networks of transactions" (1991, p.24).

Kaplinsky (1988) has also envisaged the development of a new systematic relationship between plants and firms through the adoption of a new flexible labour process which promotes enskilling as a competitive strategy. Furthermore, Sabel (1989) has argued that TNCs can create industrial districts and agglomerations of producers within peripheral areas. Continuing on from this, Hoffman and Kaplinsky argue that:

"The adoption of a new flexible labour process in which the past tendencies towards the increasing division of tasks, the de-skilling of work, and the removal of control over production from the worker are reversed" (1988, p.331).

Table 1.1 contains a description of the main theoretical differences between Regulation theory and Flexible Specialisation. Flexible Specialisation assumptions are challenged in this thesis due to their failure to comprehend the true character of capital's imperative (see Table 1.1 for a description of analytical differences). Moreover, the flexible specialisation thesis is also rejected due to an overt over-reliance upon a single path of capitalistic development which is technically determined by the introduction of new flexible machines and which is construed as a mere inversion of the Fordist industrial paradigm. Regulationists have argued that in many ways flexibility actually promotes new forms of social and productive control through the creation of segmented labour markets (Amin, Malmberg and Maskell, 1989; Boyer, 1988).

Amin and Robbins (1990) criticise the flexible specialisation notion that the form of economic growth identifiable within industrial districts is readily transferable. Instead they contend that the industrial districts which are so important to the overall analysis within the flexible specialisation thesis are largely place specific and as such cannot be constituted as a new form of capital accumulation: As is noted by Amin and Robbins, proponents of flexible specialisation are:

"The new mythmakers, with their optimistic and celebratory visions of decentralised production, high-tech cottage industry, and flexible futures, have their claims on what we consider to be an extremely simplistic and contentious understanding of historical change" (1990, p.8).

Regulationists also argue that in general terms labour flexibility is used negatively to promote valorisation and protect highly competitive markets. The thesis explores the validity of this contention through examining TNC based capital and its organisational needs. Furthermore the thesis examines the extent to which branch plant economies produce numerical and functional flexibility (Gertler, 1988; Cavestro, 1989).



Table 1.2: Analytical differences between Regulation Theory and Flexible Specialisation School

REGULATION THEORY	FLEXIBLE SPECIALISATION
<b>IDENTIFICATION OF FORDISM</b>	<b>IDENTIFICATION OF FORDISM</b>
Fordism is a model of development and its alternatives are eclectic and multi-faceted. Mass production has been remodified. The emergence of forms of flexibility does not necessarily replace mass production	Fordism was a system of mass production which has been replaced by another alternative productive order. New forms of flexibility are anathema to mass production
Fordist market relations still dominate	Market relations have been replaced by logistics functions
New industrial spaces are neither coherent or hegemonic and need to be analysed separately. The specific nature of such spaces means that they are not reproducible and as such must be distinguished from other models of economic development	Industrial districts are general models of contemporary capitalist development
The demise of Fordism was due to a supply-side crisis. Identified by reductions in the rate of profit, collapse in the wage nexus and the internationalisation of production	The demise of Fordism was due to a demand side crisis. Identified by a fall in consumer demand and the inflexibility of consumer production
Local capital remains largely uninvolved with TNC capital	Indigenous capital is linked to TNCs through sub-contracting
<b>ROLE OF LABOUR</b>	<b>ROLE OF LABOUR</b>
Removal of labour rigidities is based upon extending managerial control	The adoption of new technologies promotes general enskilling
Labour flexibility maintains the dominance of capital over labour	Capital engenders workplace democratisation
Growth in social dumping of wage earners who are not compatible with reorganised production	Mutually advantageous system of production for wage earners
Emergence of unskilled, feminised and youth labour force is the recasting of previous labour forms	Employment of technically competent skilled workers is a predominant feature of Post-Fordism

Sources: Aglietta, 1979; Boyer, 1987; Brusco, 1982; Dunford, 1990; Piore and Sabel, 1984.

Various non-Regulationists have also dismissed the flexible specialisation contention that there has been a general shift toward scope based production. As is noted by Schoenberger (1989) the cost of flexible automation is more likely to be met by large capital and such technology must be scale based to overcome initial outlay and costs. This feature of production, it is argued, removed the threat of unstable demand and supply. Martinelli and Schoenberger (1991) have also dismissed the notion of a new post-Fordist regime of accumulation due to the failure of its proponents to recognise that 'Oligopoly is alive and well':

"taken together, the almost unavoidable conclusion is that the large, vertically integrated firm, though not headed for extinction, is under increasingly severe competitive pressures which it is, by virtue of its size and organisation, ill equipped to handle. In this light, the flexible specialisation model is tendentially generalisable far beyond its geographical and sectoral origins.....we believe that it is less than obvious that large, vertically integrated firms are inherently hindered from reorganising their production along flexible lines. Furthermore, the large firm may be able to achieve this flexibility without relinquishing many of the key attributes that have traditionally

set it apart from the small firm, including large-scale financial resources, market power, and enhanced geographical mobility (1991, p.119).

The thesis also examines Schoenberger's (1988) argument that TNCs are highly flexible in relation to the manner in which they are continually capable of altering their internal production and labour processes without having to vertically disintegrate production. According to Schoenberger such flexibility has also permitted scale based production which produces a range of processes and product configurations (see also Peet, 1983a, 1983b).

In acknowledging that TNCs have introduced production, numerical and functional flexibility through their productive hierarchies the thesis also examines Amin's (1992) argument that the prospects of peripheral regional economies are now more closely tied to forms of flexibility within branch plants. According to Amin (1992) branch plant economies still have a greater socio-spatial influence than industrial districts. Amin and Malmberg's (1989) proposition that, the economy of peripheral Europe is incapable of engendering a truly stand alone decentralised branch plant economy due to the fact that locational decision making is still connected to the verity of production and the reproduction of labour, is also examined (see also Radice, 1989, 1991). Furthermore the thesis examines Amin's analytical position:

"surprisingly little attention has been paid to the position of the less favoured regions within an evolving EC-wide division of labour within large corporations and to the threats to, and opportunities for, less favoured regions arising from new patterns of corporate restructuring. There is however much evidence to suggest that the contemporary spatial behaviour of large corporations located in Europe but operating on an international scale could be equally, if not more, important than local networking in shaping the development prospects of less favoured regions." (1992, p.128)

Furthermore as is noted by Schoenberger (1988) the introduction of flexibility within TNC directed production hierarchies will actually lead to increasing pressure upon branch plant workforces due to declines in employment opportunities, increased polarisation and segmentation within labour markets. The thesis explores the central notions of Schoenberger's work in relation to the reconstruction of TNC based labour practices and the creation of new social relations: The thesis is also especially attentive to the conclusion that:

"We believe that the restructuring process currently underway is still a very open one which affords the possibility of numerous permutations of industrial and spatial structures" (Martinelli and Schoenberger, 1991, p.118)

### 1.3 Proposed Theoretical Framework and Summary

Within the thesis restructuring is identified as the manner in which capitalist enterprises respond to changing competition and crisis tendencies by altering products, services and forms of production. The thesis examines the effect of periodic changes within the organisation of capital upon the quantity and quality of employment offered to wage earners within the Shannon Industrial Estate.

Through analysing the extent of restructuring within the capitalist economy within Shannon, it is clear that a complex spatial interaction exists with regard to the relations of production. In identifying this complexity, the thesis analyses the extent to which globalization has increasingly become the dominant tendency that shapes the contemporary relations of production within the locality of Shannon. The nature of restructuring and its effect upon socio-economic conditions is examined through an analysis of the following:

- 1) The degree and nature of reorganisation of TNC-controlled production processes within the Shannon Industrial Estate;
- 2) The alteration of skills and technical competence of employees among TNC located in Shannon;
- 3) The role and extent of labour-capital antagonism in promoting the reorganisation of production;
- 4) An examination of whether or not the emergence of numerical and functional flexibility promotes a new regime of accumulation or the reworking of previous accumulation strategies;

The thesis also tests the validity of a locality-based research framework. Locality-based research has been highlighted by a series of observable phenomena within the contemporary capitalist world (Swyngedouw, 1992). The thesis explores the argument that the logistics of shop-floor labour organisation has been modified in relation to the content of institutional and organisational forms which are place-specific. These institutional and organisational forms are analysed in terms of their political-economic structure and regulatory practice all of which are comprehended as being driven through the need to augment global command structures through increasing locational flexibility.

In adopting and merging both a locality-based analysis and a Regulationist framework the thesis acknowledges that although a local MSR is bounded by national and international laws and institutions, localities, such as Shannon, have produced locally distinct production and socio-economic structures. These structures are denoted as localised MSR which have been created in order to guarantee that the accumulation system is reproducible in the medium term, through the facilitation, conciliation and normalisation of crisis tendencies. Localised MSR are recognised as being necessary to perpetuate capital accumulation through increasing inter-firm competitiveness, producing flexible labour forms and conditioning the balance of class forces in a particular time and place.

In overall terms the local MSR is dependent upon mobilising and modifying different forms of labour power due to the supply-side crisis of contemporary

capitalism. This is highlighted by the manner in which the introduction of more flexible forms of labour and production has created new labour market structures. Moreover, changes within local trade union politics and the policy making structures of locally based development agencies have similarly combined to produce a distinct localised MSR. In overall terms the thesis examines the proposition that socio-spatial unevenness is regulated by a history of productive control which engenders new institutional ways of organising and sustaining accumulation (Bardou et al 1982; Lipietz, 1992).

The nature of a localised MSR is examined through identifying the relevance of the following:

- 1) The extent of TNC-control over the Shannon Town Local Labour Market (STLLM);
- 2) The history and structure of power distribution within the STLLM;
- 3) The nature of labour market fluidity or segmentation in relation to recruitment and training;
- 4) The distribution of labour power among firms and among the workforce;
- 5) Identification of previous local MSR through an examination of skill composition and modification;
- 6) Examination of socio-spatial processes undertaken by capital through the introduction of forms of flexibility.

The thesis also explores the validity of the Regulationist framework for explaining the contemporary socio-economic situation in Ireland. Chapter 2 explores changes within Ireland's regimes of accumulation and MSR. Chapters 4-7 examines this framework through an analysis of the locality of Shannon. This locality based analysis endeavours to explain the form of socio-economic change within the context of specific regimes of accumulation and focusing on labour process change.

## Notes

1. The term TNC is preferred over Multinational Corporation (MNC) as the latter denotes location in many countries as opposed to TNC which denotes a relationship between two countries (the term is also more applicable when related to the companies analysed within the thesis. See Chapter 4).
2. This emanated from the need for spatial propinquity of related activities in both assembly and industrial transformation. There was also a need to contain infrastructure, services and labour supply within distinctive urban locations.

3. Underdevelopment is construed as a process in which (what is deemed to be development) actually produces unevenness in relation to space and time. This process of development is identified as a facet of the developmental process due to the desire of capital to aid accumulation through the competitive supremacy (Malecki, 1985; 1986; Massey, 1985, 1986; Moulaert and Swyngedouw, 1989). However unevenness and underdevelopment are not necessarily caused by the mode of capital reproduction but also through labour-capital antagonism and production dysfunctionalism.

4. The labour process is defined as the means through which the organisation of productive value is created and the value objectified in the means of production and the materialisation of a distinct product.

5. 3 main points in Taylorism the simplification of individual jobs into a single task where feasible. The skill content of the job was to be minimised by reducing the process of production in partial stages. Any conception was removed ie design work planning prototype development ie increase efficiency and profit ie greater control over production costs.

6. A flowline denotes a process in which a conveyor belt move the objects of production to a worker who remains in a fixed position, this ultimately removes the time lag between the worker fetching parts of production and re-tooling machinery to do different tasks.

## Chapter 2: National Development and the Facilitation of Foreign Direct Development

### 2.0 Introduction

In analysing the contemporary structure of the Irish economy it is important to construct a framework which explores the emergence of TNC-directed development and the link between previous and contemporary regimes of accumulation. Such an explanation, which is concerned with the evolution of Ireland's political economy, provides an understanding of the reasons why contemporary Irish industrialisation proceeds through an unfettered allegiance towards FDI which has been ceaselessly illustrated by the growth in foreign capital ownership and the free importation of means of production and exportation of profits (Kelly et al., 1983; Sklair, 1988).

By 1993 TNCs in Ireland accounted for approximately 50% of industrial output, 75% of industrial exports, and 46.1% of manufacturing employment (OECD, 1993). Such high levels of foreign domination within the Irish economy are not peculiar to other peripheral societies due to the extension of a globalised international division of labour since the 1950s. However, the contemporary regime of accumulation which has supported foreign domination of the Irish economy is in many ways contradictory to previous, post-independence-based, regimes of accumulation which were structured around agricultural domination and the attempted exclusion of foreign-controlled economic activity. Explaining this contradiction is of importance as it illustrates not only the shift from laissez-faire and protectionist-based regimes of accumulation but also facilitates an understanding of how vitally important TNC-led development has been for the survival of the Irish State.

The primary purpose of examining previous and contemporary modes of socio-economic modification is linked to providing a materialist analysis which explains how the character of contemporary Irish society has been influenced by both domestic and global concerns. In order to adequately explain the emergence of contemporary socio-economic conditions in Ireland Chapter 2 examines three distinct regimes of accumulation evident in Ireland since independence. These three regimes of accumulation, which are explained in detail below, are denoted as follows:

- 1) The 'Dependent Agricultural Regime';
- 2) The 'Protectionist Regime';
- 3) The 'Neo-Fordist Regime':

In adopting a Regulationist discourse the thesis argues that current transitions are not a direct extension of labour process based theories, but a socio-spatial variant of global crisis and conflict. More than anything else these relationships

are denoted as being determined not solely by global economic conditions but also between dominant classes and interest groups who have continually perpetuated variations of the capitalist system within Ireland (Smyth, 1990).

As well as explaining the evolution and context of the contemporary 'Neo-Fordist Regime' Chapter 2 is also concerned with introducing the spatial unit of analysis examined within the thesis. The evolution of the Shannon Industrial Estate and the role of the development agency SFADCo are discussed in relation to labour market alterations.

## **2.1 Post-Independence Regimes of Accumulation**

### **2.1.1 The Dependent Agricultural Regime of Accumulation (1922-1932)**

The 'Dependent Agricultural Regime' (DAR) reflected the deep-rooted nature of Irish dependence upon the UK. During this period Ireland, as it had prior to independence in 1922, relied upon the UK for its import and export markets. In political and class terms the continuation of a regime of accumulation centred upon the export of foodstuffs to Britain favoured a substantial land owning class which benefited precisely from such a subordinated and dependent mode of economic development.

This land owning class and its political allies Cumann na nGaedheal (later renamed Fine Gael) dominated the early independence period in both political and economic terms. In socio-political terms the DAR was held together by an alliance of large farmers and other professional groups who supported political and economic links with Britain. As noted by Breathach the domination of Irish society during this period was centred upon:

'a highly heterogeneous group whose common denominator was its membership of the merchant class-import/export agents, wholesalers and retailers, moneylenders and bankers, cattle dealers, agricultural merchants etc.....Clearly, such a class saw its interests served via the maintenance of this economic structure and hence would strenuously resist any tendency towards change". (1980; p.3)

The 'tendency towards change' as noted by Breathnach was to come in the 1930s with the acquisition of power by forces originally connected to Sinn Fein and its military wing, the Irish Republican Army (IRA)<sup>1</sup>. This Republican grouping had found the Treaty of 1922 wholly unacceptable due the Irish Free State remaining within the British Commonwealth. A lack of consensus over the terms of the Treaty led to a civil war between the pro-Treaty Cumann na nGaedheal government and Sinn Fein/IRA. The civil war ended when DeValera (leader of Sinn Fein) conceded that the IRA could not succeed with their military struggle<sup>2</sup>. DeValera's new party Fianna Fail entered the Dail in 1926. Its policies and ideological concern were underpinned by a zealous commitment to Irish nationalism and as noted above were to be enshrined in the 'Protectionist Regime' between 1932 and 1958 (Brown, 1985).

Due to the nature of post-colonial dependency the DAR was based upon a backward rural economy and a small and extremely unsophisticated industrial sector (Breathnach, 1988; Smith, 1991). The maintenance of socio-economic dependence upon the UK was directed by a comprador bourgeoisie of large landowners who were reliant upon investment opportunities outside of Ireland and agricultural produce demand from the UK (Crotty, 1986; Rumpf and Hepburn, 1977). As a hegemonic class, large landowners distrusted any form of protectionism, as proposed by Fianna Fail, which would threaten UK markets for Irish agricultural produce. As such the accumulatory regime that existed prior to independence remained largely unaltered as the State applied a largely hands-off policy toward the economy. The extent of laissez-fairism during this period was testified to by farmers remaining exempt from taxation and the State continually refusing to supplement diminishing farm incomes or to create significant welfare assistance schemes.

However, the perpetuation of the laissez-faire tradition was not only a reflection of the dominance of the property classes but was also based upon the politics of reconciliation following the Civil War, and was tied to a precondition of stability which it was argued was best served by remaining linked to Britain. For example, the stimulation of a more industrially-oriented MSR necessary to stimulate economic prosperity was deemed to be too conflictual as the mobilisation of social forces would mean unleashing national enmity toward continued British influence over the Irish economy (Parker and Driver, 1994). Another feature of Irish society which supported the link with the UK was the composition of the Civil Service which had largely maintained the same personnel and attitudes that had existed prior to independence.

However, even within such a laissez-faire based regime, high levels of socio-cultural regulation were clearly evident due to the Catholic Church playing an evermore significant role in the reproduction of Irish society. As well as assuming the role as the supreme moral interpreter the Catholic Church also accumulated a significant amount of capital which it invested in Church building and educational development. This control over surplus capital, most of which was supplied by a body of meek and subservient lay Catholics, deflected capital away from industrial investment and expanded consumerism (Smith, 1991).

The ideological significance of the Church in this period is of vital importance. As a social regulator the Church purposefully discouraged its laity against independence of thought due to the fear that a strong and independently-minded laity might have developed its own opinions, material and power interests which would have challenged the power interests of the sacerdotalists. The revival of the Church in the 1920s was closely tied to the nature of Irish identity. However, the link between temporality and Irishness was not based upon the promotion of Celtic communalism but instead upon bourgeois



property rights. As such Catholic-Nationalist Ireland was made safe for persons of property through the promotion of a virtuous lifestyles uncontaminated by commercialisation and social progress (Downey, 1989). As such the combined dominance of property interests and the Catholic Church sustained and conserved the socio-structural relations prevailing in the DAR.

### 2.1.2 The Collapse of the DAR

The eventual demise of the DAR was based upon the emergence of a new political consensus controlled by Fianna Fail. The failure to industrialise, continued population growth and a 40% decrease in agricultural prices between 1919 and 1930 led to increases in unemployment and the decline of small scale farming interests (Smyth, 1988). As noted by Kennedy et al:

"In the event there was little or no progress in agriculture....no increase took place in the number of cows, other cattle or pigs, while the area under crops fell by nearly one-fifth between 1922 and 1932" (1988, p37).

High levels of social dislocation were an opportunity for DeValera's Fianna Fail to gain electoral victory in 1932. In class and voter terms Fianna Fail attracted the support of the parvenus, the small farmers and many of the workers and the newly unemployed who were drawn together by their antagonism against the DAR which they felt did not serve their own material or anti-British interests (Munck, 1993; Wickham, 1981). As such DeValera's electoral victories were centred upon the promotion of vociferous nationalist policies which challenged the hegemonic control of the pro-British comprador bourgeoisie and promised a new regulatory regime based upon economic sovereignty and the removal of socio-economic dependence upon the UK (Munck, 1993; O'Hearn, 1988).

### 2.1.3 The Protectionist Regime (1932-1958)

The Wall Street Crash of 1929 heralded the beginning of a world depression of unprecedented severity. The severity of the depression encouraged nation states to support protectionist policies through the raising of tariffs barriers against cheaper imports in order to protect indigenous industrial and agricultural sectors. The adoption of protectionist policies internationally provided the appropriate environment for DeValera to follow a protectionist path (Long, 1975). As such the gradual introduction of protectionism was both a result of global economic conditions as it was a product of internal social pressures and hostility toward British influence over the economy.

It was argued by Fianna Fail that import-substitution policies and the adoption of a protectionist policies would serve a range of class interests. For example, it was contended that import-substitution and the creation of an Irish-controlled consumer goods market would guarantee industrial investment opportunities for an embryonic bourgeoisie as well as employment opportunities for the urban

working classes. Moreover, protection of the Irish agricultural goods market would also provide guaranteed markets for small farmers who were fearful that produce markets would be undermined by the import of cheaper foodstuffs (Munck, 1993).

A major component of the PR was the foundation of a MSR based upon a populist alliance between labour and Irish industrial capital and an economic war with the UK<sup>3</sup>. This alliance was largely based upon the latter's reservations about the competitive strength of international corporations and the former's fear that such industrial competition would lead to increased unemployment (Brown, 1985; O'Hearn 1993). This populist alliance was also supported by increased state intervention, subsidisation of industry and the move towards a tentative welfare state through the application of unemployment assistance and housing schemes.

The protectionist MSR also sustained a labour market based upon small scale family firms which were heavily influenced by family-tie based recruitment policies. In many instances labour employment was based upon family history, religion and community standing (Keightley, 1992). Such a MSR produced a disorganised and inefficient labour market which continually failed to encourage the development of a more extensive skills base (Munck, 1993). The malfunctioning of the labour market, which was eventually to contribute toward the collapse of the PR, was also exacerbated by the continual outmigration of labour power. Out-migration deterred the formation of a truly coherent Fordist complex within Ireland due to the insufficient scale of the internal market (Kennedy et al., 1988).

Apart from the failure to encourage a more innovative MSR which mobilised the productive capacity of Irish workers the PR also failed to fundamentally restructure Irish agriculture, as had been promised in the early 1930s. In fact, during the PR period there was a marked concentration of farms, especially in the East. In the West, poverty and emigration still prevailed. Certainly nothing was done to fulfil DeValera's stated objective:

*"to free the countryside from the dominance of cattlemen, to extend the area of tillage, to develop home industries and to provide employment for those who might otherwise be forced to emigrate"*(cited in Lyons, 1981, p.614).

By 1936 Fianna Fail had imposed tariffs on over 4,000 categories of imports. Furthermore, import licences and quotas were introduced in order to further protect products within the domestic market (Brown, 1985). Foreign capital and industrial ownership were also curtailed through the Control of Manufacturers Act of 1932 which ensured that 51% of the shares in manufacturing companies were controlled by Irish nationals.

Initially the protectionist policies were relatively successful due to significant rises in employment, output and new firm formation (Long, 1975). Between 1931 and 1938 industrial production grew by 50%, while industrial employment increased from 110,5000 to 166,000 over the same period. However, the PR did not create significant growths in industrial productivity, nor was much progress made in expanding industrial exports, with production being almost completely turned towards the internal market. The type of industrialisation which occurred was also limited, concentrated as it was in the footwear, hosiery, glass, paper, leather, bricks and other low-value added sectors. An essential limit was also posed by the internal market, which was not only small, but was also constrained by the stagnation of the national income (Downey, 1993).

Under successive Fianna Fail governments, state intervention was more marked than was the case during the DAR, with 19 state bodies being formed between 1932 and 1939. These included the Electricity Supply Board (ESB), Aer Lingus the national Airline the Irish Tourist Board (Bord Failte). The key move in State promotion of industry came with the formation of the Irish Development Authority (IDA) in 1949. This state-sponsored body was initially charged with the administration of tariffs and quotas in specific industries, but in the 1950s during the Neo-Fordist Regime its brief was to be extended to attracting foreign capital and encourage new indigenous industry.

One of the most central and enduring effects of the PR was that active State intervention became a precondition for industrialisation. The growth in the influence of the public sector over industrialisation was not only a distinct shift in State activity in comparison to the DAR but also bore testimony to the need of the State to intervene directly within the Irish economy in order to regulate investment and employment conditions. The need of the State to intervene directly was based not merely upon overcoming the structural limitations inherent within the economy but also reflected the lack of capital investment by the native bourgeoisie. The continual failure of the Irish bourgeoisie to invest significantly in Irish industries was to become a central limitation of the PR as it reduced the possibility of upgrading the technological nature of production necessary to promote high-value added export industries. As such the PR failed to produce a MSR which directed surplus capital investment, by the Irish bourgeoisie, away from overseas and predominantly British investment markets (Breathnach, 1988).

By 1952 the Irish state controlled 52% of all investment in Irish industry, a situation which meant that during the PR the Irish State had purposefully undertaken the role of economic regulator and protector of private wealth (Parker and Driver, 1994). The State was no longer just a guarantor of political or legal legitimacy due to it embracing a wider socio-economic role. A role which laid the infrastructural basis, and of course, the essential social services such as housing and health, necessary for capitalist expansion. Unfortunately, for the Irish State the support for infrastructural requirements necessary for capitalist

expansion was accompanied by the creation of inefficient industrial and accumulatory structures. As such it is possible to conclude that the most enduring effect of the PR was the growth in State-sponsored activity which effectively prepared the Republic to enter the age of monopoly capitalism.

The nature of the protectionist regime of accumulation meant that indigenous industry was largely detached from the Fordist epoch of industrialisation, due to the insular and parochial application of economic nationalism (Smyth, 1990). The production consumption nexus founded upon the small and static production of basic consumer goods meant that Irish industry was incapable of producing a sufficient high-value added internationally-based consumer goods market. As is noted by Mjoset:

"Ireland obviously did not...develop its own national version of the Fordist "mass production/mass consumption complex" (in NESc 1992a, p.12)

The lack of market growth and the subsequent failure of Irish industries to expand into international capital and consumer goods markets meant that industry failed to produce sufficient capital necessary for research and productive investment (Munck, 1993). The lack of innovation within the culture of production and the emergence of a bourgeoisie which was low risk-taking further emphasised the weakness and incompatibility of the protectionist MSR in promoting socio-economic development.

The failure of the PR to produce a systematic national system of innovation, capable of producing significant socio-economic opportunities, was also constrained by the use of tariff instruments which were both crude and highly indiscriminate, and responsible for increased production costs and industrial inefficiency among Irish companies (Kennedy et al., 1988). Furthermore, the use of State expenditure, especially during the last tens years of the PR, to encourage businesses which had little or no hope of expansion due to the staticism of the domestic market, meant that State sponsored investments were merely fostering naturally sheltered and relatively unsophisticated enterprises which were ill-equipped to exploit wider economic opportunities. Although national industrial policies had a central objective there was little financial support for industrial or agricultural education and as a result little effort was applied to engendering a more innovative approach towards production (Munck, 1993; Wickham, 1980,1983).

Other weaknesses within the protectionist MSR were the failure of the Irish State to produce revenues and scale economies sufficient enough to extend a welfarist MSR which would continually finance increased government expenditure on housing, health and education. In reality the populist alliance between Fianna Fail and Irish working class produced a welfarist MSR beyond the financial capacity of a declining home economy (Kennedy, Giblin and McHugh,1988; Shirlow, 1993). As is stated by Smyth:

"At the level of policy formulation the problem was seen as a technocratic one: a choice between the continuation of 'unproductive' government expenditure on housing, health and education and a productive investment in areas which would promote real economic growth" (1990, p.97).

#### 2.1.4 The Demise of the PR

After World War 2 there was a general move, internationally, towards the dismantling of protectionist barriers in return for greater access to markets abroad. The advent of Fordism/Keynesianism after the War assisted the reconstruction of the Western economies around the axis of mass production and mass consumption aided and abetted by interventionist states. During the 1950s it became clear that Fordist-based economic growth could only take place if new markets could be created and consumption made the dominant mode of social relations (Lipietz, 1988).

The PR was doomed to fail because of the core's monopoly of the most advanced techniques and, therefore, its ability to dominate these new Fordist-based consumer markets. This failure to compete within the newly forming global economy was paralleled by core institutions and States' promoting a modernist ideology, which promoted the notion that peripheral societies, such as Ireland, could industrialise and compete only through the adoption of 'Western' ideals of free enterprise and free trade. However, more powerful than the modernisationist ideology was the creation of a material reality based upon subordination within a US-dominated world system (Chomney, 1988).

The acceptance of US domination was centred upon several important considerations. At the international scale the failure to remove protectionist barriers could have led to European nations and the US refusing to trade with Ireland. This was of vital importance due to the inability of the PR to significantly alter Ireland's dependence upon imports. In relation to domestic considerations the new Fordist epoch provided an opportunity to bring jobs and prosperity, to Ireland, necessary to remove social conflict. Eventhough Ireland was a relatively insignificant capitalist country it had no choice but to align itself with the dominant mode of regulation (O'Hearn, 1993).

The State's intensified interest in the active promotion of industrial development, without the use of protectionist policies, was extremely serious due to the combination of external and internal pressure in Ireland. The failure of protectionism to remove the reliance upon non-Irish industrial inputs created a trade deficit of \$65 million which virtually bankrupted the Irish state in 1957 (O'Hearn, 1993). Moreover, by 1957 unemployment had risen to 78,000, a 85% increase since the inauguration of protectionism. In relation to terms of trade Kennedy et al have shown the following:

"While import process, also declined, they fell much less after 1931 than export prices, so that the terms of trade deteriorated by more than a quarter between 1931 and 1934, and even by 1938 had

recovered only to within 20 per cent of the 1931 level...This was partly due to the need for imports of machinery for the new industries" (1988, p.45)

Out-migration had increased dramatically, after World War 2, with an estimated 54000 (2% of the total population) leaving Ireland in 1957 (NESC, 1991). The combination of high levels of unemployment and out-migration significantly reduced the overall social costs of the reproduction of labour power and in so doing condemned the economy to stagnation. The failure to produce an acceptable MSR capable of satisfying the socio-economic demands of the electorate deepened the crisis facing the Irish State and furthered the need for the creation of a new regime of accumulation and MSR in Ireland (Smith, 1991). The combination of social dislocation and the dwindling national income meant that the PR had eventually run out of steam due to its failure to produce the necessary capital inputs required for continued industrial growth and social prosperity (Chomney, 1993; NESC, 1992a). In effect the PR entered into a distinct demand-side crisis.

The late 1950s heralded the decline of DeValera's economic nationalism through the regulated withdrawal of protectionism. In ideological terms the isolationist stance of Irish Republicanism had failed to achieve economies of growth sufficient to placate the socio-economic and consumption demands of Irish voters. This was reflected in the nature of post-war voting patterns and the subsequent removal of Fianna Fail from government in 1954 (Busteed, 1991). In a desire to reassert its dominance through populist initiatives Fianna Fail was forced to reconsider its basic ideological stance which had supported Irish capitalism and nationalist economics. Fianna Fail, under its new leader Lemass, who became Taoiseach in 1957, had particular advantages in carrying through an new economic strategy based upon the dismantling of protectionist barriers. As Wickham explains:

"Once the problem was posed ideologically as the very survival of the nation who better to rescue the nation than that party which had homogenised the political articulation of the national identity-Fianna Fail. Precisely because Fianna Fail was not linked directly to the dominant economic groups, it had the political room to manoeuvre, free from immediate pressure group constraints, necessary to reverse existing policies over a wide range of areas. At the same time, as the national party, it was ideologically independent of the apparent natural allies of an export-oriented policy" (1980, p.57)

The nature of out-migration was a clear example of Irish workers 'voting with their feet' for the material security offered by Fordist expansionism in core nations. The PR had produced wage rates, in Ireland, which were significantly lower than in countries which had successfully implemented a more welfare based regime of accumulation. For example, in 1958, wages were 50% lower than in Denmark and Britain, and 80% lower than in the USA (O'Malley, 1989). For Irish workers the continual stagnation of the economy and the continual support for a regime of accumulation which would not significantly raise industrial wages was unacceptable. As noted by Chubb:

"it was not until a recession in the middle 1950s brought a growing awareness of the gap that was opening up between Ireland and the rest of Europe that a change came....With dramatic suddenness the state lurched into the middle of the twentieth century, at least so far as the development of the economy was concerned" (1970, p. 242).

The rise to dominance of the Fordist/Keynesian regime of accumulation after World War Two heralded recovery through the combination of mass production and consumption. For Irish policymakers it was patently clear that potential economic growth could only be stimulated through supporting FDI. As is noted by Wickham the pressure to end the PR was also directed by Trade Unionists and Fianna Fail members:

"By the mid 1950s this ideology (*economic nationalism*) was clearly in danger of losing any links to a material reality. Lemass (*Taoiseach*) realised that no attempt to reinvigorate the Party's 'national' status would succeed if they ignored the demands of the masses, the unions, for an expansion of the productive forces...(The strategy) served to link the unions to a process of expansion which clearly subordinated both the number of jobs created and the social and taxation aspects of policy to the dictates of an essentially capitalist rationality of efficiency and competitiveness" (1982, pp.189-190).

The Irish bourgeoisie faced a paradox of whether it should support a Fordist regime of accumulation which would ultimately threaten its industrial strength and influence or an ineffective regime incapable of promoting a MSR capable of deflecting social conflict. Moreover, for the Irish bourgeoisie, FDI also posed a threat to the coherence of nationalist ideology. On the other hand, the stagnation of economic growth posed a potential threat of existential proportions.

The protectionist era was replaced by an industrial policy which openly favoured the development of an export oriented economy. FDI was to be attracted through the implementation of liberal tax allowances and capital grants. Two industrial promotion agencies, the IDA and Shannon Free Airport Development Company (SFADCo) were authorised with the responsibility of guaranteeing suitable industrial projects (Perrons, 1985). Fianna Fail also favoured encouraging links with US capital as it meant that socio-economic dependence would be shifted away from the UK, and onto a nation in which Irish culture carried a definable political weight. The emergence of the US as the new capitalist power bloc was to have a significant bearing on Ireland's future industrialisation.

US-sponsored Marshall Aid had offered Ireland the possibility of both improving balance of trade deficits and sustaining social welfare schemes which would obviously guarantee domestic political support. This was a cost worth taking even if it strengthened US involvement over internal economic policies and furthered trade liberalisation (O'Hearn, 1993). Initially Marshall Aid required the liberalisation of trade and the removal of quantitative import restrictions: 50% of all import quotas were removed in 1949, 60% in 1950 and 75% in 1951.

One of the pioneering voices responsible for dismantling the PR was T.K. Whitaker (Finance Secretary). Whitaker fully believed that free trade would systematically provide increased employment and the necessary capital capable of supporting a new welfare state. Whitaker pioneered the text 'Economic Development' in 1958. This text became the blueprint of economic restructuring

in Ireland and the basis of the White Paper 'Programme for Economic Expansion' (1958) which determined Ireland's future industrialisation.

'Economic Development' helped remove protectionism and introduced low taxes on profits derived from exports, and direct capital grants to encourage FDI (Fanning, 1990; Whitaker, 1969). It is clear that 'Economic Development' played a key role in redirecting government thinking and prepared the nature of the next regime of accumulation (Walsh, 1979). As noted by Neary:

"This document was a landmark in Irish history: for the first time the government set out a comprehensive statement of its policies and objectives (1984, p.71)

'Economic Development' acknowledged that indigenous capital-based innovation was severely deficient and in effect it was necessary to promote export markets through the liberalisation of price controls and the encouragement of FDI through tax incentives such as depreciation for new fixed asset investment. Such trade liberalisation was acknowledged by Fianna Fail as capable of penalising inefficient indigenous industry. However, such misgivings were dismissed as irrelevant when set against the overall extent of proposed socio-economic benefits to be created by FDI (Boylan and Cuddy, 1987). Moreover, as Whitaker urgently noted the need to support and encourage economic growth in Ireland was:

"critical for the country's survival as an economic entity " (1958, p.227).

Industrial restructuring extended the 1956 Export Profit Tax Relief (EPTR) scheme introduced for overseas companies. This scheme removed all taxation on exported goods. The creation of such policies made it patently clear that the attraction of foreign manufacturing enterprise was aimed at export-based firms. (Buckley, 1976; McCarthy, 1990; O'Farrell and Crouchley, 1983, 1984; O'Farrell and O'Loughlin, 1980).

The Keynesian influence shown within the industrial policy changes of 1958 highlighted the desire of the Irish state to produce a more coherent form of welfarism. However, the protectionist regime of accumulation, as noted above, had produced wage rates which were inadequate to support such macroeconomic change. The importance of stimulating a more welfarist approach to industrialisation was stressed by Whitaker:

"A modern community is concerned with collective as well as private spending; with the structure of education and its adequacy in relation to the world of tomorrow, and with the provision made for other social needs such as housing, health, social welfare and communications" (cited in McCarthy, 1990, p.38).

In ideological terms the neo-Fordist (NFR) regime of accumulation represented an attempt at achieving a national MSR which was acceptable to core nations which controlled international accumulation and FDI. More than anything else the adoption of such a regime-based shift acknowledged Ireland's subordinate role within global capitalism. Furthermore, the new NFR produced a MSR



which increased external control, a situation which fully-reversed the notion of economic nationalism. The Irish States desire to replace the ethos of economic nationalism with internationalised and growth oriented industrialisation highlighted the failure of Ireland's political elite to engender an economic system which would not create industrial dependency.

Rising wages, increasing State expenditure and a shortage of both skilled and unskilled labour, were causing difficulties in the advanced capitalist countries in the 1950s. A falling rate of profit was countered by the dispersal of industry and the creation of productive techniques which permitted the decentralisation of operative units away from areas which contained industrially experienced and trained workers to areas, such as Ireland, where disciplined labour could be obtained more cheaply (Perrons, 1986). Ireland's peripheral status in the 1950s and its attempts to re negotiate its relationship with the global economy favoured the extension of neo-Fordist relations of production in Ireland at this time.

### 2.1.5 The neo-Fordist Regime (NFR) (1958-1990s)

The removal of the previous protectionist regime was clearly a decisive shift towards outward-oriented growth, which was truly a new regime of accumulation with far reaching economic, social, political and cultural effects. The NFR has been characterised by the continual alignment of Ireland within the global economy through the facilitation of TNC-based location. The main form of industrialisation during this period has been characterised by a disarticulated form of location based upon fragmented production units and the decentralisation of manual execution (Perrons, 1981). The majority of TNC-based location is centred upon exports which are generally controlled by the parent company. In socio-political terms the nature of the productive base has influenced the creation of a sizeable working class, in comparison to the two previous regimes of accumulation, although it must be stressed that its creation has been based upon the extension and perpetuation of significant class disparities.

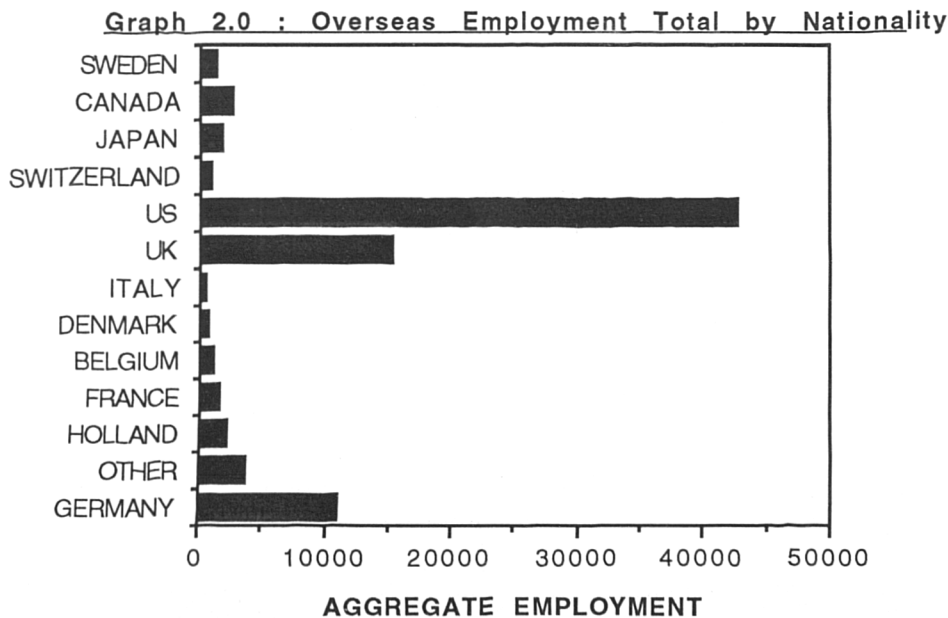
For over 35 years, the attraction of FDI has been a central strategy within the NFR. The attraction of foreign investments is often considered to be the success story of the Irish export-led regime (O'Hearn, 1993). The initial growth in FDI was initially slow due to US-sponsored FDI being postponed until Ireland joined the EEC in the early 1970s. At that time the location of US capital to Ireland was based upon the desire to gain access to the EEC market and to offset the effects of conditions of crisis at the global scale.

The first firms to seek new markets through locating in Ireland under the crisis conditions of the 1970s were the consumer goods sectors followed by the capital goods sectors and finally, international services. After a decline in the investment of the consumer goods sectors Irish development agencies targeted

US electronic firms in the late 1970s, and then introduced the international services programme during the stagnant years of the mid-1980s (IDA, 1993).

Sixty-one percent of US-controlled employment in the mid-1970s was concentrated in basic manufactures (metal articles, consumer durables, food, textiles and wood). However, as the basic manufactures began to decline in the late 1970s the new employment growth area among TNCs located in Ireland shifted onto the capital goods market. For example, the capital goods sectors share of all new employment controlled by TNCs increased from 38% in 1976 to 50% in 1991 (data supplied by IDA). Finally, a wave of US investments in international services became significant in the mid-1980s, after investments in the other sectors had stagnated.

The proportion of manufacturing employment which is TNC-controlled rose from 33.1% in 1974 to 46.1% in 1994 (data supplied by IDA, 1994). This growth in the share of manufacturing employment has not been due to significant aggregate employment growth but due to a 38.2% decrease in indigenous-controlled employment during the same period. In 1993 TNCs in Ireland accounted for 93,258 manufacturing jobs. The major employer was the US who controlled 42780/45.8% of total TNC employment (Graph 2.0)<sup>5</sup>. Between 1979 and 1993 US-controlled employment increased by 9,100 or 22.1%. The other two sizeable employers are the UK (15,187/16.0%) and German (10908/11.7%) plants. Unlike the growth in US employment both the British and German employment totals had declined by 45.1% and 9.1% respectively between 1979 and 1993 (data supplied by the IDA, 1994).



Source: Census of Production (1989)

One of the central features of the NFR has been the extent of duality evident within the manufacturing sector. In 1991 the majority (68.5%) of indigenous-controlled employment was based upon the low-value added sectors, which are largely unsophisticated in relation to R+D facilities and are marked by an absence of capital goods production (Mjoset, 1993). In 1991 34.5% of total TNC employment is within the high-value added capital goods sectors<sup>6</sup>. TNCs also control 67.1% of high and medium-tech employment in Ireland (Census of Production, 1991). In sectoral terms the highest-level of employment domination, (over 80% of total employment in 1993) by sector among TNCs, was to be found in the high-value added sectors *such as Pharmaceuticals, Chemicals, Instrument Engineering and Office and Data Processing Machinery* (data supplied by IDA, 1994).

The demise of the indigenous sector and the promotion of export-led development during the NFR has meant that TNC-controlled companies have come to play a decisive role within the Irish economy. By 1989 over half (56%) of the total gross output of manufacturing industries and 70% of net output was controlled by TNCs (data supplied by Department of Industry and Commerce. Unpublished). Furthermore, between 1984 and 1990 the gross output per employee, within the TNC-controlled sector, increased in constant terms by 51%. However, during the same period significant growths in gross output per employee were accompanied by an 8% reduction (in real terms) of the per capita income of TNC employees (SIPTU, 1993). Moreover, in relation to US-controlled companies, relative labour costs in Ireland have fallen by over 22% in real terms since 1980 (OECD,1993). In recent years it has become clear that the continual extension of neo-Fordist production has been contingent upon reducing labour costs in relation to output.

The relative sustainment of low labour costs by TNCs can be understood as resulting from changes within the labour process which have promoted the raising of productivity levels, the intensification of work and the de-skilling or even enskiling of labour. The modification of labour practices during the neo-Fordist era, especially due in recent years to the technical upgrading of TNC-controlled plants, has had far reaching consequences for the MSR during this period. In order to continually facilitate the attraction of FDI the Irish State has been forced to continually aid the reproduction of labour through providing training and educational facilities which provide suitable labour recruitment conditions.

The main role of the Irish State within the NFR, as a facilitator of accumulatory activities of both the foreign and indigenous bourgeoisie, has been relatively successful. In relation to economic growth indicators the NFR has been characterised by improved terms of trade and significant growths in GNP/GDP, and a marked increase in labour productivity per employed person. For example, between 1981 and 1993 the value of GNP and exports grew by 61% and £7,152

billion respectively. This has been accompanied by a significant rise in living standards based on GNP per capita (Banc Ceannais Na h Eireann, 1992; OECD, 1993).

However, the extent of labour productivity growth during the NFR has failed to produce significant increases in employment or stem a significant upward drift in unemployment, due to record growths in industrial output generally failing to bolster domestic incomes and employment opportunities. In socio-economic terms the Republic's unemployment rate at 21.1% (in 1993) is at a record high and stands at twice the average European Union (EU), formerly the European Community (EC), rate (OECD, 1993). Employment as a percentage of the total population has fallen from 35.7% in 1970 to 31.1% in 1993. Moreover, during the same period there has been an eight percent fall in active labour force participation and a 27% growth in aggregate unemployment (OECD, 1993). The structural severity of unemployment has also been reflected in the extent and composition of long-term unemployment. In comparison with other EU states, the Republic has produced the highest growth in long-term unemployment from a below average 36.7% in 1983 to the third highest rate of 63.7% in 1994 (Shirlow, 1994). As such it is clear that in terms of the MSR, the main characteristic of this period has been the failure to generate a stable pattern of employment.

Unemployment is the most striking feature of the social crisis now evident in the Republic and is combined with the failure of modernisation based policy making to remove Ireland's peripheral status within the EU. It is patently clear that the contemporary NFR has been unable to reverse the prosperity gap between the Republic and the wealthier EU nations, a situation which is not reflected among other peripheral EU states (O'Hearn, 1993). Between 1960 and 1993, Ireland's GDP per capita, measured in purchasing power parities fell from 65.9% to 61.1% of the EU average (OECD, 1993). The failure to increase purchasing power parities, in relation to other EU member states, has also been accompanied by a 6.3% fall in average domestic incomes over the same period (OECD, 1993).

The failure to produce a MSR capable of sustaining employment and domestic income growth has been due to a range of factors including; the nature of TNC-controlled location and employment practices, the failure of the Irish bourgeoisie to create an innovative and successful indigenously-controlled manufacturing sector, the continuation and extension of class disparities and the perpetuation of a highly conservative political structure controlled by bourgeois property interests (Breathnach, 1994; Smith, 1991).

### 2.1.6 Class, Production and Labour Markets during the NFR

During the NFR the class structure of Ireland has become more polarised. The capitalist class is supported by a heavily subsidised MSR through low

corporation tax, massive subsidies and relatively low levels of personal taxation (Chomney, 1993). The middle classes have also managed to preserve and further their position by a near monopoly of access to higher education and the professional trades. On the other hand the skilled working class has declined in size due to extensive growths in unemployment and emigration. A major feature in the decline of the working class has been the demise of local labour market structures, previously dominated by male industrial workers, which have and are being unpicked and replaced by more flexible structures of labour market organisation (Smith, 1991).

According to Whelan et al (1992), during the period 1980-1991 Ireland exhibited the lowest levels of upward social mobility compared with Germany, England, Sweden and France due partly to the extent to which Ireland's bourgeoisie displayed a significantly high level of self-recruitment. As such the Irish bourgeoisie have been capable of promoting a MSR which favours its control over the major share of Ireland's wealth without the obstacle of increased social conflict. This has been achieved through the abandonment of nationalism in favour of a pseudo-cosmopolitanism and almost total subservience to international capital (Cebulla and Smith, 1994). However, subservience to international capital has also been paralleled by significant State support for Irish-owned industry.

The level of State intervention in Ireland is very high in comparison to other EU and main competitor states. For example, in 1993 the Irish State spent an equivalent of 9.1% of GNP on industry compared to an EU average of 3.1% (Sweeney, 1994). In addition to tax breaks, there are many State agencies which are almost totally devoted to assisting the private sector. There has been a 'business-man's dole mentality' in Ireland, where supposed entrepreneurs are more successful in getting grants and subsidies from the State than they are in generating profits (Keating and Desmond, 1993). The Culliton Report (1992) recently highlighted that a total of £1.6 billion in grants alone went to the industrial sector with the creation of a mere 7,000 net new jobs in the 1980s (Industrial Policy Review Group, 1992; Sweeney, 1992). It is important to stress that the extent of State subsidisation is a reflection of the low level of investment by Irish industrialists. <sup>8</sup>

The level of State subsidisation of industry has been centred upon the creation of a politically dependent capitalist-based property owning class whose activities are largely predicated upon the exploitation of its relationship with Fianna Fail. According to Parker and Driver (1994) the Irish middle-classes links with the dominant party during the NFR has been based upon the State turning a blind eye to tax dodging, supplying political supporters with Government contracts and continually refusing to tax wealth or property. As such the contemporary MSR in Ireland is based upon an alliance between social class and political interests. In relation to this situation Kirby has stated that:

"It is precisely from these sections of small native capital that the day-to-day managers of the political system in the South are drawn. Parties like Fianna Fail-at rank and file level as well as leadership level- are full of these small-time capitalists and local members of the middle-classes. They are the ideal representatives for harmonising the interests of native and foreign capital in Ireland. They understand that they have no future beyond a link with the multinationals" (1988, p.37).

The nature of favouritism within the political system in Ireland is combined with a form of politics which deals with grievances not as political issues but as individual problems. As noted by Kirby:

"The careers of most TDs are built not on their contribution to political decision-making about the great issues facing our society, but rather on their ability to deliver to their constituents...There is little or no ideological debate in which differing options for the future can be presented and developed" (1988, p.87).

In institutional terms the continuation of a clientelist base supports the growth not of consensus and ideological motivation but of interests groups such as the Church, farmers, Trade Unions and industrialists. The result being that elaborate mechanisms have been developed which have prevented the emergence of politics concerned with those who are marginalised and socially deprived. The domination of government during the NFR by Fianna Fail and to a lesser extent by Fine Gael has been paralleled by increasing social dislocation among Ireland's working class. The working class of Ireland have continually borne the brunt of increased dependence upon welfare assistance and emigration throughout the NFR. However, such high levels of social marginalization have not promoted a political structure capable of removing the pro-bourgeoisie dominance of Irish politics (Kirby, 1988).

The failure to promote a more radical political system has been influenced by the distinct nature of the contemporary MSR. High-levels of out-migration have produced a sense of fatalism among the Irish working class who have accepted emigration as an alternative to challenging what it deems to be an unmoveable and dominant political order. Moreover, emigration has been continually cited by governments as an opportunity for young Irish workers to gain skills and experiences which will in turn facilitate their return to Ireland in later years (Lenihan, 1988). The dominance of the Catholic Church has declined in recent years but not to the extent that it cannot affect the consciousness of Irish society. The conservatism of the Catholic Church, its control over education and its promotion of frugality has sustained an acceptance of deteriorating social conditions by its laity.

Socio-political change has of course been evident due to a continual secularisation of Irish society. The removal of restrictive laws concerning moral issues such as contraception, divorce and censorship has been evident. However, the promotion of more liberal laws concerning these issues has largely been based upon satisfying the secularists demands of an increasing

urban middle-class electorate. Furthermore, the emphasis placed upon these issues has deflected attention away from the other important issues such as unemployment, class disparities and emigration. As such the political system has not supported a MSR which coherently tackles the nature of social dislocation in contemporary Irish society. As noted by Breathnach:

"...for both politicians and the state bureaucracy, innovation remains anathema. The education system continues to inculcate deeply conservative views, particularly among the intelligentsia, and the indigenous business community remains imbued with a 'quick-buck' mentality which is a direct throw-back to the circumstances pertaining in the 19th century agrarian economy.

However, new institutions have emerged to counter potential tendencies in the direction of radical innovation. These include the penetration of the foreign media which continually conveys conservative ideologies, growing dependence of the indigenous business community on the foreign-owned industrial sector, and EU subsidies which have played an important role in helping the Irish government to cope with rapidly-growing unemployment since the early 1980s" (1994, p.21).

TNCs in Ireland have contributed to the extension of class disparities in Ireland due to their control of extensive labour markets (Munck, 1993; O'Heir and O'Mahony, 1993). Due to competitive pressures TNCs have continually re-evaluated employment policies which in turn has directly effected previous labour market structures. Increased global competition, with a premium on price, quality and responsiveness to customer needs has promoted rapidly changing technologies which emphasise the need for flexible and adaptable organisations and workforces. A distinct supply-side crisis is presently underway and is reflected in the decline of the position of manual workers employed by TNCs (SIPTU, 1993).

There has been a general trend to increase productivity and reduce unit costs through introducing more flexible responses. It is argued that traditional Taylorist and Fordist approaches to work organisation are incapable of producing significant productivity gains and reduced unit costs. An analysis by the Irish Congress of Trade Unions (ICTU) (1993) highlighted that labour re-organisation initiatives and pay restraint policies were strongest amongst the subsidiaries of TNCs.

At the institutional level the Programme for National Recovery (PNR) in 1987, based loosely upon social partnership between the Trade Unions, Government and employers, was set up in order to reduce Ireland's international debt burden and ensure that industries in Ireland remained competitive. In 1993 the Irish debt burden was equivalent to 92.2% of GDP and its servicing was equal to 24% of total government expenditure (OECD, 1993). At its height in 1986, debt as a percentage of GDP was 116.8%. The need to reduce the debt burden, accumulated during the NFR, has directly affected the level of social welfare based expenditure, which has declined in real terms by over 17% since 1984 (OECD, 1993).

The growth of the debt burden during the 1980s further highlights the dichotomy between government expenditure and substantial profit growth rates among TNCs. For example, between 1982 and 1993 total debt as a percentage of GDP grew by 7.1%. During the same period profit repatriation as a percentage of GDP grew by 6.8% to 12.1% (OECD, 1993). Increased surplus extraction has been accompanied, during this period, by high levels of disinvestment within the TNC-controlled sector.

Due to the nature of the debt crisis the PNR has largely been engaged in supporting austere reductions in income tax and significant cuts in social security and education. The support for pay restraint and expenditure cutbacks has allowed for very little compromise with the Trade Unions due to macro-economic issues being based upon low inflation, low interest rates and control of the national debt (Sweeney, 1992).

Since 1980 Irish real unit labour costs have fallen by 14.2%. This significant decrease in real unit labour costs is nearly double the average decrease of 7.8% for all EU countries. As demonstrated by the evidence contained in Table 2.0 the Republic's economy has out competed the majority of its competitors in relation to wage control. A paradox has been created within the contemporary MSR due to a negative relationship between real unit labour cost reduction and unemployment growth. As such a MSR has been created which supports lower labour unit costs and higher productivity levels but not significant employment growth.

**Table 2.0: Real Unit Labour Costs 1993 (Base: 1980 = 100)**

<i>Nation</i>	<i>Luxembourg</i>	<i>U.K</i>	<i>Italy</i>	<i>Germany</i>	<i>Belgium</i>	<i>France</i>
Unit Cost	99.6	98.4	95.2	92.1	92.0	89.5
<i>Nation</i>	<i>Netherlands</i>	<i>Greece</i>	<i>Denmark</i>	<i>Ireland</i>	<i>Portugal</i>	<i>Spain</i>
Unit Cost	88.6	88.5	88.4	85.8	84.4	84.4

Source: European Economy (1993).

A central argument within this thesis is the proposition that the status of the working classes is being reduced due to pay reduction and the reorganisation of labour market structures through the promotion of numerical flexibility and increased mechanisation. The contemporary nature of TNC-based employment practices is supporting a tendency towards a segmented labour market made up from a shrinking rigid sector (regular labour contracts, full-time work) and a flexible sector (part-time, non-regular contracts, increasing participation of badly paid female labour). The nature of labour market dualism is also responsible for the consolidation of the middle-classes by increasing polarisation between well paid administrative, technical and research employment and low-wage sectors (Smith, 1990).



Flexible labour practices, de industrialisation and the promotion of a distinct service class have altered the composition of local labour markets throughout Ireland and in so doing have produced an inequitable distribution of prosperity and social welfare (O'Hearn, 1993). Previous labour market relationships are being eroded through alterations within the gender division of labour, unemployment growth, the deskilling of productive labourers and the maximisation of educational requirements by employers. The alteration and modification of traditional labour market structures have, in turn, produced a distinct schism between middle income technical staff and a low income employment sector whose wage rates and employment conditions have declined dramatically. The segmented nature of emerging labour markets highlights not only a polarisation in employment conditions but also a growing gap in social status and socio-economic opportunity.

Sophisticated and well paid employment growth, among the upper and middle income groups, is paralleled with the marginalisation of the broad masses who have endured a secular increase in unemployment, low paid employment and underemployment (Shirlow and Shuttleworth, 1994). As such the socio-economic position and status of low income groups have been dramatically altered due to previously well functioning and dynamic labour markets, throughout Ireland, becoming areas of low opportunity. For example, between 1971 and 1991 the share of those whose livelihoods are dependent upon state-sponsored welfare, in Ireland, rose from 31.1% to 48.1% (McCluskey, 1994).

The thesis contends that TNCs exacerbate capitalist mechanisms of unequal development. However, its main concerns are related to understanding how companies have restructured/regulated their labour forces not only through the functioning of the global economy but also within the context of the local labour market. Accumulation is placed within the context of a mechanism whose imperatives stimulate socio-political change. The thesis searches for the specificities within the local production system as created by the technical institutionalisation of capitalism. Key factors include the balance of bargaining power and its ramifications for different social groups.

## 2.2 Shannon Free Airport Development Company (SFADCo) and the Shannon Industrial Estate

Shannon's "Industrial Estate" (Map 1) was established in 1958. It was an influential innovation at the time. Before its creation, 'Free Zones', such as that of Danzig, Poland, had been confined areas which expedited the import of goods. In Shannon the concept was implemented towards the organisation and location of manufacturing operations with the adoption of sites of production (O'Dwyer, 1961).

Shannon has attracted journalistic and academic comment since its inception. The majority of articles written about the zone have been related to the diffusion of policy-making authority to SFADCo, the role of technological development, and the future of role of Shannon Airport. (Callanan, 1984; Hutterman, 1978; McConville, 1984; Sklair, 1988; Soulsby, 1965; Prasad, 1969). It has generally been assumed that SFADCo's policy-making structures have been largely successful due to the implementation of constructive arbitrary policies which have activated extensive economic and technological developments (Dineen, 1990). Moreover, it has been argued that SFADCo's regionalised role, as opposed to the nation-wide orientation of the IDA, has produced significant socio-economic benefits (Drudy, 1992; Hume, 1990). For example as noted by Sklair:

"...Shannon,(is) internationally recognised as the first and probably the most successful of the modern industrial zones, (which) was deliberately established to provide an environment in which foreign companies could feel comfortable to do business and confident that a high level of profitability could be sustained" (1986, p.161).

Initially the zone was the main contributor to the instalment of FDI in Ireland, and by the mid-1960s, 39% of Ireland's TNC-based exports were derived from Shannon (SFADCo Annual Report, 1965). This proportion fell to 3.6%, in 1990, as similar means of facilitating FDI have been developed throughout other parts of Ireland (SFADCo, 1990).

SFADCo is an Irish Government agency responsible for economic development in the Shannon Region (which includes counties Clare and Limerick and sub-county areas Tipperary North, North Kerry and South-West Offaly). The origins of SFADCo go back to the 1950s. At that time Shannon Airport served primarily as a transit refuelling stop for aircraft travelling from North America to Europe, and as such was an important economic strong point in what was otherwise a very depressed part of County Clare. The development of the long range piston aircraft and the emergence of the jet aircraft changed aviation technology, removed the need for the intermediate stop for refuelling and threatened the very existence of the Airport. The Fianna Fail Government of the time reacted to the threat by firstly deciding to improve the physical infrastructure at the Airport in order to facilitate shifts with aviation technology. In terms of industrial development SFADCo expanded the Customs Freedom aspect of the Airport into the world's first airport industrial free zone. Since the zone was deemed to be outside Irish Customs territory goods could be imported, processed and re-exported without payment of customs duties and with minimal customs procedures.

In 1968 the Government, recognised the beneficial impact of the Airport hinterland, and increased SFADCo's remit to include industrial development in the then Mid-West region (i.e. the Shannon Region without parts of Offaly and North Kerry). Ten years later the Government decided that SFADCo's remit should again be altered; this time by extending SFADCo's role in the intensive promotion and development of Irish industry. The objective of the exercise, in

addition to greatly expanding the industrial base, was to generate new projects, new ideas and new schemes for supporting industrial enterprises.

In 1987 the Government once again decided to change SFADCo's remit. The decision was that SFADCo would become responsible for all industrial and tourism development in the Shannon Region. The Government's objective in making this change was to ensure that SFADCo made an integrated and creative contribution towards national recovery in the Shannon Region. For the first time in the history of the Republic the major strands of economic activity, including industry and tourism, were brought within the ambit of one development agency. In doing so the Government provided an organisational framework for integrated regional development, enabling the different elements of development to be co-ordinated, thus reinforcing their complementarity. A significant factor in extending the remit of SFADCo was based upon removing the IDA's role within the region. Prior to these changes SFADCo had only been responsible for TNCs located within the SIE. However, the movement of companies from the estate to other areas outside the industrial zone, but within the Shannon region, meant that contacts built up previously between SFADCo and these companies were lost as they moved under the control of the IDA. In order to resolve this problem and remove the duplication of effort between the IDA and SFADCo it was proposed that the localised nature of SFADCo's policy-making would be more successful in creating a closer and more valid relationship between TNCs and Irish capital.

During the 1970s and throughout the 1980s there were several debates concerning IDA involvement within the Shannon Region. In 1970 the IDA complained that SFADCo's overseas promotional activities were undermining the IDA's role as the main promotional agency in Ireland. The IDA was also concerned that SFADCo was diverting investments into the SIE without regard for other national needs. The IDA has never accepted the concept of selected regional development models, preferring to gear the placement of industry to the operations of market forces and the pressures of individual needs. Furthermore, from the IDA point of view it always appeared illogical that their national responsibility should be arbitrarily diluted in respect of the Shannon Region, creating an embarrassingly blank space on the national map.

Political support for the IDA concerning the expansion of SFADCo's role was represented by the Fine Gael-Labour governments of 1973-1977 and 1982-1987. During both of these terms of office the coalition governments discussed merging or more appropriately dissolving SFADCo into the IDA. This hostility toward SFADCo was generally due to its close links with Fianna Fail. Since the 1950, when Sean Lemass strove to create SFADCo, right through to the 1990s there has been a continual link between the appointees to the SFADCo board and Fianna Fail. It is no coincidence the extension of SFADCo's remit has always been directed by Fianna Fail-led governments. As noted by Daniel:

"The link between SFADCo and Fianna Fail is so great that whenever the later are in power the board of SFADCo are as important as any government minister" (1991, p.21)

Early comments by the Irish Times journalist Henry Kelly also stressed the high level of self-promotion by SFADCo and its indissoluble link with Fianna Fail:

"Political Support from Fianna Fail and SFADCO's publicity machine is so geared up that it could probably run a mission in a brothel or sell Jack the Ripper to the public as a champion of moral rearmament. That it does not try to do so is either sheer honesty and integrity or the subtlest piece of brassneckery this century" (Irish Times 9 December 1975).

The shift in SFADCOs remit was also supported by Limerick and Clare County Council and Limerick Corporation who petitioned the various governments through-out the 1970s and 1980s to expand the consultative and organisational role of the regions main development agency. Government support of a more holistic orientation for SFADCo was warmly welcomed by prominent Fianna Fail Ministers who, as noted above, had close contacts with board members of SFADCo. Desmond O'Malley, who was to become Minister of Industry and Commerce and who was to leave Fianna Fail to form the Progressive Democrats was a strong proponent of extending SFADCo remit. As a TD for the West Limerick constituency O'Malley (prior to leaving Fianna Fail) was aware that a successful regionally constituted development agency would provide significant political support for Fianna Fail within the Shannon Region. As he stated at a confidential meeting of SFADCo in 1981:

"Extending our regional role will fit into to regional identity of the area. If we can extend SFADCOs role and are successful people will vote for it. Not only will we create an oasis in the desert but we will produce a body which deflects the influence of Dublin. The people of Shannon will be very pleased to see a decline in Dublin's control over their everyday lives" (Confidential Report, SFADCo, 1982)

Further support for the enlargement of SFADCo role within the Shannon Region came from the ESRC which stated that:

"The experience of the Shannon Region constitutes a useful precedent for the successful conduct of the process of decentralisation and for the creation of the conditions needed for promoting innovation and setting up new firms...This is manifest, not only in technology and industry in the narrow sense, but also in renovation of towns, adaptation of the services of Shannon Airport and development of cultural activities".

By 1988 O'Malley, the then Minister for Industry and Commerce, was able to remove IDA control within the Shannon region. The most far reaching consequence of this new mandate lay in the transfer of responsibility for overseas representation in the industrial area from the IDA to SFADCo. O'Malley was capable of directing this initiative due to growing concerns nationally that SFADCo had out-competed the IDA in relation to employment creation and new firm formation. As noted by Share:

"There was a feeling in some quarters that the action had been taken not so much to further the fortunes of Shannon as to administer a salutary lesson to the IDA for perceived shortcomings (1992, p.123).

Since Sean Lemass began to appoint members to the SFADCo board there has been a continual appointment of those who have strong links with Fianna Fail. Initially those appointed were civil servants who had worked under Fianna Fail governments. The board up until 1978 was made up of 8 members six of whom were ex-Civil Servants. Since 1978 the membership has been extended to 14. The composition of the board in 1990 was made up of four ex-civil servants appointed prior to 1974. The other ten members of the board included one priest, the President of Limerick University, two seconded civil servant, a Director of the Bank of Ireland, two prominent members of the Irish Management Institute and five business men from the Shannon Region. The board as such is heavily influenced by those keen to support the development of private industry.

### 2.2.1 SFADCo and the University of Limerick

During the Fine Gael-Labour Coalition of 1973-1977 O'Malley and the SFADCo board were keen to push forward SFADCo policies which would not only protect the organisation but in O'Malley's own words "make it too important to dismantle" (cited in Share, 1992, p.56). This was to be achieved by SFADCo taking on tourism, technological assistance schemes and promoting the development of a technology-based educational establishment. The development of SFADCo during this period prompted O'Malley to state the following:

"The most successful regional organisation in the country, SFADCo, should be the one to spearhead an intensive all-out effort to develop entrepreneurship and industrial development among our own people" (Speech to the Irish Senate, 1978; cited in Share, 1992 p.81).

The development of links between Limerick's National Institute of Higher Education (NIHE) and SFADCo proceeded apace as these two institutions strove to develop the NIHE into an Irish 'MIT'. (Sklair, 1988). During the Fine Gael-Labour Coalition of 1973-1977 the Government tried to block the autonomy of this educational institution due to fears that it would become a regionally-controlled and Fianna Fail-directed establishment (Daniel, 1991). The return of Fianna Fail to power in 1978 recovered the fortunes of Limerick NIHE, and in 1980 the NIHE Limerick Act established the Institute as an autonomous statutory body, paving the way for its emergence as a fully independent university in 1990.

The eventual establishment of Limerick University was closely tied to making a much greater contribution to a developing region such as Shannon than as a traditional academic university. This has been achieved through stressing the importance of technology-based education and promoting the development of the Plassey Technology Park (in which the University is sited) which provides facilities for industrial and commercial innovation. As such the University and the technology Park are important institutions which combine university

education, industry based on 'state of the art' technology and R+D facilities. The adoption of this technopole model during the 1980s was clearly linked to SFADCo establishing an institution which could not be controlled by the IDA (Share, 1992). It is worth stressing that four of SFADCo's present board members also hold executive roles within both the University and the technology park.

The foundation of these two institutions was also based upon encouraging industrial research and the creation of a pool of technically qualified workers (Sklair, 1988). The creation of these two entities was to be directly tied to the needs of both indigenous and TNC-based industry. The significance of this shift was noted by Barron as being;

"based upon maximising wealth creation first and job creation second" (Interview, December 1990).

Industrial policy was also directly tied to linking innovation, entrepreneurial drive, employee willingness and self-worth. SFADCo policy decreed that emphasis should be placed upon technical upgrading. As noted by O'Connor:

"It is undeniable that a new climate has been created in the region characterised by a remarkable entrepreneurial dynamism" (1986, p.47).

This new industrial policy was identified by one overriding concern for the 'pursuit of excellence.' In order to provide such an environment the University and Plassey Technology Park created a range of industrial support initiatives. The Innovation Centre and the National Microelectronics Applications Centre, which were both founded in 1981, have both made useful contributions to the process of raising the technology base of industries in the Shannon Region. The Innovation Centre at Plassey provides comprehensive development services for small industries throughout the country with a strong bias towards products of advanced technology with export potential. SFADCo and the University of Limerick have also been involved with the formation of the Regional Management European Telecommunications Centres.

### 2.2.2 The Shannon Industrial Estate

Manufacturing employment within the SIE grew from 2012 in 1960 to 2412 in 1990. In 1975 the SIE manufacturing employment highpoint (3650) was reached. As shown in Table 2.1 the dominance of employment by the mechanical engineering sector has continually declined from 74.0% in 1960s to 40.6% in 1990. This has partly been due to the closure of UK-owned companies and reflects a similar decline within this sector nationally. The miscellaneous sector, comprised of pharmaceuticals, textiles, printing and chemicals, has grown slowly since 1960. The most significant growth has been within the electrical engineering sector which grew quite significantly during the early 1970s, a situation which reflected the increase of mobile capital investment by this sector world-wide.

**Table 2.1: Manufacturing Employment within the SIE and Sectoral Percentage Share (1960-1990)**

YEAR	Manu. Employment	Mechanical Engineering		Electrical Engineering		Miscellaneous	
		%	No	%	No	%	No
1960	2012	74.0	(1490)	13.9	(279)	11.9	(243)
1975	3650	68	(2482)	23.7	(868)	8.2	(300)
1982	2982	56.9	(1699)	33.1	(1001)	9.4	(282)
1990	2412	40.6	(981)	46.8	(1131)	14.4	(300)

Source: Data supplied by SFADCo.

The number of firms located within the SIE has fluctuated since 1960. In 1960 there were 15 manufacturing companies located within the zone, this rose to 23 in 1976 and then to a high-point of 45 in 1981. In 1990 when the survey work relating to this thesis was undertaken there were 38 manufacturing companies located within the SIE. Of these 38 companies 18 were mechanical engineering based. Fourteen companies came from the electrical engineering sector and 6 were from the miscellaneous group. Between 1960 and 1990 the number of manufacturing companies which located within the SIE and had subsequently closed numbered 68, a situation which reflects the highly mobile character of companies previously located within the zone. The high level of plant closure within the SIE is reflected in the fact that the average term of location for companies within the SIE is 5.1 years (data supplied by SFADCo, 1992).

In terms of nationality of ownership (Table 2.2) the majority of companies are now US-controlled having increased from 4 in 1960 to 27 in 1990. In terms of sectoral share 11 electrical engineering companies and 15 mechanical engineering companies are US-controlled. UK-controlled companies have declined from a highpoint of 12 in 1972 to a low point of 1 in 1990. The other main contributor has been German companies which have also declined from a highpoint of 8 in 1976 to a low point of 4 in 1990.

**Table 2.2 Nationality of Ownership 1960, 1976 and 1990**

Country of Origin	1960	1976	1990
USA	4	22	27
UK	8	9	1
Germany	2	8	4
South Africa	1	1	1
Netherlands	0	2	1
Austria	0	0	1
Other	0	3	3
Total	15	45	38

Source: SFADCo

### 2.2.3 The Shannon Town Local Labour Market (STLLM)

The proximity of the STLLM and its general dependence upon TNCs located within the SIE provided the opportunity to explore the nature and structure of contemporary labour market relationships. It is essential at this point to stress that a descriptive difference exists between the SIE and the STLLM. The former refers to the area which contains the industries located in Shannon while the latter refers to the town situated alongside the SIE.

In relation to the STLLM it is recognised that a local labour market is defined in terms of a spatially delineated travel to work area, whose boundary is rarely crossed in daily journeys to work (Storper, 1982). This area is usually acknowledged as the space in which employees generally seek employment and from which employers generally draw their labour forces. In the case of the SIE a sizeable proportion of employees reside outside the STLLM - a general methodological problem acknowledged by Storper:

"A perfect market is, of course, impossible to define because, in the extreme case, each employers and each employee has a unique search area. This does not detract from the validity of the concept, but it means that any operational definition will compromise it" (1982, p.426).

Although the STLLM is not the outer boundary of the industrial space under analysis it is the single most important labour recruitment area within that space (SFADCo, 1990). Therefore, although the STLLM share of total manufacturing employment within the SIE has declined from 58% to 45%, between 1974 and 1990, its role as the most significant recruitment area is still predominant (SFADCo, 1990).

Locality based research was undertaken in order to provide a contemporary insight into the nature of productive activity and socio-economic change (Cooke, 1988). This approach was adopted in order to create a satisfactory methodological base capable of discerning the relationship between economic systems and social outcomes. Such a locality-based analysis permitted an exploration of the relationship between production, recruitment and social modification. It also provided the opportunity to examine the role of reproduction in relation to specific social phenomena such as emigration and gender-based divisions of labour (Harvey, 1985).

In effect the thesis adopts the argument that although localities cannot be studied in isolation they can be used to explain broader socio-economic processes in particular places. The analysis of Shannon as a locality is based upon discerning how both supranational institutions and state sponsored bodies operate and how these operations affect and are related to the working lives of STLLM residents. The implicit argument contained within the locality-based research undertaken



was centred upon discerning how the range of accumulatory structures, evident within the SIE, directly affects the provision of employment within the STLLM.

In overall terms Shannon Town is used as a analytical boundary within which socio-economic conditions and their relationship with changing economic structures are examined. The analysis undertaken provides information on the link between the incessant changes within the productive sphere and the consequences such changes have upon employment conditions and opportunities. More importantly the thesis is keen to acknowledge the extent to which space is used as a setting for the interaction between capital and labour. In this instance locality is posited as the space within which individuals engage in economic and social life (see also McMichael and Myhre, 1991; Preteceille, 1990).

A locality-based research profile was also adopted in order to examine whether or not the logistics of shop-floor labour organisation are modified in relation to place-specific institutional and organisational forms. In relation to this point the thesis examined the extent to which the structure of Shannon as a locality is integral to the reproduction of social relations (Cochrane, 1987; Cooke, 1987, 1989).

#### 2.2.4 SFADCo and the STLLM

The conception of Shannon was enshrined in a Government White Paper in 1959. Development at Shannon was based upon central government's desire to produce an industrialisation process which diverted economic influence away from the eastern core around Dublin. Part of this strategy was centred upon developing Shannon Town and its labour market as a distinct growth pole through the attraction of foreign industry and industrial workers (O'Dwyer, 1961). Policy was designed to achieve a high degree of socio-economic compatibility between foreign industry and the employment needs of Irish workers in order to reduce unemployment and emigration from the Mid-West region (Soulsby, 1965, Prasad, 1969).

The primary objective of SFADCo policy-making was to encourage the location of foreign industries within the SIE. An expected spin-off from the location of foreign industry within the SIE was the growth of Shannon Town as a large local labour market (Downes and Meehan, 1962; SFADCo, 1969; SFADCo, 1974; Sheppard-Fidler, 1972). The attraction of industrial workers was to be achieved through the provision of suitable housing, schools, shops and most importantly employment opportunities. As noted by Ryan the town would become a place in which:

"..the highly educated, highly skilled, highly articulate workers would like to live due to the high standards of living" (1969, p.13).

Furthermore according to SFADCo;

"the highway which divides the town from the thriving industrial zone...will be tree-lined and traffic will move freely past carefully-designed junctions. The town on the right of the highway will be comparable with any of the best planned towns in Europe...it will also be a place in which we (SFADCo) and the community will work together in order to provide a good standards of living" (1970, p.12).

By the early 1970s it was estimated that the new town would have a workforce in excess of 10,000 by 1990. The related population estimates were 6,000 by 1967 (actual 1,781); 16,000 by 1970 (actual 3,412); 27,000 by 1972 (actual 5,001); 58,000 by 1990 (actual 8,081). The provision of employment through the attraction of FDI was initially tied to the growth of Shannon Town. As noted the population estimates were never realised and the link between SFADCo and the development of Shannon Town has been radically altered in recent years. Initially SFADCo had attempted to guarantee the growth of Shannon Town as a highly skilled labour market through purposefully supporting the location of FDI from the 'mechanical engineering' sector whenever possible. This decision was primarily based upon the notion that non-mechanical engineering (especially textiles) based investment was dependent upon the employment of a workforce which was generally female and low skill oriented. SFADCo assumed that the employment of low skilled women workers would encourage the movement of young single women to Shannon Town as opposed to a more favourable in-migration of skilled male workers and their families.

During the period 1960-1978 it was considered inappropriate to place female employment opportunities before male employment prospects. J. Browne (SFADCo employee) remarked that it was essential to provide employment opportunities for men in order to remove potential hostilities from unemployed males against female employees (Interview, June 1990). For example, as noted by several SFADCo employees, in 1966 male workers had stoned several buses of female workers commuting into the SIE as a protest against significant rises in male unemployment. Such incidents according to SFADCo employees made it patently clear that the continuation of such hostilities could have severe consequences upon attracting future investments to the SIE. According to Sean Barron (SFADCo employee) it was decided that in order to obviate against the repetition of such incidents that the promotion of male employment should be placed at the forefront of policy-making (Interview, May 1990). According to O. Delaney (Ex-SFADCo employee) the nature of industrial planning in the period 1960-1974 was founded upon:

"...the need to provide a good, healthy and reasonable workforce. One of our main tasks, in those days, was to ensure that we could not only supply industry with workers, but that we could provide the conditions that would attract skilled workers" (Interview July 1991).

Furthermore, as noted by Share:

"It was concluded (*by SFADCo*) that the labour position would have to be explained early in negotiations with all applicants (*foreign direct investors*) and if it appeared that an industry required too many female workers the promoters would be encouraged to seek a location elsewhere in the country" (1992, p.66)

A major part of the discrimination against women workers was an earnest attempt by SFADCo to provide skilled employment opportunities for the male participants of the STLLM. SFADCo interviewees acknowledged that prior to the mid-1970s the primary goal of industrial development was to tie industrial location into increased employment opportunities within the STLLM. Housing and various inducements (usually low rents) were offered through the Irish and British press to skilled male workers as incentives to migrate to Shannon Town. However, as noted by A. Daly (former Chairman of SFADCo) this relationship was to be significantly altered due the incompatibility between industrial and social policy:

"In the early days the premise was based upon making Shannon Town into a large industrial town of 50,000 plus. The idea was that continual employment growth within the SIE would encourage families to come and live in the new town. Other families it was hoped would also set up shops and businesses in the town so as to cater for the new town residents needs.

In those days it really was important to make Shannon into a sizeable town or more importantly into an industrial conurbation. As you say our role was primarily founded upon attracting big business first and people second through mixing industrial and social needs. In many ways it was impossible to provide for industrial and social needs and after a time we realised that the town's development was very secondary to our overall objectives" (Interview, July 1990)

A distinct shift in SFADCo policy making began with the 'Oil Crisis' of 1974. The most important factor, which affected the policy orientation which favoured skilled manual employees, was the 12% decline in 'mechanical engineering' employment in the period 1975-1978 (data supplied by SFADCo). Furthermore, this employment crisis was matched by a rise in the level of militancy within the SIE (see Chapter 5). SFADCo's reaction to this dual crisis of labour conflict and sectoral decline led to a shift in financial support toward 'electrical engineering' companies. An internal memo written in 1977 (and supplied confidentially) stressed the need for SFADCo to re-analyse its relationship with the SIE employees. As noted:

"In recent years there has been a significant growth in trade union activity within the SIE. Prior to 1974/75 the trade unions had a negligible influence upon industrial activity in Shannon. However, the combination of some companies flouting Irish labour laws and the decline in wages has led to a growth in poor industrial relations...Some of the smaller trade union groups have purposefully tested the resolve of their employers...

It is important at our meeting in December to decide what course of action we should take. It is also important that we can show to potential investors that we have a potential industrial relations problem that we can deal with pragmatically." (SFADCo Internal Memo, September 1977).

According to SFADCo sources companies were continually complaining about the increasingly high levels of labour turnover. Moreover, SFADCo sources also stressed that they had become concerned that male workers were refusing to work the new shift systems adopted by several of the companies located within the SIE. It became evident to SFADCo that the policies adopted in the 1960s which favoured the employment of skilled manual 'mechanical engineering' workers had run out of steam due to an incompatibility between the demands of labour and the attitude of management. According to SFADCo interviewees, the contraction of the 'mechanical engineering' sector and the growth in mobile capital investment in the 'electrical engineering sector lead to new policies which supported the later. This decision was aided by several factors:

- 1) It was evident that 'mechanical engineering' investment would not be capable of replacing the jobs already lost.
- 2) SFADCo staff maintained that the 'mechanical engineering' sector had been incapable of producing significant linkages with indigenous companies, a situation which undermined a major element of SFADCo's development initiative.
- 3) The growth oriented nature of 'electrical engineering' was identified, among SFADCo executives, as capable of augmenting employment levels and linkages with indigenous industry

A major factor influencing this restructuring in policy was a confidential report (which remains unpublished) commissioned by SFADCo in 1974. This report, written by Van Benumb and Trist on behalf of the 'Human Resource Centre' (an offshoot of the Tavistock Institute of Human Relations), argued that general hostility between workers and management was clearly evident within the SIE. The report concluded that antagonism was based upon high levels of worker supervision, deteriorating employment opportunities and a generally well organised and militant labour element within the STLLM. In relation to high levels of labour hostility the report suggested that the travel to work area should be extended in order to draw in workers from the rural hinterland of Shannon. It was proposed that a rural workforce was less militant than its STLLM peers. According to Van Benium and Trist this was due to STLLM participants possessing a:

"greater history of industrial work and trade union activity" (1974, p.12)

Van Benium and Trist also concluded that STLLM participants were more prone than their rural counterparts to labour turnover, absenteeism and low levels of moral. In theorising the characteristics of the two workforces it was concluded that the wider social and cultural environment created within the STLLM was not conducive to the socio-technological environment of the SIE. This socio-technical environment was denoted as producing high stress levels, few

promotion opportunities and deteriorating employment conditions (wage reduction/lay-off periods) for STLLM participants. The 'Human Resource Centre' argued that the high levels of employment restructuring within the industrial environment of the SIE favoured rural as opposed to STLLM workers:

"rural people value very highly any kind of work which yields a regular weekly wage, this attitude is understandable for many reasons but particularly so because of the traditional instability of earnings from land produce..."(1974, p.147).

and

"Their Shannon counterparts are less likely to express allegiance to the company worked for. They are also less willing to tolerate employment conditions which they deem to be unfair. In general they are not interested in the money per se but in security and personal improvement... in relation to work they will not suffer employment which is meaningless or which induces their powerlessness " (1974, p.168).

A further summary of workforce characteristics stated that the potential to introduce new machinery and change skill demarcations was rendered extremely difficult due to the "well organised nature of trades groups"(1974, p.17). The report also stated that female workers tended to have a better attitude towards work and as such their employment should be encouraged. In relation to these points the report concluded that there was a need to ensure that future investment opportunities were not hindered by an environment which was highly militant and unagreeable to overseas industry. As the report noted:

"SFADCo must make a choice between socio-economic development and socio-technical support. The former has failed to produce a good labour environment and the latter has not been yet been fully tested...At present socio-technical change which will involve producing a better relationship between employees and employers is hindered by very poor labour relations" (1974, p.179)

According to several SFADCo employees it was concluded that the attraction of a new industrial sector would provide the possibility of removing an unwanted element within the SIE workforce. As Edward Walsh (Director of SFADCo and President of Limerick University) stated:

"The 1970s were a time of change. Many companies had left Shannon due to the recessionary effects of the 'Oil Crisis' and a subsequent downturn in world trade. The electronic engineering companies were beginning to expand and we felt that they had more to offer. It's not that the companies before this had not been partly successful, but we felt electronics would grow much more. Linkages before hand were poor and electrical engineering offered new opportunities. As the NIHE/University began to grow we felt that the type of graduates we would produce could fit in well with an industry that was progressive and would want highly intelligent and skilled labour. As well as that the labour force in Shannon had been too militant and had driven companies out. These new firms would bring new production practices and would need a new workforce that we could supply. It was a case of 'if the workforce did not want to cooperate' with the types of companies who had located in the Mid-West then we would encourage new types of firms who would look for people with the right attitude" (Interview, December 1990).

Walsh's argument that there was a distinct need to remove antagonistic attitudes among manual workers was echoed by several of his SFADCo colleagues, all of whom had argued in the 1970s that the secondary emphasis placed upon female employment should be lifted in order to remove employee dependence upon male workers. The period 1975-1979 was to mark a distinct watershed in SFADCo policy-making.

Several SFADCo officers also claimed that the use of Shannon Town as a potential and predominant labour market had become seriously flawed due to the highly politicised nature of Shannon Town residents. For example, several stated that the industrial experience held by workers who had settled in Shannon from more industrial areas such as Belfast, Dublin, Birmingham and London had ultimately led to significant trade union activity and hostility toward employers and in some cases toward the organisation itself. This high degree of political activity was reflected in two highly confrontational rent strikes undertaken by SFADCo tenants in 1971 and 1978 (Makowski, 1990; Schaeffer, 1979). According to Walsh after the "Human Relations Report" (1974) it was concluded that:

"we dropped the paternalistic policies and adopted the new innovative phase. We no longer favoured the skilled manual type of employment. The new phase would be a drive to enhance foreign investors' profitability" (Interview, December 1992).

As L. Dunne (SFADCo employee) noted:

"In the late 1970s it became clear that providing housing and other facilities for workers and their families did not always attract the right type of people. Anyway relying on the town to provide labour was short-sighted due to the fact that many workers from Shannon's rural hinterland were keen to travel into work. Some from as far away as Cashel and Birr" (Interview, July 1991).

E. Walsh, when interviewed, noted that O'Malley was also concerned that SFADCo's continual support for the socio-economic development of Shannon Town was incompatible with industrial needs. In reply to this concern SFADCo board members generally agreed that strategies involving TNCs should favour profit-making and productivity structures as opposed to employment creation initiatives. According to Sean Barron (SFADCo employee) financial support from SFADCo was generally shifted toward attracting 'electrical engineering' companies and the training of technical workers at Limerick's NIHE. This shift also emphasised a new direction in industrial policy. As noted by Barron:

"For nearly two decades we had favoured a growth pole strategy. One major recession and another one on the way convinced us of the need to replace social policies with strong industrial policies. It was time for individuals to find their own place within the world of work not SFADCO's" (Interview December 1990).

The first sign of the demise of the relationship between SFADCo and Shannon Town was the removal of advertising which encouraged the in-migration of

skilled workers to Shannon Town. This was replaced by a scheme which encouraged Irish emigrants (generally business graduates) to start-up small industries within the Shannon region. The removal of SFADCo's remit pertaining to the development of Shannon Town was sealed in 1993 when administrative control was handed over to Clare County Council.

The decline of 'mechanical engineering' companies and the forced shift toward the attraction of 'electrical engineering' investment provided SFADCo with the opportunity to recast the nature of labour market relations within the SIE (a list of company closures 1978-1990 is contained in appendix 8). Furthermore in 1978 SFADCo came under tremendous pressure from the then Minister for Industry and Commerce Desmond O' Malley (Share, 1992). O'Malley was concerned that SFADCo had not been capable of producing suitable opportunities for overseas 'electrical engineering' companies due to resources being tied to the social development of Shannon Town.

### Conclusion 2.3

It is clear that State-sponsored activity during the NFR has had a strong emphasis upon supporting industrialisation through invitation. The success of this policy has been evident due to the growth in output and exports. However, in terms of promoting stable employment conditions the NFR has been less successful. In order to determine the link between industrialisation and social dislocation the empirical basis of this thesis is tied to an examination of how alterations within the productive sphere alter labour market conditions.

A significant part of this examination is tied to the an understanding of how SFADCo development and its industrial support structures have altered the MSR within the SIE/STLLM. As such the thesis is concerned to provide a more valid interpretation of developmental structures which include a wider socio-economic interpretation which measures the social impact and nature of capital restructuring. In effect the thesis agrees with Massey (1978) that any interpretation of socio-economic development must be set within the context of a changing spatial division of labour.

### Notes

1 Founded in 1905 by Arthur Griffith Sinn Fein increasingly supported anti-parliamentarianism and as such were largely self-excluded from negotiations with the British State.

2 Up until 1926 Sinn Fein followed a policy of abstention from the Dail (Irish parliament) which resulted in a party split over this issue. As a result DeValera founded Fianna Fail and his new party re-entered the Dail.

3 During the Economic War 1932 £2.5 million was withheld in land annuities to the UK government whose response was to put a 20% duty on Irish goods imported to the UK. The Irish

response responded with high levy's upon UK raw materials and manufactured goods. Such policies implemented the protectionist stance.

4 This dependence upon the international market was highlighted during World War 2 when the Irish economy suffered from an inability to acquire fuels and precious materials a feature of trade which hindered significant productivity growth and as overall export orientation (Mjoset, 1992; O'Malley, 1989)

5 The term TNCs is used to denote overseas companies located in Ireland (see Chapter One for a definition of this term in relation to the thesis). It is estimated that 93% of all overseas companies are owned by TNCs (IDA, 1991. Unpublished). Each establishment is defined as a single economic activity conducted at a particular location. Classification is determined by the nationality of the owners of 50% or more of the share capital. There could, therefore, be some part ownership of classified Irish companies by foreign concern

6 Low-Tech companies include: Food, Drink and Tobacco/Textiles and Clothing/ Wood and wood manufactures/Paper and Printing/Non-Metallic minerals. High-Tech Include: Chemicals/ Pharmaceuticals Machine tools Computer and Office Machinery/Electrical Engineering/Healthier Products/ Diagnostic and Medical Equipment.

7 According to the Human Development Index (HDI) produced by the United Nations Development Programme Ireland's socio-economic development has continued to decline in relation to other surveyed countries. For example, Ireland's HDI ranks 55th out of 105 surveyed countries for the period 1970-1990. Its ranking places it between Honduras and Pakistan and below all other OECD countries.

8 For example, the amount of capital raised by the Irish Stock Exchange for investment in indigenous industries was only equivalent to 14% of State expenditure on indigenous industry between 1969 and 1993 (Sunday Business Post, 4/9/1993).



## CHAPTER THREE: METHODOLOGY AND RESEARCH QUESTIONS

### 3.0. Aims and Objectives

In overall terms the survey work undertaken was centred upon an examination of the 'divisions of labour' within the SIE and their socio-economic relationships. Such an approach was chosen in order to delimit both the time-space domains of TNC-controlled organisational structures and the extent to which such structures determine specific forms of capitalist social relations. Moreover, the analysis undertaken sought to determine how various organisational patterns among TNCs related to place specific labour market conditions. Such a 'restructuring' approach was centred upon identifying qualitative shifts in the form of capitalist organisation and capital restructuring and was concerned with explaining the evolution of production and labour market structures within the SIE. More specifically this relationship was examined through an analysis of contemporary developmental processes among TNCs located within the Shannon Industrial Estate (SIE).

A central feature of the above analysis was based upon determining the validity of the 'regulationist' concept of a 'MSR' and 'regime of accumulation'. A localised MSR was acknowledged as involving mechanisms which adjust the behaviour of individuals to the collective principles of the regime of accumulation (Lipietz, 1992). This was examined through analysing the nature of the interaction between capital and labour in Shannon. This interaction was viewed through a comprehension of recruitment and training policies, the effect SFADCo policy making has upon the content of FDI and the structure of the Shannon Town Local Labour Market (STLLM). In methodological terms the regime of accumulation was analysed through examining the nature of the forces of production promoted by Shannon's TNCs. In overall terms this analysis was based upon determining the labour process form of the firms interviewed. A subsidiary feature of the fieldwork undertaken was to engage in a study of the level of social alteration and the extent to which local accumulatory structures are arranged and modified (Peck and Tickell, 1990).

The relationship between FDI and socio-economic change was analysed in relation to the spatial construction of the forces and relations of production in Shannon (Lipietz, 1992). Furthermore, as noted in Section 1.1.6 the analysis undertaken was contingent upon examining the nature of capital formation as determined by alterations within the organisation of production. These alterations are also examined in relation to the socio-spatial distribution of employment and unemployment. The nature of corporate relationships, labour recruitment and management structures were measured through examining the interconnection between production processes within the SIE and the nature of

employment modification within the STLLM. The survey findings were also measured against the significance of the argument that restructuring through the engenderment of flexible production practices by TNC-based capital not only highlights capital's dominance over labour but also promotes job insecurity and a decline in the position of manual workers (Dunford and Kafkalas, 1992). In analysing these themes the thesis includes four surveys (a company survey and a labour market survey) in order to explain the manner in which productive processes both construct and re-modify socio-economic relationships.

The locality based analysis was founded on four surveys:

- 1) A survey related to the companies located within the SIE;
- 2) A survey of adult male employment characteristics within the STLLM;
- 3) A survey of adult female employment characteristics within the STLLM;
- 4) A combined survey of youth labour market characteristics within the STLLM and a survey of graduate employees within the SIE.

The thesis was also concerned with the forces which alter capital reproduction relationships. These included: labour militancy among the STLLM workforce, the role of competition and the variations within inter capitalist rivalry. Early observations noted that a major element in labour market and company re-organisation was founded upon the extension of employment and productive practices which were explicitly 'flexible' (Cavestro, 1988). As a result of these early observations it was important to determine the nature of flexible production practices and the extent to which branch plant economies had adopted new flexible work patterns (Dunford and Benko, 1991; Gertler, 1988; Schoenberger, 1988). Analysis was based upon determining the capacity of TNCs to produce flexible production practices (Schoenberger, 1991). For example, in relation to technology shifts, the SIE survey measured the nature of technical re-organisation within the companies surveyed, while the STLLM sample measured skills composition and the character of recruitment.

Two types of research design were used. Intensive study which looked into causal processes and extensive research which analysed general properties. Extensive research was based upon acquiring descriptive statistics through the use of formal questionnaires. The intensive research had its primary focus upon how groups or agents actually relate toward or between each other. In general terms the extensive techniques provided aggregate information on formal relations, while the intensive techniques examined causal mechanisms (Sayer, 1984, 1985a, 1985b; Smith, 1987; Smith and Ward, 1987).

Extensive research is based upon asking differing respondents the same question under controlled conditions in order that comparisons can be made (Sayer and Morgan, 1985). Intensive techniques also enable the researcher to build upon a priori knowledge in relation to the specific character of the respondent. Intensive interviews are also more flexible in that the adoption of preconceived questions elicits and stimulates more relevant answers. Intensive interviewing is also founded upon the adaptation of preconceived questions. Overall intensive and extensive techniques were merged so that a middle ground could be accommodated although primacy was accorded toward intensive techniques. As is noted by Sayer:

"The identification of mechanisms depends upon careful description of the objects and the relationships in virtue of which they act. In contrast, description of entities is treated as an unimportant preliminary to theory in empiricism. Facts are assumed to be capable of simple atomistic description, and theoretical issues are seen as problems of ordering these facts. In this way, many necessary relationships are overlooked or distorted; usually by removing objects from the context upon which they are dependent and ignoring their ...specific character (1981, p.11)

The coupling of the two interviewing techniques permitted a fuller analysis of both representativeness and causal links. This was achieved by asking interviewees standard questions. When these questions had been answered the respondent was then asked to explain the reasons and situations which promoted such replies. Opinions and personal understandings were encouraged in order to accommodate an understanding of the mechanisms involved (Schmener, 1982). It was essential to also use less formal and standardised questioning techniques in order to accommodate an overview of personal circumstances relating to employment and migratory histories. Through utilising such structures it was possible to build a more concise knowledge of information flows as they occurred. The collection of these specific experiences was essential due to the complex nature of the relationships between the STLLM and the SIE.

Background material was also derived from various publications, both academic and non-academic, relating to employment and industrial structure within Shannon and the Shannon Region. Materials included those produced by the Regional Development Organisation and Limerick University's Social Science and Business Studies Departments. These sources were combined with SFADCo's 'Annual Report' and 'Mid-West Directory of Companies'.

### 3.1.1 Company Surveys

The survey of companies was based upon examining the production and organisational characteristics of TNC located within the SIE. The form and content of location undertaken within the SIE was also examined in relation to the influence of SFADCo's administration and policy-making structures. In relation to the survey of companies the combination of these techniques (generally) encouraged interviewees (the majority of whom were senior

manager) to offer information on the context of competitive strategy, market relationships, product technology, labour relations, production difficulties and successes. The use of standardised questions guaranteed that a high degree of statistical generalizability, consistency and reliability of data was ensured.

Twenty seven of the thirty eight manufacturing companies located in Shannon, in 1990, agreed to be interviewed on the proviso that all details and information required remained confidential (the research questions are listed in Appendix 2). In order to preserve confidentiality, it was agreed in advance that the company name would not be disclosed to any third party. These companies employed 64.2% of all manufacturing employees within the SIE in 1990.

The first batch of questions directed at company managers were related to industrial classification and nationality of ownership. In relation to industrial classification all 27 companies were grouped into three distinct industrial categories according to the HMSO Standard Industrial Classification (SIC) of 1989. This classification was used in order to provide both a satisfactory sub-division of broad groups and a uniformity and comparability within those groups. Table 3.1 presents information on the 3 groups analysed (Appendix 3 provides a more detailed account on the companies interviewed).

The eleven companies constituting 'Group A' were identified as companies which produced consumer goods of a predominantly electrical nature. They were drawn from 'Manufacturers of Office Machinery and Data Processing Equipment' (Class 33/Group 330) and 'Electrical and Electronic Engineering' companies (Class 34/Group 341). In order to provide a general classification 'Group A' companies are referred to as the 'Electrical Engineering' group.

**Table 3.1: Sample and SIC Classification among Survey Companies**

Sample Classification	SIC Classification
A1-A11	33/330 34/341
B1-B11	37/3710, 328/3281 322/3221
C1-C4	483/4831 475/4752 451/4571 432/4321

Source: Author's Survey

'Group B' companies included a broad range of companies generally involved in mechanical engineering or related industries. These included; 'Instrument Engineering' companies (Class 37/Group 3710), other 'Machinery and Mechanical Equipment' manufacturers (Class 328/Class 3281) and 'Metal-Working Machine Tools and Engineers' Tools' manufacturers (Class 322/3221). This group is referred to as the 'Mechanical Engineering' group.

The remaining four firms were involved in a wide range of production including superhard materials, publishing, chemical manufacturing and the production of plastic closures. This group is denoted by the letter 'C' and is referred to as the 'Miscellaneous' Group.

Within the sample 20 of the firms were US-based. Of the other seven companies 2 were from the UK, 2 from Germany and one each from South Africa, Holland and Austria (Table 3.2).

**Table 4.0: Company Classification and Country of Origin among Survey Companies within the SIE**

Country of Origin	Company Classification
U.S.A	A2 A4 A5 A6 A7 A8 A10 A11 B1 B2 B5 B6 B7 B8 B9 B10 B11 C3 C4 C5
U.K	A1 A3
Germany	B3 B4
South Africa	C1
Holland	C2
Austria	A9

The companies were self-identified as follows. **A1** (SIC activity code 330/3301) was involved in the manufacture of non-electrical data and processing machinery. **A3, A4, A5, A7** and **A11** (SIC activity code 330/3302) were all manufacturers of digital, analogue and hybrid electronic computer equipment and sub-assemblers of peripheral computer equipment (information on products contained in appendix 7). Electrical generators and limiting reactors for electrical motors and power rectifiers were produced by **A8/A9/A10** (SIC activity code 341/3420). **A2** and **A6** (SIC activity code 343/3433) both manufactured and assembled electronic sound and visual signalling equipment (e.g. fire alarms)

Among the 'mechanical engineering' group **B1, B6** and **B7** (SIC activity code 328/3286) manufactured water tube holders and mechanical heat transmitters of a heavy fabrication. **B2, B3, B4** and **B5** (SIC activity code 322/3222) manufactured hard metal forming machine tools, mining tools, twist drills, machine saws and lathe tools. **B8, B9** and **B11** (SIC activity code 372/3220/1) manufactured scientific and industrial instruments and heat precision balances. **B10** manufactured centrifugal reciprocating, rotary and liquid pumps.

The 'miscellaneous' group of producers included **C3** (SIC activity code 475/4752) a printer and publishers, **C1** a synthetic and natural component manufacturer, **C4** a chemicals manufacturer and **C2** (SIC activity code 483/4831) a producer of vinyl and other plastics.

Research questions were also related to the hierarchical nature of relationships between branch plants in Shannon and their parent companies in order to determine the degree of transnationality and parental control. The main criteria used in order to determine if a firm was independent or parentally-controlled was based upon asking managers about purchasing and marketing arrangements. In general if a firm, depended exclusively on its parent company for the supply of necessary raw materials, components or non-utility services and if/or it depended on a sales and marketing system physically and administratively separate from itself to dispose of the major part of its products, then it would fall into the category of parentally-controlled group.

Totally independent and autonomous producers were easily identified when managers were interviewed. They were firms who could freely choose among a variety of competing suppliers of materials, components and services they use, and are also free to sell their products in all available markets. Decisions about what they produced, when they produce, and how much they produce are all taken at local the local level. Firms totally subsumed within a globally integrated production process were also defined in a similar manner. They are typically supplied with their key materials, components and services through a single source, controlled by the parent company. They were also according to the managers interviewed under strict control from parent companies in relation to strategic production decisions.

Managers were asked to provide employment totals broken down by skill levels. Managers were then asked to relate skill levels to the nature of the productive tasks performed within their plant. This information Was then used to determine whether or not the plants in Shannon were involved in an autonomous/independent or highly fragmented/parent controlled production process. In order to provide clarity and remove any ambiguities about the content and nature of skills classification, a distinct a priori typology of skills was used following Schoenberger (1988). As shown in Table 3.2 the typology used was not based solely on training and employment status but also on the interaction and cohesiveness of workers, the nature and character of control/autonomy structures, the content of management's needs and skill requirements (Schoenberger, 1988). The typology used was based upon three skills classifications: technical, skilled manual and semi/unskilled manual employees. After interviewing, it became evident that the particular characteristics noted in Table 3.2 were appropriate for the skill classifications listed below.

Skilled manual workers, according to the managers, were paid less than technical staff and were unlikely to have wages tied to individual performance. The majority of skilled workers (82.3% of all skilled workers according to managers) had undertaken a skilled apprenticeship and had usually received a City and Guilds diploma. Skills training was reflected in highly demarcated employment practices according to management. Skilled manual workers were tied to specific tasks although they did control a certain degree of their own workplace, largely

due to control over machine tooling and setting. Within this sample skilled manual workers did not work in teams although they were part of distinct skills groups.

Semi/unskilled manual workers were identified as being vulnerable to lay-off periods during times of low production. Semi/unskilled workers performed few productive tasks a feature which reflected the lack of recognised skilled training within this group. The organisation of their work was generally based upon highly repetitive tasks which demanded high boredom thresholds and manual dexterity. Among semi/unskilled workers technical authority was denoted by management as the source of control which was determined by the rhythm and pace of the machines worked on.

**Table 3.2 Skill Classification used in Relation to Company Interviews**

Job Content Category	Technical	Skilled Manual	Semi/Unskilled Manual
Job Stability	High/Stable	Stable/Increasingly Unstable	Unstable/Volatile/Lay-Off periods)
Career Mobility	Generally Good	Internal to skills group	Largely non-existent
Physical Demands of Tasks	Low demand	Moderate demand	High physical demand
Repetition and Variability	Irregular tasks	Tasks largely defined but not repetitive	Highly repetitive/Few tasks/Long cycles
Training	Generally third level education	Apprenticeship/Diploma	General state-sponsored training/None
Autonomy (completion procedure and movement paths)	High autonomy	Set procedure/Open movement	Set procedure fixed work/All work timed
Workpace	Autonomous	Moderate	Extremely rapid
Pay Structure	Linked to productivity	Set by management	Set by management
Work Group Structure	Very Important	Generally unimportant	Non-relevant
Average Wage	£17,000	£ 13,5000	£6500

Source: Company Interviews and Schoenberger (1988).

The main area of concern with regard to company interviews was to determine the background and nature of contemporary forms of work organisation. This analysis of workplace change and modification was tied to a review of the implications for employees and STLLM participants in relation to the introduction of 'numerical' and 'functional' flexibility. In order to comprehend the effect of increased 'flexibility' (if any) managers were asked to give details on the changing composition of production and skills within their respective plant. This was based upon questioning managers about changing skill levels, alterations within the production process and the nature of employment change in relation to competitive and labour pressures. Companies which displayed employment contractions were as to explain which sections of the workforce has

been removed and the reasons for such alterations. Managers were also asked to consider the importance of production decentralisation, market changes, mechanisation, the growth of flexible employment and issues relating to labour conflict and quality control.

### 3.1.2 Labour Market Surveys

As a logical progression, door-to-door interviews were conducted after the company interviews in order to explore and explain the effect of past, current and prospective industrial reorganisation within Shannon. As noted the door-to-door interviewing combined intensive and extensive methods. The latter provided the opportunity for respondents to discuss personal employment histories, labour market perceptions and factors influencing employment opportunities. The main themes covered included: determination of work histories and skill levels, discussion of unemployment histories, detailed discussion of training received, an analysis of employment status, and a general discussion of workplace change.

The analysis of the degree and extent of 'restructuring' was tied to determining the overall socio-economic construction and modification of Shannon's political economy. The basic labour market question was to determine what makes certain groups of workers suitable for jobs as defined by employment relations and the demands of TNC-controlled companies. As noted above the survey of managers accounted for labour demand characteristics. Moreover, as argued by Burawoy (1979) and Clark (1980), an important element in the analysis of local labour market characteristics is the need to determine management's minimal requirements. In order to match employers' needs with employment opportunities within the STLLM, the survey enquired into the degree to which these employment needs varied systematically among occupations.

The male survey was based upon a random sample of 10.1% of the 2534 households in Shannon Town (information supplied by SFADCo). The sample was based upon interviewing 250 male heads of household over the age of 24. Households were chosen on the basis of visiting one in every three households until 250 males had been interviewed. Interviewees conformed to a division of Shannon Town into three distinct areas in order to include a range of income groups. These three areas were; Tullyvaragh, Tullyglass and Drumgeely. In relation to population totals Tullyvaragh contained 34.7% of the towns population, Tullyglass 34.4% and Drumgeely 30.7%. In order to provide representativeness the Male sample was related to these population percentage shares.

The male sample was based upon those who had or who were working for a manufacturing company located in Shannon. This bias was introduced in order to link respondents whose occupational and skill classification had been directly influenced by the actions and policies of the companies located within the SIE.



This interview bias guaranteed a more coherent analysis of how productive and business strategies affected the structure and content of the STLLM. Table 3.3 provides details of the 250 adult males interviewed and their employment status (appendices 3-6 give details on the questions asked for both the company and SIE surveys). The largest group was comprised of skilled manual workers who made up 37.2% of all respondents. In overall employment terms these 250 individuals made up 17% of total number of males within the STLLM aged between 24-65 (SFADCO Population Survey, 1991).

**Table 3.3 Occupational Characteristics of Male Sample**

Skills/Occupation Category	Number of Respondents	% Share of all Respondents
Managerial/Technical	32	12.8
Skilled Manual	87	34.8
Semi-Unskilled Manual	75	30.0
Unemployed	66	26.4
Total	250	100

Source: Author's Survey

Respondents were placed in skill groups according to the content of their present or previous occupation and in groups which related to the classification contained in Table 3.1. All skilled manual participants were asked to supply details of personal training and employment histories in relation to their individual skills definition. As skilled workers they were expected to have either undertaken an apprenticeship which had earned them a recognised qualification (usually a City of London Guilds Diploma). Those respondents who were not in receipt of qualifications or training but who held skilled employment posts were asked to explain their employment characteristics and the nature of in-house training undertaken. A further definition of a respondent's skills status was achieved through asking them to identify their employment position in regard to other job categories within the company worked for. A vital part of respondent questioning also included respondents fully-explaining what they considered to be the differences between skilled and unskilled employment.

Male sample respondents were also asked about their present economic status and how this had been altered in relation to skill levels and unemployment histories. In relation to unemployment histories respondents were questioned on the duration of periods of unemployment. Those who were presently employed were also questioned in regard to conditions of employment and the nature of change within the companies worked for. This was generally related to control of the workplace. Those who were unemployed, and who had worked previously, were questioned on the reasons for their job loss.

### 3.1.4 Female Sample

Overall 100 women were interviewed which comprised 7% of the total adult female population aged between 24-60 (SFADCo Population Survey 1991). Unlike the male sample females were not excluded if they had not been employed by a manufacturing firm in Shannon. This feature of the female sample was incorporated in order to include a more general perspective on the ethos of women and work. The role of women within the Shannon workplace is based upon a distinct gender division of labour which although ultimately affected by the nature of FDI is also affected by cultural and religious factors. A reflection of the difference between women and men within the labour market is shown by the largest section of the female sample being composed of those involved in home duties. Moreover, in comparison to the male sample there were no skilled or technical employees within the female sample.

The female sample was also based upon door-to-door interviews and conformed to the population percentage shares used for the adult male sample. The households interviewed were different from those used in the male sample in order to remove any bias. In terms of employment characteristics 38 women were semi/Unskilled employees, 16 were unemployed, 45 were involved in home duties and two were on training courses. As well as present economic status interviewees were also questioned in relation to employment histories, job classification, opinions relating to women working, trade union activity and unemployment histories.

### 3.1.5 Youth and Graduate Survey

Two survey groups were chosen separately in order to examine contemporary recruitment structures among school leavers and university graduates. Unlike the other two surveys the youth and graduate surveys also considered the impact and role of out-migration due to its continual growth in the 1980s and the link between out-migration and labour market conditions. Both of these surveys were merged in order to compare employment conditions, employment opportunities and relationships between the non-adult group and the companies located within the SIE.

Due to the high levels of out-migration among the youth and graduate samples it was impossible to utilise intensive techniques. It was decided that a formal questionnaire should be given to all respondents in order to produce representativeness. The youth labour market questionnaire related to education/training, employment histories and emigration patterns. The graduate sample related to the career structures achieved as determined by course option.

The youth sample included 116 individuals. Seventy four were interviewed in Shannon and had been contacted on a door-to-door basis. This was based on visiting one in three households in Shannon, but not the same households as visited previously. The addresses of the forty-two respondents were given by parents at the homes visited. A total of 84 stamped addressed envelopes containing questionnaires were given to the parents of those who no longer lived in Shannon for the parents to post. Of these 42 were completed and returned to Liverpool.

The Limerick University graduate sample was based upon those who had undertaken training with a company in Shannon. They were traced through company records, Limerick University records and various respondents who passed on names and addresses. Overall 212 graduates were sent questionnaires of which 102 were returned by stamped addressed envelope. Twenty four were interviewed at their home address within the Shannon Region. Of the 64 graduates who worked elsewhere 12 were interviewed directly in Dublin, London and Birmingham.

In relation to the Shannon Town Youth labour Market survey respondents, both those living in Shannon and those residing elsewhere were questioned on present economic status, job type, and unemployment histories. Respondents were also asked to provide information on educational and training qualifications, reasons (where appropriate) for leaving Shannon, and attitudes to employment conditions in Shannon.

The empirical issues relating to the migrant survey was based upon defining the structural nature of contemporary migration flows from the Shannon youth labour market and among the graduates who had trained in Shannon. It was essential to analyse migratory relationships as they provided a base on which to draw conclusions about contemporary labour market practices in Shannon. This relates local labour market to national and international developments in the productive system. Similarly assertions that training can correct imbalances in local labour markets are also discussed together with the assumption that better training invariably leads to better employment prospects (Breen, 1991).

The graduate sample was also based upon employment and unemployment histories, training experience, courses undertaken, job descriptions, attitudes toward the workplace and causes (where appropriate) of migration. As with the Shannon Town Labour Market the graduate respondents were also questioned in relation to wage rates and promotion opportunities.

**CHAPTER FOUR: THE CHARACTERISTICS OF INDUSTRIAL LOCATION WITHIN THE SHANNON INDUSTRIAL ESTATE.**

**4.1 Branch Plant Operations**

The role and character of branch plant operations were measured through an analysis of corporate affiliation and workplace organisation. Managers were asked to discuss the role of manual employees in order to determine if employees were highly expendable or a complement to available technology (see Chapter 5). Managers were also questioned on the character of the division of labour within their respective plants. In order to determine the nature of workplace structures managers were asked to provide details on layers of supervision, formal operational procedures and top-down planning structures. In order to strengthen the analysis adopted managers were also encouraged to discuss the implementation and development of managerial functions and the manner in which they operated.

It became evident that the mode of organisation and the workplace procedures evident among the companies were split between two readily identifiable groups, namely Polarised Manufacturing Systems (PMS) and Autonomous Manufacturing Systems (AMS). As shown in Table 4.0 the main differences between these two groups are centred around the nature of shopfloor control, the hierarchical nature of production, the standardised nature of production and the extent of managerial control. PMS companies were defined as explicitly Taylorist/Neo-Fordist (see section 1.1.6/1.2.6) due to them being mass/large scale producers who maintained a tight control over all aspects of the production process through maintaining distinct employment hierarchies (Braverman, 1974). AMS companies on the other hand promote workforce enskilling, favour a mix of scope and large scale production and enjoy a high degree of autonomy in relation to the parent company.

Table 4.3 Classification of AMS/PMS Companies

<i>Classification</i>	<i>PMS Companies</i>	<i>AMS Companies</i>
Production/Work Organisation	Fordist/Neo-Fordist	Flexible Specialisation
Relationship with Parent Company	Highly Constrained/Dependent	General branch plant autonomy
Manual Employees	Expendable	Complement to technology
Division of Labour	Hierarchical/Functional	Non-Standardised/Generally autonomous
Tasks Performed	Fragmented	Enskilled

The PMS companies were divided into two smaller groups (PMS1/PMS2) both highly dependent producers although the employment and processes of production created by PMS 2 companies were of a higher skills nature. The PMS1 group included the 11 companies. The PMS2 group included 9 companies and the AMS group included 3 companies.

An important area of definition which was also applied to both AMS and PMS companies concerned branch plant operations and referred to the nature and extent of 'backward' and 'forward' linkages. 'Backward' linkages relate to the purchase of goods and services necessary for production (Jones, 1976). 'Forward' linkages occur when the seller firm furnishes a firm with its productive needs. More specifically, 'forward' linkages relate to the use of sub-contractors to undertake the production or processing of a material, component or sub-assembly. 'Forward' linkages differ from 'Backward' linkages as the relationship is not merely based upon the purchase of ready-made parts and components from suppliers (Dicken, 1992).

An exemplary model of these relationships would entail the stimulation and growth of indigenous supplies of materials and components of a high value-added quality (Kennedy, 1991; McHugh, 1989; O' Brien, 1989; O'Malley, 1989). The establishment and creation of linkages with indigenous industry was one of the principal criteria of successful economic development based upon FDI (Munck, 1993). Complementing this would be the dispersal of output from TNCs into the local economy for supplementary processing.

The importance of linkages within a small, open and underdeveloped economy such as Ireland's cannot be overstated (see Table 2.3). The capacity of indigenous industries to augment sales of high value goods to TNCs is one of the most realistic strategies for upgrading the domestic economy. The more tightly bound a TNC is to its parent company the less likely it will be that Irish companies will be capable of sourcing TNC purchases (Kennedy, 1991). The measurement of 'Backward' linkages was based upon an analysis of the percentage share of purchases of materials and services by each industry. 'Forward' linkages were measured through analysis of the percentage share distribution of the domestic use of each company's output.

#### 4.1.1 The PMS Definition

In analytical terms PMS companies continually fragment and undermine the tasks performed by traditional craft/skilled workers (Lipietz, 1992). In determining if a company was PMS-based it was important to note the degree and nature of restructuring (Chapter 5). For example, if management described the introduction of 'functional' and 'numerical' flexibility as being part of an open-ended process of increased communication between management and employees through the mobilisation of employee knowledge and commitment

then this was clearly not characteristic of PMS plants. A more appropriate workplace structure for a PMS company would have been a high degree of skills demarcation and low levels of on-the-job skills training (Perrons, 1981; Sklair, 1988). PMS companies were also identified as unwilling to promote a "bottom-up" structure which focused on creating work process and problem solving teams (Lipietz, 1992). Furthermore, they also declined to implement personal achievement structures as a means of reinforcing complete employee commitment. Therefore, in these instances the desire to ensure a search for flexibility through team-working, job rotation and multi-skilling was not evident.

PMS companies were denoted as being highly dependent upon external (to the plant) corporate decision-making structures. For example, these highly dependent producers did not independently source materials, components and services, or control their own sales and marketing facilities. Such dependent plants were identified as being dedicated to a process of part production within a framework of vertically de-segregated manufacturing processes (Telesis, 1982).

PMS 1 companies are mass and large scale producers who operate large stock-piled inventories. On average 92% (range 78%-100%) of goods produced were returned to the parent company, due to each plant being involved within parentally controlled production networks. These networks are highly fragmented and generally founded upon the elemented manufacture of electrical equipment and the assembly of disjunctive and integrated electronic components. The majority of production was based upon assembly based activities with nearly two thirds of manual workers involved in assembly type activities. Such a high level of assembly based production highlighted the disjunctive nature of production within this group (Aglietta, 1979; Howells, 1990; Palloix, 1979). Such a disjunctive manner of production was also accounted for by Delaney's (1988) in her analysis of the 'electrical engineering' sector located within the SIE.

None of the PMS 1 firms are involved in the key stages of company development which include corporate headquarters, regional headquarters, research and development stations, design centres marketing or mask-making activities. Instead their involvement is based upon fabrication, coating, assembly and final testing (Perrons, 1981; Telesis, 1982). These companies were also denoted as having located production processes which are directly tied to an internal and parentally controlled production process. Production processes, which management acknowledged were both highly fragmented and predominantly based upon the assembly and intermediate manufacture of goods for export (Perrons, 1981).

Within the PMS based sample the mode of organisation was assumed within the higher echelons of the firm and was characterised by a process in which the majority of decisions affecting the plant's role and nature of production are taken

within corporate headquarters. As noted these companies were distinctively supplied with their fundamental needs of materials, components and services through sources administered by the parent. Simultaneously, these companies exclusively disposed of their products to the parent. Indispensable and critical manufacturing resolutions were necessitated through the creation of a corporate hierarchy (Massey, 1982; Sklair, 1988).

#### 4.1.2 The AMS Definition

AMS based companies conformed to Halal's (1986) evolutionary variant on capitalist development which argues that branch plant economies are structured upon encouraging participative leadership, strategic management and shopfloor democratisation. AMS based companies are characterised by management as companies who purposefully generate a general commitment toward employee involvement. In general terms AMS activities aim to remove adversarial relationships between capital and labour through the promotion of the knowledge and experience of employees (Scott, 1992).

In order to determine if a company conformed to AMS characteristics interviewing was based upon determining the extent to which managerial objectives were founded upon engendering a workplace culture in which employees shared common goals and aspirations. For example, managers were questioned on whether or not they continually informed employees of company concerns and objectives. The following criteria were used to classify AMS based companies: <sup>1</sup>

- 1) Management undertake careful staff selection with a bias towards employees with statistical process and control knowledge
- 2) Multi-skilling and high levels of 'functional flexibility' are evident within the workforce
- 3) Employee involvement initiatives promote group working and autonomy
- 4) Companies promote an individual versus collective focus among employees through reducing skill demarcations
- 5) Individualism is combined with enhanced training and the perpetuation of discernible promotion structures

One of the central areas of definition and industrial classification was the nature and extent of teamworking within companies due to the fact that teamworking is a developmental and learning process, in which employees, union representatives and management have some degree of direct influence. On the other hand PMS companies had purposefully excluded trade unions from decision-making processes and were wary of autonomous teamworking groups

due to the possibility of manual employees using such groups in order to hold sway over the production process.

Management was questioned on the nature of teamworking structures, including the ability to communicate and, resolve conflicts and solve problems. In order to delimitate the extent of teamworking, managers were asked to determine if the role of production supervisors/controllers had been altered to moderators or supporters, and whether achieving these objectives requires team working, self-inspection, multi-skilling, flexibility, job rotation and a focus on training. AMS companies accept that the need for continuous improvements in all aspects of company performance is vital in order to control competitive conditions (Schoenberger,1992).

## 4.2 SURVEY RESULTS

### 4.2.1 PMS 1 Group Survey Results

The PMS 1 group comprised 11 companies, 8 of whom were 'electrical engineering' based. Managers acknowledged that location in Shannon had been possible due to extensive neo-Fordist fragmentation of production and the supply of a semi-skilled workforce within the SIE. With the exception of 2 companies location had taken place in the period 1978-1990. In general these companies had been encouraged to locate in Shannon in the period identified by SFADCo as being centred upon technical upgrading and the 'pursuit of excellence'.

Through interviewing management, it became clear that PMS 1 companies reflect a division of labour that conforms to a distinctive corporate hierarchy. As shown in Graph 4.0 the majority of employment was centred upon semi/unskilled workers. Out of 909 employees, nearly two thirds (573) were classed as semi/unskilled workers (for a definition of skills see section 3.3). Fifteen percent (138) were classified as skilled workers, and only 5% (48) are technical employees.

In relation to such high levels of semi/unskilled employment it is clear that these companies have failed to locate significant competitive and key functions such as marketing, distribution networks and R and D facilities within the SIE. Furthermore they have also provided employment opportunities which are of a low skills nature. Moreover locational activities within this group have been based upon creating limited employment possibilities for a workforce which is dedicated to routine tasks manipulation (see also Telesis submission to SFADCo, 1982). As noted by the manager of A2:

"Elaborate electrical engineering and marketing are not carried out here and never will be. In relation to development this company may not provide the most skilled employment but it does offer jobs and I don't see anyone complaining. Anyway our company is based on its administrative



strengths as well as keeping the whole process ticking over. In fact we are only interested in location in Shannon in the short term" (Interview, June 1990)

According to the manager of A4:

"Our company is not breaking any rules. The way in which you talk you would think we should be locating important stages of production in Shannon. This is the real world not a charitable institution. We are a major competitive company and we locate in places like Shannon in order to remain competitive. We use some places to perform our more labour intensive stages and use others as real home bases. The brains of the company are in the US and the hands in places like Shannon. That is not exploitation it is the common sense way of the world (Interview, February, 1989)

For PMS 1 companies global integration is based upon a division of labour in which the capital-intensive, high value-added stages of production are carried out in factories in the high waged economies and labour intensive stages are carried out within the periphery. The production characteristics and linkage relationships distinct within the PMS1 group challenge O' Farrell's argument that;

"The common stereotype of the MNC branch plant in developed areas is a production unit using standardised methods, processing inputs supplied by affiliates abroad, exporting output to the parent company, having little or no autonomy to change suppliers and with most of its key services provided from within the company, is not valid in the Irish context" (1978, p. 454).

#### 4.4.2 PMS 2 Group Survey Results

The PMS 2 group is largely mechanical engineering based and includes 9 companies. These firms also exhibit a similarly high degree of external control but a dissimilar form of production fragmentation. All but 2 of these firms had located within the SIE in the period 1964-1975.

Production fragmentation within this sector is customary due to the interrelated composition of mechanical engineering (Therborn, 1984; Walker, 1988). Managers agreed that location in Shannon had been based upon the location of sophisticated and skilled stages of production. Unlike PMS 1 companies, fragmentation of production is based upon employing skilled workers (for example only 12% of employees were assemblers) and producing a disparate range of products. At a global level Bosier (1981) has argued that such a mixture of globalised fragmented production and the employment of skilled workers is a common feature within the mechanical engineering sector.

Within the PMS 2 group, plants largely conform to large scale production although they cater for less standardised orders common among PMS 1 companies. Within the sample, product design and markets for goods and supplies were still largely determined within the internal hierarchy of the company. As shown in Graph 4.1, out of the 551 employees within the PMS 2 group 45% (250) were skilled workers. Furthermore, 27.1% of employees come



As with PMS 1 companies PMS 2 companies did not control 'Backward' and 'Forward' linkages due to the hegemonic control of the parent company. In all cases managers noted that parental control was the predominant factor which influenced linkage relationships. PMS 1 production and assembly generally constituted one stage in a vertically integrated globalised manufacturing process. Both PMS1/PMS2 companies are supplied with an average of 82.4% (range 78%-98%) of their key materials, components and services through a single source, which was controlled if not directly owned by the parent group. 'Forward' linkages were negligible (1.4%) for both groups due to the disposal of products, which are often semi-finished, exclusively to the parent. Furthermore, according to the manager of A6 strategic production decisions are taken at TNC headquarters:

"I would like to see a growth in our relationship with Irish companies, after all that's what industrial development is supposed to be all about. We have even pointed out to HQ that the Irish companies have the goods at competitive, maybe even lower prices and to good standards, but they are not interested. However, they are committed to their policies and that's all there is to it"(Interview, June 1990).

As noted by the manager of B1;

"We (management) would like to buy more but the low quality and high cost of the sub-suppliers prevents this. Anyway it will hardly ever happen, you see, in Shannon there are no cost penalties for foreign firms to import components" (Interview, July, 1990).

Overall, in relation to the PMS groups any understanding of linkage structures must be related to the productive developments of international capital movement (Stewart, 1977). As noted by management, the superiority of foreign firms depends upon a close relationship between the parent company and branch plants. In relation to SFADCo's contemporary policy of strengthening the technological base and linkage relationship of TNCs PMS companies have failed to produce the expected outcome of branch plant autonomy and augmented R + D. In reality the nature of production within the PMS group is determined by a process through which productive activities within the SIE have come under the control of parent companies through the international extension of managerial control.

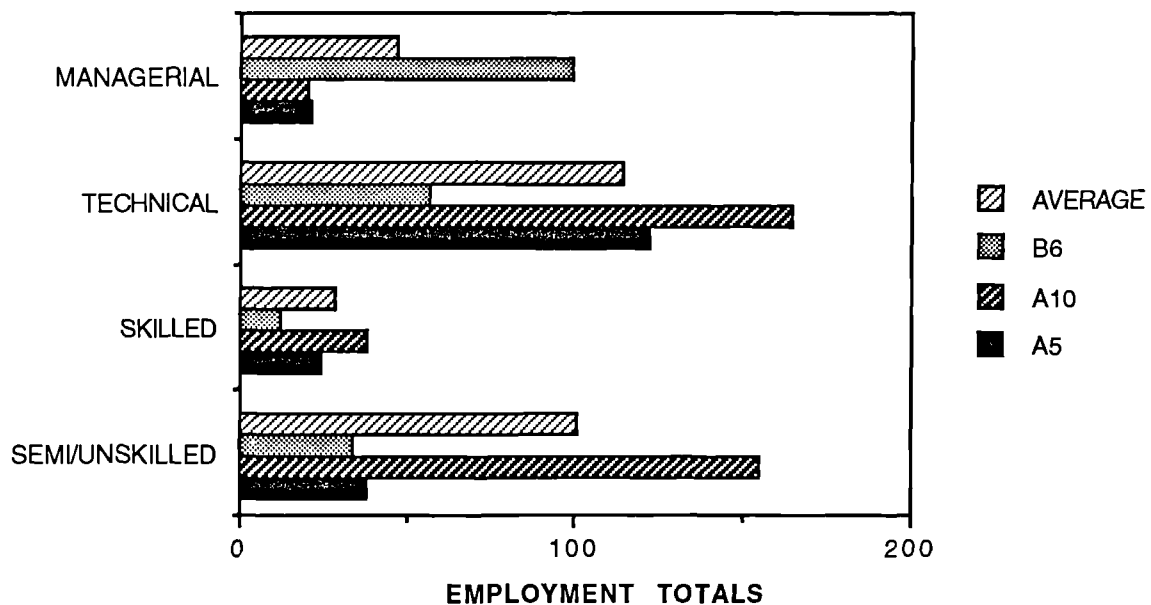
#### 4.2.3 AMS Group Survey Results

The AMS group included three companies two of whom were drawn from the electrical engineering sector and one from the mechanical engineering group. This group included the companies; A5, A10 and B6. All had located to Shannon in the period 1984-1987. Each company had decentralised higher levels of productive capacity and autonomous decision-making facilities to the SIE. A10 had expanded in order to encompass a more diverse schema of computer-based

production. A5 design and manufacture telecommunications equipment while B6 manufacture and design sophisticated aircraft machinery.

Total employment for the AMS group was 784 or 35% of all employment within the sample. A5 employed 225, B6 employed 122 and A10 employed 437. The largest occupational group was composed of technical staff who made up 43% (343 employees) of all employment within this group. Semi/Unskilled staff included a sizeable proportion of workers and accounted for a 28% (227 employees) share. Skilled manual workers were under-represented in comparison to the PMS group with a mere 11% (84) of total employment within this group.

**Graph 4.2: Employment Totals By Classification (AMS Group)**



The importance of recruiting technical workers was asserted by the manager of A10 when he argued that location in Shannon was due to the amenable nature and abundance of both technical and shopfloor staff:

"We have expanded and brought more and more functions to the estate. We are very pleased with the results, all the way from the shopfloor to the design office. The University has supplied us with staff as well trained, no I would say better trained, than in the US, and we are very confident about their work. We used to have plants in the UK and France but a combination of lack of support from the development agencies and a high turnover of staff meant we sought a new location. We have no problems bringing crucial stages of production to Ireland. We have good staff and an excellent relationship with SFADCo...." (Interview, June 1990).

All 3 firms replicate Scott's (1992) analysis of contemporary branch plant economies due to high employment levels of technical staff who are also

encouraged to become involved in decision making. These companies also confirm Scott's (1988) analysis that TNCs have produced internal economies of scale and scope with complete production systems manifesting characteristics of 'deverticalisation' (Scott and Cooke, 1988; Bassett et al, 1989).

'Backward' linkages were low with an average of 12.8% (in fiscal terms) of goods being sourced from Irish companies. Augmented linkages with the Irish economy, it was argued, were undermined by the relatively unsophisticated nature of Irish companies. 'Forward' linkages accounted for an average of 8% of all goods produced in Shannon and as with 'Backward' linkages further linkages were blocked by the incompatibility between the foreign and Irish sectors. In relation to these difficulties A5 and A10 were supplying capital support to the University of Limerick in order to promote more extensive linkages with Irish industries, a situation which would support Sabel's assertion that the potential exists for a new form of locational relationship;

"The activities of the giant corporations would more closely resemble and actually blend into the activity of the industrial districts. An engine plant which participates in the design of the engine and depends on highly specialised local suppliers to produce it is both part of a multinational corporation firm and an independent industrial district (1989, p.40).

#### 4.5 CONCLUSION

The potential for making supplementary profits through transfer pricing is an additional disincentive for branch plants to institute linkages with indigenous firms. The movement of capital within the company to low tax areas such as Ireland is accompanied by inflated prices of company-based outputs in order to take advantage of this situation (Gilmor, 1982, 1985a, 1985b). Similarly contacts with indigenous companies would mean that Irish Customs and Excise would be capable of analysing profit ratio and capital expenditure of various branch plants (Foley, 1989, 1991).

Within the Shannon sample collecting data relating to linkages and expenditure for the twenty three firms was rendered difficult. However, working from the parental company sources and J-1 tax returns data was collected for 17 of the 20 US plants. Overall between 1982 and 1989 the companies had invested £IR 8,430,002 within the SIE and had recouped £IR 26,574,389 in profits. The possible second round effects capable of counteracting such a process of decapitalization, whereby capital is continually removed from the Irish economy, are based upon TNCs increasing the overall level of economic activity within the national economy (Kennedy, 1991). However, as indicated within Shannon, insignificant linkages between TNCs and domestic firms have been created.

AMS firms with their own R and D facilities and diverse product design and range capabilities are exceptions to the general rule of location within the SIE (for an EC comparison see Amin and Robins 1989). The 'flexible specialisation'

argument that 'vertical disintegration' is a vital part of TNC reorganisation is irrelevant to the majority of companies located within the SIE (Scott, 1988). In reality the majority of TNCs within the SIE still support an integrated system of industrial organisation which processes a high proportion of inputs supplied from their affiliates abroad, with sourcing being unequivocally determined by the parent group in order to generate inward economies of scale.

It is also clear that the present strategy of attracting high technology firms in order to upgrade the domestic economy has generally failed to produce enhanced linkage arrangements within the SIE. The failure of TNCs to blend into the industrial activity of indigenous companies also highlights the inappropriateness of Sabel's (1989) argument that contemporary TNC based location is contingent upon promoting a branch plant economy which is locally co-ordinated, generally autonomous and dependent upon functional integration with local markets (see section 1.2.6). In general the Shannon sample re-emphasises the essence of the Telesis:

"Little spinoff has occurred from multinationals in Ireland....Irish companies are not successfully supplying sub-supplies to foreign owned industries. That is understandable. The controlling company charges in the enclave inputs at low prices against which Irish producers cannot compete; and it charges out the product at high prices, which Irish processors cannot afford to pay" (1982, p127).

The composition of skills within the Shannon sample comprehensively differs from that found nationally among TNCs. Chomney's (1992) survey (1992) based upon IDA information recorded a semi-unskilled employment percentage share 17.4% higher nationally than that found within the Shannon survey (see Graph 2.3). As shown in Table 4.4 the skilled employment group was only 2.5% smaller in Chomney's survey than in the Shannon sample. The most significant difference between the 2 surveys is related to the technical group which was 11% higher within the SIE sample. In relation to high levels of technical employment within the SIE SFADCO have stated that:

"Technical employment is four times higher in Shannon than it is nationally. A result of good planning and the growth of the University" (SFADCO, Internal Review, 1990)

**Table 4.4: SIE Survey and Chomney's National Survey of the Skills Composition of TNCs**

Skills Classification	SIE Survey: % Share and Total Nos.	Chomney's Survey % Share
Semi/Unskilled	40.6 (871)	58
Skilled	21.5 (462)	18
Technical	19.6 (440)	8
Managerial	16.5 (371)	16

It is evident from this Chapter that with the exception of the AMS companies the employment of technical workers has not removed the fragmented nature of employment and production within the SIE. Furthermore as noted in Chapters 5 and 6 the employment of technical staff has generally undermined the role of skilled manual workers.

When applying a regulationist framework to the contemporary structure of production, policy-making and employment among the companies located within the SIE the following was observed. In relation to the predominant PMS group the regime of accumulation evident within the sample is founded upon high levels of fragmented production and parental control. Consumption is based upon supplying globalised mass markets, while investment is predicated upon producing a highly reproducible labour process (Lipietz, 1992). The socio-spatial organisation of production within Shannon is predominantly controlled by a distinct TNC based hierarchy.

Shannon's 'regime of accumulation' is set within distinguishable macroeconomic and highly globalised relationships. In socio-political terms the nature and character of development within the SIE has been contingent upon partial industrialisation, augmented branch plant control, labour process change and the location of decentralised operative units (Aglietta, 1979). The social processes which have accompanied this 'regime of accumulation' have been centred upon a localised 'MSR' which endeavours to provide a mechanism capable of achieving, as noted above, high levels of labour reproduction.

In relation to a localised MSR the goal of SFADCo policy making has been contingent upon adjusting contradictory and conflictual behaviour among STLLM employees. In order to ensure accumulation within Shannon's branch plant economy SFADCO have adjusted labour market conditions through the promotion of new labour alternatives and the abandonment of pre-existing policies. The institutionalised form of decision making was initially evident in the 1960s when SFADCo promoted an employment bias (whenever possible) through allocation of grants to foreign investors interested in employing a sizeable male workforce. This policy orientation was also directed at promoting skilled employment in order to strengthen the developmental potential of the Irish economy through the provision of high paid employment. This policy was also founded upon SFADCo's desire to remove high levels of conflict between male and female workers.

A localised MSR based upon supporting Shannon Town's growth through promoting increased employment was however incompatible with the macroeconomic shock waves of the first 'Oil Crisis'. Reductions in profitability, high levels of capital retraction, increased unemployment and a growth in labour-capital conflict led to a distinct shift in policy options. Policy was no longer founded upon supporting the male workforce of the STLLM but instead upon ensuring that accumulatory structures were complimented by an amenable

workforce capable of supporting both a globalised division of labour and increased 'flexibility within production' (see Chapter 5). SFADCo concluded that the previous MSR which promoted a mixture of industrial and socio-economic development was incapable of stimulating a rate of accumulation which satisfied investors' needs (Munck, 1993; Smyth, 1991). As argued in Chapter 5 the outmoded skills base of skilled workers and their heavy reliance upon skills demarcations removed the possibility for investors to introduce contingent competitive strategies which included such workers. The localised MSR which existed in the period from the 1960s to the mid 1970s and which was centred upon extending the role of the skilled manual worker was inappropriate to the accumulation needs of international capital. Furthermore increased militancy threatened the existence of the SIE branch plant economy due to the obvious threat such conflict would have upon capital accumulation.

The issues raised through defining AMS and PMS companies highlights the varying forms of capital location in Shannon. Considerations as to the organisation of TNCs and their affiliation to the parent company indicates the many countenancing factors involved within internationalised capitals accumulatory role. Regulation theory points to the need to adopt a categorical analysis of TNCs as concerns the nexus between the labour process, the capacity of surplus extraction and the perpetuation of a distinctive international division of labour. Analysis of the perpetuation and reconstruction of accumulatory structures is considered in Chapters 5-7. One of the main arguments of the thesis is that no distinctive pattern of labour control and productive organisation actually exists due to the complex and contradictory nature of capital organisation.

## Notes

1) The measurement of production was based upon management's based estimates of the total hours spent by each worker upon either complete, intermediate or assembly based activities. In effect each workers activities were measured in relation to time then aggregated and averaged. This information was not provided at the interviews directly but was passed on at a later date

2) When some companies undertook one or more of the above initiatives on a piecemeal basis, it was important to determine if this formed a coherent programme of initiatives which were being introduced on a step by step basis by management. In general the six areas noted above were generally relevant when a company was deemed to have objectives which included gaining employee commitment to meeting company goals by moving from an adversarial, pluralist culture to a unitarist one.

3) It is worth noting that in the period 1990-1993 this group has shed 501 jobs which is equivalent to 82.6% of all job losses within this period



## CHAPTER FIVE: EMPLOYMENT CHANGE AND WORKPLACE REORGANISATION

### 5.1 Social Fabrication and Labour Modification

The conceptual analysis and primary concerns of Chapter 5 are attentive to an examination of in-situ restructuring and the transformation within workplace structures. The overall analysis closely examines the nature of new socio-technical affiliations upon work regimes and the modification of pre-existing labour systems and capital investments (Amin and Goddard, 1986; Amin and Thrift, 1991; Bardou et al., 1982; Walker, 1985). Chapter 5 also examines the purpose and significance of labour-capital relationships through examining the emergence and reorganisation of suitable conditions for FDI and its impact upon the socio-economic construction of the STLLM. In order to determine the nature of this relationship Chapter 5 analyses the content of capital organisation as it affects shopfloor practices while Chapter 6 examines the extent to which workplace modification alters the nature of recruitment within the STLLM.

The nature of social fabrication and labour modification is examined in order to determine whether contemporary workplace reorganisation has stimulated social polarisation or workplace democratisation. According to SFADCO (1991) and Dineen (1991), workplace restructuring within the SIE is part of a modernising and socially progressive process in which foreign companies are implicated due to the competitive nature of the contemporary global economy. In contradiction to this Munck (1993) and Smyth (1991) argue that workplace reorganisation, in Ireland, is founded upon reversing the role of skilled labour through stimulating employment opportunities for university graduates and low paid politically weak workers.

A major element in workplace restructuring is centred upon increased 'numerical' and 'functional' flexibility (see section 3.3). As noted in Chapter 4, SFADCo policy-making has in recent years supported the creation of a pool of technical/university trained workers. As noted by SFADCo interviewees the continued attraction of the SIE as a potential and continued site of investment has been contingent upon the capability of industry to promote more diverse production relationships. For example, Ted Parslow (SFADCo adviser) during his speech at SFADCo's "Industrial Opportunity Conference" in 1987 stated that:

"flexibility means more and more computers are needed. It is only those companies who are not reliant on old forms of work organisation and who have taken a forward looking approach who will succeed. Changing your labour approach will achieve immense gains..creating employment is no longer a reality...ignore new technology at your peril" (May 1987)

Similarly at the same conference M.Devine (SFADCo employee) noted the potential and importance of creating a 'new amenable workforce' when he stated that:

"as a country limited in many respects in our ability to grow, we must welcome changes in production. We (SFADCo) are not limited in providing a new amenable workforce that can adapt to computer technology. This is the only way we can thrive" (May, 1987).

Furthermore according to John Humphrey (Operations Manager of A10):

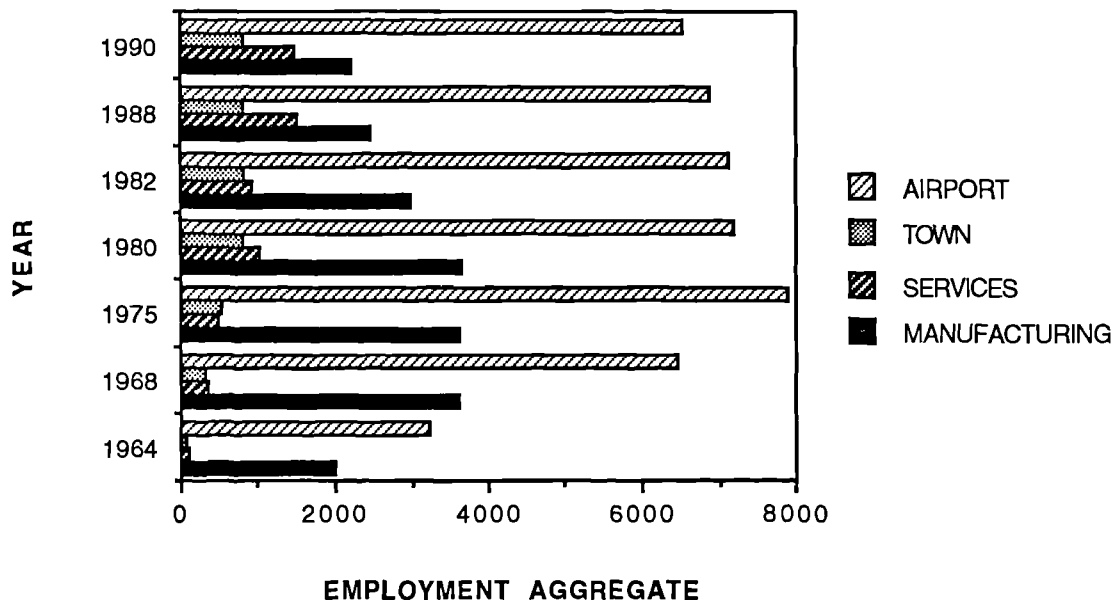
"Even those of us working in TNCs will have to work harder to sustain that investment. We do this by recognising the importance of manufacture in the overall business and thereby involve the production specialists, those people who know-how (sic) to reorganise and implement change. This becomes even more important as the number of blue-collar workers declines and the need for a new type of staff (*technical staff*) is created". (May, 1987)

### 5.1.1 Employment and the SIE

As shown in Graph 5.0 manufacturing employment, within the SIE, rose from 2012 in 1964 to 2412 in 1990. Between the period 1964-1980 manufacturing employment increased from 2012 to 3655 (81%). In the subsequent period 1980-1990 manufacturing employment fell by 1243 (-34%). Employment within services has been more buoyant with a net creation of 1954 jobs in the period 1964-1990. <sup>1</sup> The airport has continued to remain the main employer within the Shannon Town complex with a total of 6231 employees. However this 1990 employment level is the lowest since an employment highpoint of 7892 in 1975.

Job loss has been due both to closure and in-situ restructuring. Exact data which permits an analysis of job loss within the SIE is only available from SFADCo for the period 1974-1988. As shown in Table 5.0 the most significant contribution towards employment job loss in the period 1974-1988 has been plant closure, which accounted for 2562 or 60.8% of gross job losses. In-situ job losses totalled 1652 within this period and accounted for 39.2% of all job losses. SFADCO was capable of mollifying the extent of these job losses through supporting the creation of an additional 2762 jobs through supporting new openings and plant expansions. However, such employment growth was insufficient in that net job losses totalled 1252 (for a further analysis of company job losses within the SIE see Sklair, 1988).

**Graph 5.0 : Aggregate Employment Shannon Industrial Estate, Shannon Town and Airport (1964-1990)**



Source: Data supplied by SFADCo,1991

**Table 5.0: Employment Change 1974-1988 SIE**

Type of Employment Change	Employment Change
In-Situ Job Loss	-1452
Job Loss due to Closure	-2562
Total Job Loss	-4014
Gross Job Gains	+2762
Net Change	-1252

Source: Data supplied by SFADCO

Aggregate employment decline within the manufacturing sector has been paralleled by other restructuring tendencies within Shannon. The perpetuation of 'numerical' and 'functional' flexibility within the Shannon workforce led to a 14% decrease in full-time employment and an 102% increase in part-time work between 1978 and 1986 (ITGWU Shannon. Unpublished). The importance of part-time work in enhancing both profitability and reducing labour's sphere of influence is a vital constituent of capital's underlying tendencies within the SIE. The majority of managers acknowledged that an increasing number of corporations were looking to flexibility in the workplace as an essential prerequisite to extending competition. Moreover the creation of a 'flexible' workforce was contingent upon the ability of the plant to respond to unforeseen circumstances as swiftly as possible and without labour resistance (at a national level see O'Heir and O'Mahoney, 1993).

A major element in the emergence of a more flexible workforce has been the alteration of the role played by skilled manual workers within the SIE due to the emergence of multi-skilled technical staff capable of transferring across skill demarcations. According to the survey of managers the demarcated tasks structures evident among skilled workers became a major issue of concern during the late 1970s and early 1980s, due to high levels of workplace rigidity and inflexibility among demarcated trades. Skilled manual workers were considered to be too closely tied to an invariable task flow, a situation which meant that a more diverse schema of production, necessary to remain competitive, could not be introduced. According to managers the task-specific nature of skilled employment impeded the implementation of production processes more compatible with shifts in product markets and capable of responding successfully to competitive pressures. In overall terms the growth in the employment of technical staff was centred upon employing individuals capable of amalgamating various skilled workers' trades (Thrift, 1989).

As shown in Table 5.1 the variety of general conditions which influenced workplace reorganisation included internal, external and conflictual contexts. All of the managers within the sample concluded that internal and external factors were predominant influences upon general reorganisation. Conflict factors which are noted as internal to the plant were generally related to the PMS2-based plants (see section 4.3). Hostility between managers and workers expressed in strike activity, "go slows" and work to rule periods convinced managers of the need to reduce the power of militant and generally skilled workers.

According to managers one of the major external factors which influenced change was the nature of intrafirm competition between plants based upon the unit cost of production in comparison to other subsidiaries. In most cases the initiatives undertaken promoted more flexible approaches under the direction of the parent company. In relation to workplace modification at a national level O'Heir and O'Mahony have argued that:

"The pressure to successfully introduce these work initiatives was strongest amongst the subsidiaries of multinational corporations" (1993, p.27).

The external context based upon the need to compete against other major companies was also a major incentive toward workplace restructuring in Shannon. Low prices and higher quality levels among competitors had initiated the need to produce goods of higher quality and lower cost among the majority of Shannon's firms. This it was argued was achieved through a distinctly Fordist process which supported production relationships capable of reducing unit costs, increasing productivity and enhancing capital utilisation.

**Table 5.1: Context and Reason for the Introduction of 'Flexible Workpractices' (SIE, 1990)**

Context of Change	Reason for Change
External to the firm	Intrafirm Competition/Investment Return Maintenance of Profitability Levels
Internal to the firm, external to the plant	Competitor Pricing/ Product Change/ Innovative Change/ Interfirm Competition
Internal to the plant	Strike Activity/Militancy/Decline in Managerial Authority

## **5.2 IN-SITU EMPLOYMENT CHANGE**

### **5.2.1 Classification of Firms/Plants**

Within this section firms are analysed in relation to employment histories and productivity growth. Productivity, was measured as the value of output per production worker. Managers argued that the desire to increase productivity was an essential characteristic of continued location in Shannon. Within the sample, four forms of labour organisation and modification were identified:

- 1) AMS plants which have increased employment levels due to production expansion and growth oriented demand-side structures. Employment structure alteration has increased due to global competition which has placed a new premium on price, quality and rapid responsiveness to customer needs.
- 2) plants (generally PMS1) which are relatively labour intensive and which have enhanced productivity through intensification and increased 'numerical flexibility' in order to remain competitive and cost effective
- 3) plants whose employment has decreased due to slowdown in sales, collapse in internal markets and the parental company's decision to reduce investment in Shannon
- 4) plants (generally PMS2) which have reduced employment through mechanisation which in most cases was stimulated by competitive pressure and antagonism between managers and workers. In this instance increased functional flexibility was accompanied by the removal of effective trade union authority.

The companies **A9,A11, B11 C1, C2** are excluded from the following analysis due to managers either failing to provide adequate information or location in Shannon being so recent that it precludes longitudinal analysis.

### 5.2.2 Increased Employment

Three companies (A5, A10 and B6), all of whom come from the AMS group, had significantly increased their employment levels in the period 1987-1990 (Table 5.2). B6 increased staffing levels by 78% while A10 had A11 had increases of 66% and 87% respectively.

The governance and support structures provided for these companies include a full range of institutions such as Limerick University, the parent company and SFADCo, all of whom work together to provide common services and encourage collective commercial action through the promotion of a long-term developmental perspective (Sklair, 1988; Scott, 1992). Each of these firms had produced production processes which conformed to Scott and Storper's hypothesis that:

"the viability of contemporary flexible production agglomerations depends in high degree upon effective institution building at the regional level" (1990, p.57)

Company	Year of Establishment	Employment 1987	Employment at Time of Survey (1990)
A5	1987	120	225
A10	1986	263	437
B6	1986	68	122

The manager of A10 asserted that expansion of the Shannon plant had been due to the closure of two branch plants in England and Scotland. This the manager claimed, was due to several factors:

"the development agencies in the UK couldn't satisfy our demands and in many ways the two plants had to function under separate development agencies, while here the relationship is with a sole authority. The other important concern was the problem with the shopfloor workers, we had problems with the Unions who continually obstructed productivity plans. Another consideration was the location of Shannon itself, which is ideally suited for transatlantic and European distribution as well as the free zone status that lowered costs" (Interview, 4/6/90).

The manager of A5 had taken on additional staff due to continued growth and increased output demand. The manager of the plant noted that there would be continual increases with possible relocation of other stages of production to Shannon. Each AMS firm cited the importance of extending their R + D capacity, a situation which was centred upon their relationship with the University of Limerick and the continuous supply of technically qualified staff from this institution.

Each company had joint steering committees which allowed workplace representatives and/or individual employees to participate in the management and implementation of production initiatives. This structure was accompanied by team working groups who were based upon complementing individual skills

through promoting autonomous work units. It was evident that technical employees working within such units were multi-skilled and did not have their functions determined by strict demarcated routines. Each firm conformed with Scott's (1992) analysis that contemporary work organisations revolve around demand-side features within the contemporary world economy including; increased global competition, a new premium on price stability, quality and the need to respond rapidly to consumer needs. This it was argued was achieved through promoting a workforce which was 'functionally' flexible and characterised by individual performance appraisals and merit based pay awards.

Managers sought to stimulate commitment within their workforce in order to facilitate workplace changes which support competitiveness. Such production relationships provided management with the opportunity to extend employee involvement which was necessary in order to secure flexibility, adaptability in work practices and the production of quality products through the elimination of material waste and time loss. The 'flexible' orientation of production was accompanied by rigorous technical staff selection procedures in order to guarantee a compatible fit between the individual and the organisation worked for. Significant investment of time, financial resources and training facilities were provided for all technical workers. Each company also provided a wide range of training for employees in areas such as handling inter-personal conflict, team working, technical and leadership skills. Furthermore, additional payments for individual employees were provided on the acquisition of new job related skills. Competency/knowledge based pay schemes were designed in order to promote operational flexibility through increased decision-making and participation (Schoenberger, 1989).

The outcome of supporting a workplace structure based upon 'functional flexibility' through multi-skilling promoted a 70% (range 65%-78%) rise in productivity among all three firms in the period 1988-1990. Associated with distinct productivity increases was the benefit of being able to maintain or reduce unit costs. This was combined with increased output per employee, improved quality and less waste due to a sizeable reduction in reject parts since 1987 (average 42% reduction in reject parts between all 3 companies. Range 32%-45%). In each company managers also stressed that such significant productivity gains were due to technological improvement. The AMS companies were clearly involved in a production process based on 'flexible' specialisation which was characterised by small batch production, the use of advanced and multi-use equipment and a multi-skilled technical workforce and fragmented markets. The key characteristic of AMS based production is the ability to exploit economies of scope through changing the intensity and range of production, in terms of both inputs and outputs almost instantaneously with changes in demand (Lipietz, 1992). This strategy of accommodating ceaseless change and encouraging permanent innovation has engendered an industrial environment in which competition is centred upon innovation and product quality, rather than the Fordist emphasis on price and labour stability (Best, 1990)

The traditional Fordist characteristic of production evident among the other companies interviewed was related to economies of scale achieved through lowering input costs as output expands. The majority of PMS companies conform to the Fordist mode of production centred upon the tendency to de-skill and reverse the extent of labour control over production. Workplace reorganisation although influenced by increased intra-firm competition is not centred upon producing a more diverse product range related to a consumer sensitive supply structures. Among the PMS companies production modification has not been accompanied by the emergence of new consumer markets as characterised among the AMS group of companies. Furthermore the introduction of 'flexible machines' which permits a redistribution of work practices has been contingent upon modifying skills, intensifying production and maintaining economies of scale. The use of new technology has in turn promoted a form of functional flexibility which has produced the capacity to alter the nature of recruitment among PMS companies. 'Functional flexibility' is not based upon creating and upgrading labour skills through a process of worker socialisation as predicted by Scott (1993). New technology has in turn promoted functional flexibility which has produced the capacity to alter the nature of recruitment within the PMS companies.

### 5.2.3 Numerical Flexibility

The extension of numerical flexibility through the creation of shift working, weekend working and the inclusion of contractual hour working has been accompanied by the greater use of contract/temporary semi-unskilled workers whose technical control is facilitated through machine modification. The companies conform to a highly Fordist model of production with modification based upon production cost reduction and the desire to increase productivity gains (Braverman, 1974; Perrons, 1985).

The group of PMS companies A2, A3, A4, A6, A7 and A8 had predominantly female workforces and were self-identified as labour intensive. The use of intensified production involved not only the speeding up of production but also increased the recruitment of technical and part-time workers. Reinvestment supported the installation of machinery which accurately registered individual work rates among semi/unskilled workers. Many of these companies had invested and continued to invest in Shannon in order to exploit an unorganised, low skilled and low paid female workforce (for a more national debate see Breathnach, 1993; Harris, 1984; Wickham, 1978)

Among these companies significant increases in constant productivity rates (182% in the period 1980-1990; range 142-201%) were paralleled with increased levels of part-time employment. Operative based full-time employment had, in aggregate terms, decreased by nearly a third (192) while technically based and



part-time employment had increased by 5% and 16% respectively, thereby creating a net decline of 51 jobs (Table 5.3). Within this group of companies the effects of restructuring were predated upon overall workforce reduction and lessening the relative importance of full-time employees. Furthermore, within each of these plants 'numerical' flexibility was achieved through reinforced contractual flexibility, the use of fixed-term contracts, shift working and part-time employment. As noted, enhanced flexibility established a residue of part-time workers.

The use of part-time workers allowed companies to keep labour costs down while at the same time guaranteeing a reserve of labour which could be called upon when increases in output capacity were necessary. The recruitment of part-timers meant that the rate of profit could be augmented since workforce inactivity and productive time were dramatically decreased (see also Massey and Meegan, 1982). In responding to these new imperatives, management's in the 1980s have attempted to move to new forms of work organisation which reflect the new realities and requirements.

**Table 5.3 Employment Change among Manual, Technical and Part-Time Workers**

Company	Employment Total (1990)	Employment Decline *	Manual Employment Decline *	Increase in Technical Staff *	Part-Time/STC Increase *
A2	67	27 (1984)	40	8	15
A3	88	38 (1986)	48	7	32
A4	62	33 (1984)	40	7	23
A6	64	4 (1987)	46	2	18
A7	65	20 (1986)	18	2	5
A8	78	24 (1983)	30	6	18
Average	70.6	28.1	31.7	4.5	15.8

\* Refers to employment highpoint presented in brackets

According to managers the employment of technical staff permitted not only greater direct supervision and intensified control over the production line but also facilitated a reduction in malfunctions within the production line. Maintenance had become a crucial factor since delay times caused by breakdown had led to productivity decline. Extended control over the production process also meant less component wastage. In each firm it had become imperative to alter faults as they occurred. Prior to the augmented recruitment of technical staff, faulty products were either scrapped or put back into buffer stocks a situation which was reversed with substandard components being corrected within the immediate production process.

As noted, mechanisation had been introduced and was largely used to either record output levels (for individual workers) or to speed the flow of parts. Sophisticated mechanisation, which was a feature of other sectors in which job losses occurred, had been largely omitted. The use of mass and large-scale production processes meant that labour intensity was the most cost effective

mode of operation, a situation which was enhanced by the amenable nature of the predominantly female workforce. The cost effective nature of production was complemented by internal demand mechanisms, for example companies had designed components and electrical goods for multifarious uses, a feature of production which had meant that internal markets for goods had remained relatively buoyant.

According to all of the managers within this group new production methods, particularly part-time work, were catered for more effectively from an employers' viewpoint due to the opportunity to remove job demarcations. The removal of job demarcations was also complimented by the opportunity to shadow the workforce available in order to integrate employees into a more complex set of shift patterns through the extension of weekend working. The growth in part-time working was in all cases at the employer's instigation rather than in response to a demand from the workers themselves. As noted by the Services Industrial Professional Technical Union (SIPTU) at the national level part-time employment has been centred upon employers:

"reducing costs by cutting down the number directly employed workers" (1993, p.12).

Furthermore as argued by SIPTU:

"By the end of this century-that is, in a few years time-about one-third of the non-agricultural workforce will be in what is being termed 'atypical' employment. They will be working part-time, or on contract; in temporary or casual work; or self-employed. The 'permanent and pensionable' worker, employed for forty years on a 40-hour week (or even a 39-hour one), is already a shrinking species" (1991, p.7).

#### 5.2.4 Output Decline and Market Collapse

Job losses within this section were related to international market collapse. These companies tended to belong to the PMS 2 Group. All of these companies (B1, B5, B8 and B9) had undertaken location in Shannon prior to 1978.

The managers of B1 and B8 stated that international recession had promoted a slowdown in production which ultimately led to a reduction in employment levels. In both cases it was claimed that the parent companies had financial difficulties which necessitated financial circumspection. It was also stated that the parent companies were looking for alternatives to their present branch plant system, such as buying out or undertaking contractual agreements with other firms. International recession had substantially influenced a distinct decline within the accumulation process of these companies due to significant collapses in consumer markets.

Two companies, B5 and B9, had shed workers due to parent companies producing new sourcing arrangements among their branch plant networks.

Continued investment within the Shannon plants had been reduced due to the failure of B5 to stimulate significant reductions in output costs. The companies B1 and B8 had reduced employment levels due to changes in international markets and materials used. B1 had shed 54 jobs (since 1987) and B8 had reduced its workforce by 21. Both had produced goods in which markets had continually declined. For example B1's volume of production (in machine tools) had declined due to both a market collapse internally and on the world market. In this case sophisticated plastics production had reduced the quantity of metal components necessary for final production and assembly. The parent company had established a significant plastics manufacture of machine parts near the company's headquarters in the USA. This in turn reflected the importance and significance of R + D facilities in relation to continued investment. In effect the plants in Shannon were deemed to be both technically unsophisticated and outdated and as such not worthy of continued investment.

B8's employment decline was linked to the collapse of international markets and the failure of the company to compete internationally. B8 is involved in the production of medical machinery. The products made had become outdated due to the lack of in-situ R + D facilities. As with B1, advances in plastics had meant that the types of valves being produced had been replaced by specially designed materials which sufficiently altered the net retail price of the product. Since the products had become technically less sophisticated markets had contracted for goods produced by over 30%. In both cases the management asserted that the plants would be closed within 3-5 years due to financial difficulties.

### 5.2.5 Mechanisation

Continued mechanisation has been produced through the persistent evolution of capital and the pursuit of continuous improvements in productive and process techniques in order to obviate against crisis tendencies (Best, 1990; Bardou et al, 1982; Malezieux, 1985). Among the companies A1, B2, B3, B4, B7 B10, C3 and C4, continued investment in Shannon is concerned with changing the requirements of the labour process through a continual refinement of Fordist labour control techniques. According to management, mechanised developments were vital in order to absorb the effects of market variability and uncertainty through quantity adjustments of output and labour inputs. The general tendency within this approach has been the removal and deskilling of skilled workers through a Fordist process of cost reduction and productivity expansion. Among these companies a dual relationship exists between management and workers and must be acknowledged in contravention to the ideas of Scott (1988) whose individualistic methodology is incapable of explaining the interaction between capital investment and social modification (Clark, Gertler and Whiteman, 1986; Oberhauser, 1990).

As shown in Table 5.4 the aggregate employment highpoint of each company within this group stood at 1424, but has fallen down to 701 in 1990 a decline of

723 (50.7%). It is important to note that 498 (71%) of these job losses were among skilled workers. The adoption of new technologies is hazardous for both capital and especially labour (Jacobi, 1988). However the perilous nature of technology adoption is reduced for capital due to the financial assistance that is available from SFADCo. SFADCo's pecuniary support plays a significant role in perpetuating capital dominance within the production process (for a similar analysis of the state support for capital see Jessop, 1982; Peet, 1983; Schoenberger, 1989). As E.Walsh, Director of SFADCo, stated, stated the trend to remove workers so as to maintain productivity is vital to SFADCo's development process:

"Ireland is a small country, its population is too small for indigenous development as well as this its population is too large to give everybody employment. The new feature of development policy is not solely to create jobs, it is concerned with aiding productivity gains. If TNCs can not be aided in achieving productivity gains then the policy will falter and more companies will leave. This is the reality, in any case it has taken a long time to rid the workforce in Shannon of militant and unsociable elements. These companies can now recruit people who wish to work, not those concerned with trouble making and utopian ideals" (Interview, 17/12/90).

**Table 5.4: Employment Decline among Companies Exhibiting High Levels of Mechanisation (1990)**

Company	Employment Highpoint with Year	Employment 1990	Employment Decline
A1	117 (1984)	75	42
B2	162 (1974)	87	75
B3	231 (1978)	102	129
B4	124 (1978)	63	61
B7	145 (1982)	93	52
B10	267 (1978)	132	135
C3	195 (1981)	75	120
C4	183 (1973)	74	109
<b>TOTAL</b>	<b>1424</b>	<b>701</b>	<b>723</b>

The PMS1 labour intensive companies (A1/B2) had introduced more mechanised production processes, a feature which was uncommon among other electrical engineering plants. In both cases the companies had introduced intensification policies which managers admitted had disastrous consequences due to the failure to recruit a 'numerically' flexible workforce. In both companies women were employed in the assembly of printed circuit computer boards. They both receive and make bare boards from their sister plants which already have the required apertures drilled in order to accommodate the components to be inserted (dilics, capacitors, resistors, etc.). The finished boards are used in the assembly of the company's own micro and mainframe computers, as well as *being supplied to other computer manufacturers.*

The adoption of a Manusert system led to a reduction in labour time necessary in production with the effect that the number of components assembled by one worker increased 2-4 fold, a feature which is further enhanced through the decrease in the amount of necessary downtime associated with start-up and switching between tasks, transfer of materials, retooling etc. The system also creates a disciplining effect since it engenders intensity and continuity within the work process. Of the other companies in the sample, (with the exception of C4) all are involved in the machine tool industry. In this case the jobs lost were mostly of a skilled/semi-skilled nature. Some of the comments of the managers emphasised the extent to which reorganisation has emphasised the re-emergence of managerial control. According to the Manager of B7:

"cheapness has now been replaced by control. We have a commitment to productivity and will do anything to achieve this goal. The fact that we had strikes, sometimes of a very marked and prolonged nature, does create pressures for looking generally at relationships between those in industry and at the question of involvement generally" (Interview, 7/9/89).

The manager of B3 pragmatically spoke of the need to use workplace modification in order to underpin and defend employers' as opposed to employees' rights. Furthermore, he stressed the need to introduce technological changes in order to remove the extent of wastefulness within production:

"Employers should not start with solutions for problems but rather ask themselves what kind of problems they are having. Management's' priorities are to keep things going and to get products out of factories. If things get in the way they deal with these in a sensible fashion. They must defend their rights first and foremost..

"We are producing larger volumes on the same capacity, but with higher quality. The computer controls help us to run the machines better so that our off-spec materials are greatly reduced, and that's exactly what we need. Our off-spec materials once ran at as much as 9.8% of sales, now it's 0.75%. Take half of your cost of quality out, you are talking in rough terms about taking another \$1million of production, and this in the long term pays for the machinery" (Interview, 12/7/90).

Management of A1, B2, B3 and C3 stated that the introduction of Numerically Controlled (NC) machinery meant that the number of machining activities undertaken by workers had increased two-four fold. Relatedly, the amount of work intensity that could be performed by any single worker has increased due to control systems within the machine being directly controlled by a minicomputer. Furthermore, the capacity of the machine displaces the number of workers needed, due to the reduction in task function. For example within the machine tool industry skilled toolmakers no longer have to spend time reading diagrams and changing the machine tools in order to undertake various functions (Dunford and Benko, 1991). Computer adoption has also meant that simple tasks such as drilling and piercing can be fully automated, a situation which reinforces a reduction in lead times and the amount of labour time necessary. Similarly, the pre-setting of cutting scales and measurements means less time is spent measuring parts to ensure quality/scale. In turn increases in function

intensification has led to a general decline in the amount of mental labour necessary. As noted by Cooley:

"more and more knowledge has been attracted away from the labour process and the amount of mental labour needed has been rarefied (sic) into mathematical functions" (1980, p.76).

Among seven of these companies (A1, B2, B3, B4, B7, B10 and C3) workers have been regrouped into work stations, each with 1-4 technical supervisors who monitor output and employee attitude. Unlike the technical staff employed within the AMS group these employees do not have a direct consultative role with management. Multi-skilling is not used to enhance technical staff autonomy but instead is used to undertake manual tasks previously undertaken by skilled workers. In each case skilled workers no longer control maintenance activities due to a belief by management that such control over the flow of production could and was used by skilled workers to gain concessions and antagonise management. The use of technical workers has been essential not only because a certain amount of the machinery is new, and as such skilled workers are not familiar with its function, but also due to management's belief that technical staff are less interested in trade unionism and organised shopfloor antagonism. The failure to train skilled workers in the techniques of NC machine maintenance further emphasises the extent to which skilled workers are mere extensions of available technology.

The short term effects of technology adoption have not increased functional flexibility and worker involvement as with the AMS group, but instead change has been centred upon cost reductions and a decrease in workforce control. Technological change has not encouraged the production of more diverse goods and has as such not been tied to consumer needs but instead has been directly affected by a supply-side crisis (see Chapter One). According to managers this supply-side crisis has been characterised by reductions in the rate of profit, a demise in market conditions and continual rises in constant and variable capital. In order to challenge this the form of flexibility initiated has been centred upon breaking down skills demarcations and removing the task specific nature of skilled work through replacing such workers with a polyvalent core of technical staff (Dunford and Benko, 1991; Elam, 1990; Harvey, 1989; Jessop, 1990). The majority of this technical workforce are University of Limerick graduates whose recruitment has been preferred to retraining workers in relation to new tasks. This new phase of recruitment produces two political implications. The desire of management to reduce the unions' presence on the shopfloor has been achieved through gradually purging from the workforce those workers with a background in unionised relations. This unofficial policy has been paralleled with the employment of what is characterised as a more amenable and technically competent form of labour power. This new form of labour power highlights how deskilling leads to enskilling since, in practice, the production process still requires a skills hierarchy.

However, the growth in technical occupations does not automatically guarantee authority within the workplace (Cooley, 1980). Several technical workers have argued that the payments they receive are not adequate compensation for the growth in productivity which has been achieved. Although graduate based work is usually complex and requires a higher level of problem solving and interpreted skills dependencies it is not artisanal since it relies upon perpetuating a reorganised and highly specific production process. Managers openly admitted that the work undertaken by graduates was not based upon their individual skills but upon increasing productivity on a reduced manning capacity. Overall, unlike the AMS companies, new technology does not facilitate the active commitment of employees (Piore and Sabel, 1987). As one manager noted, the relationship between his management team and the workforce was based upon:

"Supervision and a case of the workforce knowing as little as possible. It is a classic case of what you don't know won't hurt you" (Interview 13/7/90).

The actual job-displacing effect of technological implementation varied from plant to plant. The magnitude with which job losses have transpired is not solely predictable from the disposition of the technology. The existing level of technological development and the extent of labour recomposition are vitally important. As one of the managers stated about the implementation of such machinery:

"It is successful in that it has created better production capability. The skill intensity of certain workers has increased, but I could not tell you what the overall effects actually are. We take it week by week and as yet we only know so much. The only thing which I can tell you is about the number of workers we have paid off. As you said it is the blue-collar worker who has suffered the most but not all have had their jobs redefined. It's a difficult situation because it is always changing.

"You see, if the new technology really gets up and running anything could happen. Even if you came back in two years I couldn't tell you what the future would be" (Interview 12/4/89).

The high level of labour recomposition has involved the growth of what is deemed as a technically based workforce. In most cases this workforce is not that characteristic of the 'flexible specialisation' school since its inherent skills are used to permit greater control functions on the shopfloor through using technical staff to control and re-integrate older and newer technologies. In general technology-based recruitment has increased productivity due to a new and extended supervisory role.

### 5.2.6 Militancy and the Context of Trade Unions

The struggle between capital and labour is set within the context of accumulation (Peet, 1984). This struggle was highlighted during the 1970s and early 1980s, when managerial levels of legitimacy and control were eroded due to trade union activity. The incorporated use of technology has retained and stimulated competitiveness and restored managerial control. SIPTU spokesperson John

Doyle, when interviewed, argued that the unions have adopted a non-aggressive attitude toward TNCs due to the general perception of powerlessness which was related to a decline in trade union membership within the SIE from 1521 in 1976 to 1021 in 1990 (see Pollock, 1981 for a discussion of trade unionism at a national level). All 23 PMS company trade union officials interviewed argued that the growth of technical recruitment promoted the role of the formal individual as opposed to collective based negotiation.

All of the firms discussed within this section of the analysis claimed that they had suffered due to what they considered as prolonged and protracted strikes. Among the companies B2, B3, B4, B7, B10 and C4 the average number of days lost per worker per year due to strike activity in the period 1976-1984 numbered 18.7 a figure which fell to 0.8 in the period 1985-1990 (for an analysis of Industrial Relations in Limerick City and its environs during the period 1971-1978 see Wallace, 1982). Combined with this has been a decline in the number of days lost due to illness, in the same periods, from 11.8 per employee per year to 1.2. In all of these companies management stressed the desire to rid itself of a workforce that was using illness as an excuse not to come to work This they claimed not only slowed production but was costly.

According to McGrath (1989) the number of stoppages per 1,000 of the insured population per year in the period 1974-1983 numbered 4.2 in Shannon compared to an average of 2.6 for the survey areas Waterford, Cork, Dublin, Galway and Drogheda/Dundalk. Within the same period McGrath (1989) highlights how Shannon produced the second highest average strike duration among the above surveyed areas of 16.8 days compared to an average of 12.3.

All companies located in Shannon since 1984 have produced single union and pre-production agreements with the Serves Industrial Professional Union Irish (SIPTU). The use of single union agreements since 1984 has led to the exclusion of the following unions in all new agreements; the Marine Port and General Workers Union (MPGWU), the Electrical Trade Union (ETU) and the National Engineering and Electrical Trade Union (NEETU). The exclusion of the latter was due to its involvement with the Limerick Workers' Committee which had been responsible for several protracted strikes within the Limerick-Shannon area in the 1970s and early 1980s. Both the ETU and NEETU represented skilled workers and were generally perceived, by the managers of B2, B3, B7 and B10, as having achieved high levels of control over sensitive and high-value added stages of production. The same managers argued that the MPGWU, ETU and NEETU had purposefully supported and encouraged frequent interruptions and strike activity. Such activity it was argued threatened continued investment in Shannon due to the continual need to re-negotiate deals with each of these unions. A process which was time consuming affected worker morale and proved costly due to the continual need to send disputes to the Labour Court (Wallace, 1982; Sklair, 1988). According to one SFADCo employee who wished to remain anonymous, it became a matter of policy to secretly encourage companies



to set upon pre-location deals with the SIPTU because they were the only union capable of:

"policing workers for the company and keeping hostilities under wraps" (Interview, 13/7/1991).

As noted by a former leader of the MPGWU in Shannon (T. Callan) SIPTU offered a service to its members which was:

"dishonest and underhand...members of the SIPTUU were regarded as gullible and easily conned by their own representatives" (Interview 14/8/1991)

Several criticisms of the ITGWU came from O' Riadan (an interviewee) an ex-ITGWU representative who claimed that since the mid-1980s the ITGWU had begun to follow new and highly undemocratic procedures, through abrogating the authority and functions of trade union leadership. For example he and several other interviewees argued that when meetings between employers and unions take place in Shannon they are held in secret in order to ensure that employees do not influence negotiations through threatening to strike. ITGWU representatives, it was argued, have vetoed the passing on of pay claims and objections from the shopfloor to managers. The laying-off of workers outside normal working hours, in order to remove the threat of sympathy strike action, has it was claimed been facilitated by union representatives attending dismissal sessions early in the morning and at people's homes. An ITGWU spokesperson who did not wish to be identified claimed that facilitating the dismissal of workers outside of normal working hours removed any possible conflict from workers and allowed production to continue unabated. Furthermore he stated that potential and selective redundancy agreements which were formally discussed in-plant between all union members and their trade union representatives had been temporarily suspended. A continual refusal of the ITGWU to renegotiate production agreements as requested by their members in the companies was also evident. Even John Doyle, the SIPTU spokesperson for the SIE admitted that the best position for unions in a period of high unemployment is to represent broad industrial relations:

"It really is not like the 1970s. We cannot afford to antagonise employers as we and especially other unions did in the past. My job is to get the best I can and I have to admit that means doing things which are not pleasant...Militancy is a thing of the past and thank goodness. If it ever came to all out strikes like before most of these companies would be away like a shot. The real problem is we (*Ireland*) is not the only good investment opportunity" (Interview 24/11/1990)

The managers **B2, B3, B4, B7, B10** and **C4** all acknowledged that the demise of in-plant trade union authority had been due to structural matters decided and influenced by autonomous work teams who participated in the implementation of new work practices. Technical workers had been used to produce new agreements, a role which had formally been undertaken by shop stewards. The shop stewards' role was now undertaken by technical representatives who were involved in consultation and information dissemination referring to workplace

initiatives. In each case trade unionists were only involved in policy implementation on the occasions when they were given details of what had been pre-arranged by technical and managerial representatives. Trade unionists operating within these companies had accepted this situation due to the threat that a failure to do so would produce the removal of investment within the SIE. Moreover in each case trade unions had signed clauses which secured their commitment to co-operate with all future managerial incentives. As noted by Sklair, the contemporary role of SIPTU within the SIE is to:

"hold the line rather than march boldly forward" (1988, p.183)

It was also argued that changes in the composition of recruitment undermined trade union activity due to technical staff organising individual pay and conditions deals with management. In response to this managers noted that the removal of collective bargaining was necessary in order to remove the threat of skilled workers being 'hijacked' by industrial relations problems. As one manager noted;

"It was a policy of stepping over the unions not encouraging them to participate" (Interview 12/7/90).

According to trade union sources, growth in individualism through the promotion of technical employment had significantly reduced the solidarity and bargaining power of organised labour. Such a situation it was argued produced high degrees of conformity among workers who were pressured into undertaking tasks by other group members who were fearful that individual complacency within groups would affect pay and employment conditions. The trade union spokesmen in the companies stated that unions were continually blackmailed into accepting initiatives due to the threat of significant job losses. Furthermore wages were not tied to significant productivity gains and as a result union representatives felt that their members had not been adequately remunerated. The union representatives also argued that high levels of multi-skilling among technical staff meant job losses among other employees.

As noted above many workplace representatives were concerned that the growth in the focus of management on employees as individuals reduced the solidarity and bargaining power of unions. Specific aspects of the individualist orientation of management policy included direct communication with employers rather than through workplace representatives, the failure of unions to gain control over the choice of technology, job design and work organisation as employers are no longer forced to make concessions in order to sustain consensus due to the demise in trade union authority. Furthermore, it was argued that union representatives had been unable to negotiate over the detail of new socio-technical arrangements due to the exclusion of workers from negotiating tasks due to technology adoption becoming a reflection and reinforcement of labour exclusion.

In general all PMS companies had produced poor relationships between employees and employers due to low levels of trust and significantly high levels of mutual suspicion regarding the objectives of workplace reorganisation (Beasant and Hayseed, 1988). The poor relationship between TNCs and unions was highlighted recently by SIPTU (1993) who showed that of the last 23 cases involving TNCs which had been referred to the Irish Labour Court under Section 20 of the Industrial Relations Act (1990) 20 judgements were in favour of permitting and extending trade union membership. Companies which undertook this agreement numbered four.

In general a significant demise in employment has been accompanied by significant productivity gains. Among the companies, employment has fallen since 1985 while productivity per worker has increased by an average of 8% per annum. In national terms the labour share of industrial value added has fallen from 0.78% to 0.51% due to increased capital intensity and a decline in the level of constant pay awards by 14.2% during the 1980s (SIPTU, Unpublished, 1993). As noted by Bradley, Whelan and Wright:

"Such a decline in labour's share is mirrored by an equivalent rise in the profit share of added value, and serves to explain some of the phenomenally high industrial exports growth of more recent years" (1993, p.14)

### **5.3. CONCLUSION**

It is generally clear that management have been empowered through recasting workplace structures through the adoption of new technologies and a distinctive reorganisation of recruitment policies and union relationships. However, it is not the technology itself which has permitted such renewal but the socio-technical relationships which have accompanied the development of the SIE. The feasibility of acquiring a technically-based workforce, which is denoted as a distinct MSR, has not only permitted the instalment of new work practices but also undermines the role of the traditional manual worker.

TNCs have reacted to competitive and trade union pressures through recasting a MSR which was contingent upon the employment of skilled manual employees. In stimulating a new MSR which is founded upon the recruitment of technical and semi-skilled and part-time workers TNCs have generally freed themselves from an inherited legacy of skilled manual dominance. In effect the spatial organisation of capital within the SIE has been predated upon the creation of a wider socio-economic and political structure capable of altering the relations of production in order to favour capital accumulation. (Massey, 1984). Moreover, functional flexibility has become one of the main determinants of economic performance and in many instances is an imperative of socio-political change for capital.

It is also important to note that the patterns of labour relations and modes of accumulation change within plants. The vital element in the forms of restructuring taking place in Shannon leads one to question the adequacy of the 'flexible specialisation' thesis to encompass the multitude of changes currently taking place. While it is tempting to view new technology and the process of technical change as providing one solution for the practical ills of society's problems, there is considerable evidence that at least in the realm of innovations in the productive sphere, the path of progress is unsteady, uncertain and fraught with difficulties and false promises. Using the term 'flexibility' is somewhat ironic as the processes involved engender or accommodate social relations which are in many ways less flexible in political terms due to high levels of labour exclusion. As has been noted these outcomes are related to the machines and the social political decisions taken and implemented in relation to the organisation of production. In effect the central conclusion is that the social impact of technology is rarely the result of the inherent features of the design of the technology itself. Rather it is a function of the social and political choices which are made in relation to the implementation of technology.

Skilled labour decline is noted as being stimulated by intensification, the removal of skilled manual workers from the production process and the continued growth of part-time work. This reconstruction of labour demand and structure is posited as a distinct MSR which is created in order to further extend the role of capital accumulation. The thesis argues that the stimulation of productive mechanisation is based upon capital's reaction to distinctive crisis tendencies. However, it should be stressed that no one crisis tendency is predominant although certain trends of labour displacement emerge. In promoting such structural changes technical staff have been recruited in order to permit greater control functions upon the shopfloor through using such staff to control and re-integrate older and newer technologies. Technical staff are relied upon to perpetuate a re-organised but specific production process in order that active commitment is not augmented. Overall the erosion of managerial power has been reversed through increasing labour manipulation and social polarisation.

The creation of a docile and compliant workforce stimulates capital accumulation due to significant increases in quality control, technical feasibility and productivity growth. Reorganisation of social production permits the expansion of dominatory modes of organisation. This differing and continuing dynamic of labour reproduction is related to the inherent and contradictory nature of capital/labour relations.

In terms of the developmental potential of FDI in Shannon it is clear that socio-technical arrangements favour the growth and individual prosperity of a largely middle-class university educated technical workforce. In effect the political economy of Shannon reflects a national MSR in Ireland which favours the middle and upper income groups due to their control of educational facilities

necessary in order to generally guarantee technically based employment. The emergence of labour dualism in Shannon and throughout Ireland further consolidates the position of the middle-classes through increasing the degree and extent of polarisation between technical and manual employment.

As argued in Chapter 5 the STLLM MSR is centred upon the decline of the male skilled industrial worker and the increased participation of low skill, low paid female employees. The growth of a segmented labour market based upon the division between technical and manual employment is further based upon the division between technical and manual employment is further based upon the removal of a rigid manual sector through the withdrawal of regular employment contracts and full-time work, a process which is accompanied by the incorporation of a flexible sector of part-time, short-term contract workers.

#### Note

1) Sklair recorded a loss of 1176 (34.1%) jobs within his sample of firms located in Shannon in 1984. Similarly, Brunt (1990) noted a decline of TNC employment of 17% within the same area between 1982 and 1989. However, in both cases inadequate attention was assigned to an analysis of the social context within which these changes took place. The analysis of socio-economic variables and employment decline permits an enhanced understanding of closure and the development of forces of production.

## **CHAPTER 6: EMPLOYMENT AND UNEMPLOYMENT: THE ADULT MALE AND FEMALE LABOUR FORCE WITHIN THE STLLM.**

### ***6.1 The Shannon Town Labour Market***

As outlined in Chapter 5 socio-technical relationships have been reconstituted due to the dual effect of inter/intra capitalist competition and the localised nature of labour-capitalist hostility. The emergence of a new and distinct MSR has been testified to by the collapse of traditional areas of recruitment, a process which has ultimately de-politicised labour and re-emphasised capital's dominance over socio-technical relationships within the SIE. Chapter 5 challenged Dineen's (1991) contention that the globalization of production has improved labour market conditions within the SIE for the majority of employees. High levels of labour modification, the inheritance of income instability and a significant growth in unemployment within the STLLM highlights the general failure of development policies to guarantee satisfactory employment conditions (Shirlow and Shuttleworth, 1994). The re-modification of spatially constituted social relations (Corbridge, 1986) within both the SIE and STLLM is predominantly based upon the exigencies of foreign capital and SFADCo's facilitation of continued capital investment.

The control mechanisms applied to manual workers, in recent years, highlights the political impact of contemporary capital accumulation structures which are neither static nor empirically bound due to the continual reconstruction of skills hierarchies (Aglietta, 1992; Boyer, 1989; Elam, 1990; Peet, 1992). The perpetuation of numerical and functional flexibility has had a distinct social impact upon technological and employment relationships. The findings and intent of this chapter are related to current research topics on social change within Irish society (Peillon, 1989). However in so doing it challenges the position of Foley and McAleese (1991), the IDA (1988), McMahan, McHugh and Bowie (1988) and SFADCo (1992) that economic development should mainly be delineated in terms of the enlargement of economic and corporate resources.

As noted by Smyth (1991) and argued within this thesis, the social manifestation of these processes has largely been overlooked, with fundamental questions about the character of these developments and their social effects seldom being raised (NESC, 1986). These points have been considered and analysed in Chapters 4 and 5, and as an analytical progression the following chapters will look at the effects of the international economy upon the personal/local labour market. The general nature of the analysis moves away from the econometric nature of various evaluations which discount the political motivations behind labour market change. This Chapter also challenges the argument that the level of employment and unemployment within the Irish economy is predominantly

influenced by the general level of demand for goods and services (Fest, 1990 Gear, 1988; O'Caseide, 1983 and Murphy and Thom, 1987).

Such a deterministic base is rejected due to its failure to comprehend the effects of contemporary recruitment policies and the institutional and socio-technical organisation of local and national labour markets (Schmener, 1982; Storper, 1982). For example, as noted by O'Heir and O'Mahony (1993) the effects of mechanisation and job re-organisation upon employment levels has not been included within any state-sponsored examinations of labour market conditions. This Chapter follows Walsh's (1985) and Drudy's (1991) position that there is a need to parallel local labour market characteristics and structures with the exigencies of continued industrial location.

According to Schmener (1982), employment is allocated to workers on the basis of characteristics assumed to affect their performance in particular types of jobs. According to the survey of managers these background characteristics (education, sex, age, appearance and trade union background) affect the decision-making process used when employing workers. For example, all managers noted that workers with histories of extensive trade union activity with the ETU, MPGWU and NEETU were generally unlikely to receive employment. As noted below, contemporary recruitment within the SIE is highly segmented due to different ports of entry for workers with certain types of background characteristics (Storper, 1982).

In analysing the nature of these background characteristics the STLLM is examined in relation to the nature of employment based discrimination in order to test the validity of the regulationist assertion that the objective source of the need for labour market discrimination and segmentation has two clear facets (Boyer, 1989; Elam, 1990). First, the lack of perfect technical flexibility means that employers are faced with possibilities of exploitation and limitations from distinct interdependencies within the production process. Secondly, competitive relations of production promote the pursuit of a range of productivity and cost levels which need a selection of workers with background characteristics that will enable production to function smoothly in order to reproduce capital investment.

As shown in Table 6.0, between 1975-1990 employment within the SIE declined from 4132 to 3880 (-252). This was the result of a decline in manufacturing employment of -1238 offset by a rise of 1156 in service-based employment. In relation to manufacturing employment the STLLM shed 931 (-43.9%) manufacturing workers and gained 195 service workers a situation which produced a net loss of 736 employees. A general decline in employment within the STLLM of 30.2% has been accompanied by a significant rise in male and female unemployment. Male unemployment has grown from 252 in 1975 to 549 in 1990 a shift in the male unemployment rate within the STLLM from 6.2% to 18.3% (Data supplied by Limerick Unemployment Centre, 1991).

**Table 6.0: Job Loss and Employment Gains within the SIE and STLLM (1975-1990)**

Sector	SIE 1975 *	STLLM 1975*	STLLM as a % of SIE* 1975	SIE 1990 *	STLLM 1990 *	STLLM as a % of SIE * 1990	Net Change STLLM 1975 -1990
Manufacturing	3650	2120	58.6	2412	1189	53.7	-931
Services	482	312	64.7	1468	507	41.3	195
Total	4132	2432		3880	1696		-736

Source: Table 4.2

Such declines in manufacturing employment contradict Dineen's (1990) argument that the presence of foreign manufacturing industry, within the SIE, is a reflection of the success of industrial job promotion based strategies. When Dineen produced these arguments foreign sector controlled manufacturing employment created prior to 1978, had already decreased by 48.1% (authors calculation SFADCo data). This trend continued up to 1990 with 48.2% of jobs created prior to 1982 having also been lost among TNCs sponsored by SFADCo.

### 6.1.1 The Male Adult Sample

This section is related to males between the age of 24 and 65 and accounts for 250 respondents (see section 3.4). The sample included only those who had worked within the manufacturing sector in Shannon, a bias which was introduced in order to link respondents whose occupational and skill classification had been directly influenced by the actions and policies of the companies located within the SIE. The sample is broken down by the job classifications set out in section 3.4. As shown in Table 6.1 the largest group was comprised of 87 skilled workers (34.8% of the sample). The second largest group included 75 (30% of the sample) semi-skilled workers. The other two groups the managerial/technical and unemployed groups included 32 (12.8%) and 66 (26.4%) participants respectively.

**Table 6.1: Adult Male Sample STLLM**

Category	Respondents	24-45 Age Group	46-65 Age Group
Managerial/ Technical	32	13 (9.7%)	19 (16.3%)
Skilled manual	87	32 (23.8%)	55 (47.4%)
Semi/Unskilled Manual	75	55 (41.0%)	20 (17.2%)
Unemployed	66	34 (25.3%)	22 (18.9%)
Total	250	134	116

Source: Table 3.2



Respondents were also divided into two distinct age groups comprising of 134 24-45 year olds and 116 46-65 year olds. This age classification was introduced in order to adequately analyse different labour market histories and contexts. For example 112 (83.5% of group) of the 24-45 age group had entered the STLLM as active participants in the post-1975 period when employment totals began to decline significantly, whereas 96 (82.7%) of the 46-65 age group had joined the STLLM prior to 1973 when employment growth was a characteristic of the SIE/STLLM complex. In acknowledging differing contexts of labour force participation this Chapter is capable of examining the longitudinal nature of STLLM construction. For example, nearly fifty percent of employment among the 46-65 age group (55 employees) was based upon skilled work compared to 23.8% among the younger age group, whereas semi-skilled recruitment and unemployment accounted for 66.3% of the younger age set.

The low level of recruitment of skilled workers within the younger age group reflects the decline in skilled posts, a bumping-down process and the collapse of the apprenticeship scheme (see section 7.2). Moreover, semi-skilled manual employment among males within the SIE grew in the period 1974-1988 from 18.6% to 37.2%, a feature of deskilling, feminization within the STLLM and increased functional flexibility (ITGWU Shannon, 1990. Unpublished).

When managers were asked the reason why some older skilled workers had been retrained in favour of recruiting younger skilled workers it was generally concluded that the majority of older skilled workers had monopolised trades on which production depended. This situation was generally supported by skilled workers (generally Grade 1 toolmakers) who argued that although others trades had been in decline their specific skills position had remained unchallenged. It could be argued that many of these young semi-skilled workers are capable of moving up to skilled posts as they accumulate service years and receive additional training. However, this contention is rendered invalid when it is considered that over 85% of 44-65 year olds had entered skilled posts by the age of 23. Fifty seven (76%) of semi/unskilled workers within the younger age group were aged 27 or over.

The nature of employment change is highlighted by the nature of skilled employment within the mechanical engineering sector. Forty nine of the 55 skilled manual workers from the older age group were employed within this sector compared to 14 of the 32 skilled workers from the 24-45 age group. Moreover, of the last 50 recruits, within the sample, (1986-1990) who had entered the mechanical engineering sector 39 came from the 24-45 age group of whom 36 were employed as semi-unskilled workers. Of the remaining 11 46-65 year olds five had entered skilled manual positions while the remaining six entered semi-skilled employment although they possessed skilled manual based training. In effect the majority of younger workers had been excluded from this traditional form of skilled employment due to a distinct shift in recruitment practices.

### 6.1.2 Changes in Employment and the Attitude to Work

Within the sample there has been a general movement downward in relation to skills transfer. For example, 89 (35.6%) (of whom 61 were formerly skilled workers) of participants had entered unemployment or had undertaken employment of a lower skills nature than that held previously (in 1984 Daly found a similar trend in her sample of West Limerick). In contradiction to this 12 (4.8%) participants had moved into employment of a higher skills or technical nature. Such circumstances emphasise the lack of upward mobility within the STLLM, a feature which reflects the nature of shopfloor reorganisation and the polarisation of skills described in section 5.2. The most significant trend has been the growth in the percentage share of unemployment within the STLLM among skilled workers. According to calculations taken from Limerick Unemployment Centre, the percentage of those unemployed within the STLLM who were formerly skilled workers has increased from 12.8% in 1974 to 49.2% of all unemployment in 1989. This situation has been engendered by plant closure and in-situ re-organisation.

The present characteristics of employment conditions denotes how the creation of a segmented labour market is an on-going process of perpetual re-segmentation. As shown within the sample, segmentation has adversely affected and undermined the position of skilled manual workers. The predicament of this group further underlines the need to understand the evolution of contemporary economic and social structures that exist within the local labour market. The findings of this section also emphasise the nature of power relationships within the STLLM. This scenario has arisen due to the necessity of capital to control labour demand structures and workplace conditions within the SIE. In order to estimate the effect of such changes Table 6.2 presents attitudinal responses of the 162 manual participants in relation to work and workplace change.

Attitude is here defined as the individual's tendency or predisposition to evaluate a situation in a certain manner. Evaluation is determined by qualities and the dimension of favourableness or unfavourableness. The responses are related to changes over the last few years. For many of the manual workers, meaninglessness which depends largely on the worker's relationship to the product and the work organisation has increased. Working on a unique and individual product is almost inherently meaningful (Blauner,1966), although, the demise of skilled workers has rendered this less important, with many manual workers noting that it was difficult to maintain a sense of purpose when working on newly instigated repetitive cycles.

One way of coping with the problems of alienation and powerlessness would be for management to introduce 'flexible specialisation' and team working in order to fit the total system of goals of the organisation of meaning and overall job

satisfaction. However, in relation to manual workers it appears that management have opted for greater control and more rigid working practices. This process of inflexibility was most notable due to higher surveillance by management and the reduction in freedom of movement during working hours and more importantly the failure of manual workers to be retrained for technical posts.

In relation to control and freedom, within the productive task, managerial and technical staff were mostly unaffected by change. This situation was somewhat different for the skilled and semi-skilled categories in which a majority of respondents felt that their position within the workplace had declined. In relation to control of the pace of work 51.1% of skilled workers and 44.9% of semi-skilled workers felt that control had declined. Similarly 62.7% of skilled and 64.4% of semi-skilled workers asserted that there had been a distinct decline in freedom of movement. This situation was similarly repeated in relation to the other criteria. Overall 56.7% of manual workers, clearly stated that their workplace activities had been undermined due to changes within the workplace.

**Table 6.2: Attitudinal Response to Work and Workplace Change (STLLM Male Survey 1990)**

Category	Increased (% Share)	Unchanged (% Share)	Declined (% Share)
<b>Skilled Manual</b>			
Control of Workpace	16.2	32.5	51.1
Freedom in Job	13.9	30.2	55.8
Freedom of Movement	11.6	25.3	62.7
Freedom to Talk	18.6	32.5	48.8
% Average among Skilled Manual	15.0	30.1	54.6
<b>Semi/Unskilled Manual</b>			
Control of Workpace	14.0	21.1	64.9
Freedom in Job	36.3	17.1	54.3
Freedom of Movement	11.1	33.3	64.4
Freedom to Talk	26.6	28.8	52.1
% Average among Semi/Unskilled Group	27.0	25.2	58.9

### 6.2 Sample of Unemployed Males

Unemployment trends in the Mid-West and Ireland have followed similar paths throughout the 1970s and 1980s with a dramatic increase in the rates recorded. It is apparent that the average unemployment rates in the late 1980s were substantially above those recorded in the pre-recession period of the early 1970s.

Within the EC Ireland's high level of unemployment (21.1%) is equalled only by Spain, and is substantially higher than the EC average of 10.7% (OECD, 1993).

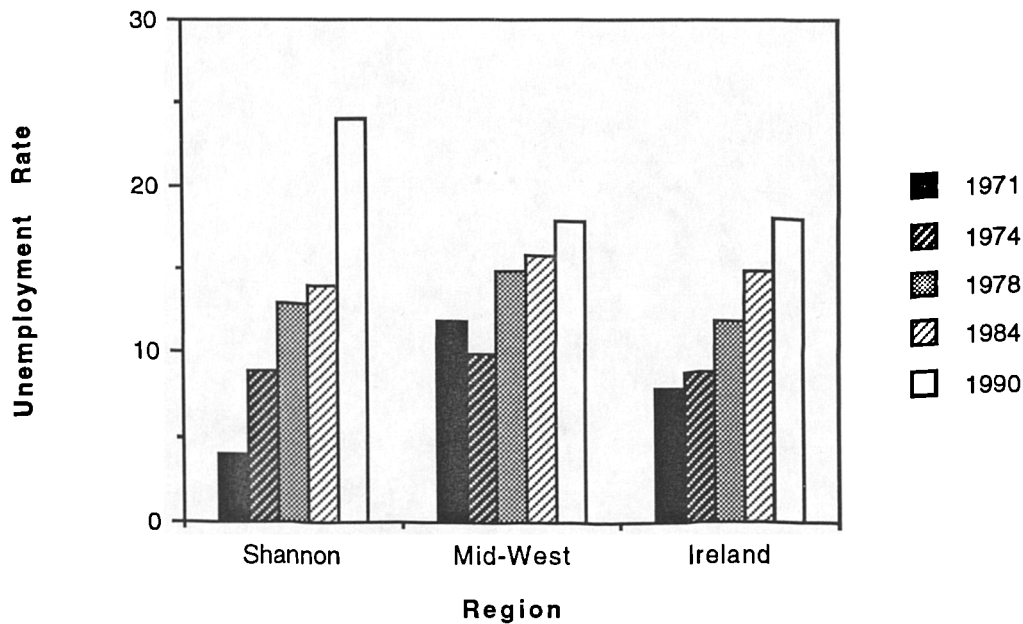
When the unemployed were sub-divided by age, 34 (25.3%) of the 24-45 age group compared to 22 (18.9%) of the 46-65 age group were unemployed. Two distinct phases in relation to unemployment have existed within Shannon. The first phase can be identified with the period 1971-1979 when firms supplied the local labour force with a relatively secure and sheltered employment position. The second phase has witnessed the reversal of the previous trend with a wholesale decline in employment possibilities. The effects of unemployment are obviously not solely related to the individual but also stretch into the family and local community. As one respondent noted:

"It put us (the family) under terrible pressure. I've been out of work 2 years. If it wasn't for the wife, you see she works and keeps us, I don't know where we would be. But it's just no good we go out once every blue moon and that causes problems. She knows I'm no skivver but she still shouts at me to get a job, but I just can't. I know other lads like me and they've fallen apart you see them stoned (drunk) all the time feeling sorry for themselves. Its just not right making men feel like they are nobody. People just don't realise how important a job is, if you don't have work your whole life falls apart".(Interview 3/11/90)

One causal effect has been demographic, with the labour force increasing by 11.8% between 1974-1988. However, as is noted above, the closure of foreign plants has generally contributed to the rise of unemployment within the STLLM. As shown in Graph 6.0 unemployment within the STLLM has risen from 6% in 1971 to 24.1% in 1990. In comparison to the Mid-West and Irish national totals unemployment in Shannon is now higher, having grown by 18.1% since 1971 compared to unemployment growth of 6.1% within the Mid-West and 9.1% nationally 1.

Among the 66 unemployed respondents 4 (6.0%) had never worked. Thirty two respondents (48.4%) had previously held skilled manual positions prior to becoming unemployed. This high level of unemployment among the well trained a situation which further contradicts Dineen (1984) and Daly's (1984) position that unemployment within the Mid-West region is predominantly based upon the failure of individuals to receive skills training or good educations. Moreover, in relation to re-employment it was obvious that because of the change in general recruitment policies and the effect of mechanisation, the types of skills available amongst the unemployed are both unused and unwanted. However, high levels of unemployment among the formerly skilled employee's is not solely based upon skills knowledge but upon skill displacement and a subsequent decline in general employment opportunities.

**Graph 6.0: Unemployment rates Shannon, Mid-West and Nationally (1971-1990)**



Source: Data supplied by Limerick Unemployment Centre

The main contributing factor in relation to unemployment within the male unemployed sample was company closure which accounted for 26 (39.3%) of respondents. In addition 24 (36.3%) cited job reorganisation and shopfloor modification, 9 (13.6%) claimed that they had been laid off temporarily and the remaining 7 (10.6%) all gave personal reasons. The latter group chose to enter unemployment voluntarily due to what they argued was a personal intolerance of declining workplace legitimacy. One respondent clearly stated how he felt his role within the plant had diminished so much that remaining in employment removed any pride he had in himself:

"I was standing one day working away and one of the lads came over to me and said, "Do you know you have to put your hand up now if you want to go to the bogs?" I got thinking to myself what's next? If you sneeze they'll take it out of your wages. These people don't own you. My kids they were at school at the time and it was if I was being treated like them you know saying to the teacher :

"Can I go to the toilet miss, please"

I'm a grown man, not a child. They always were taking things off us. So I took the voluntary (redundancy payment) and left. My wife had a job and because of the kids I knew I'd get a few bob of the social. I've never had a full-time job since and it's been hard but I get a bit a building work and do a bit on the black (black economy). At least I am not some skivvy going yes sir no sir, three bags and all that. There's part-time jobs here in some of the electronic firms I wouldn't work there if you paid me. Because it would be put your hand up to go the toilet or work like a slave and get peanuts. A lot of the fellas I know take shit at work but they won't admit it. They say Sean you're an eegit

(mad/foolish), packing in the work but at least I've got my pride they don't even realise what they have become"(Interview. 1st/November/1989)

For another respondent the decision was similarly based upon a strong reaction to the changes in work conditions and the desire to retain some sense of dignity. In this case work had been found and was considered satisfactory:

"I went into construction. The conditions and pay were as good as in the toolmaking and I was sick to the back teeth. The management were always hassling us, taking more and more away from us. Just before I left I realised there hadn't been a pay rise in two years and all that time we were worrying about losing our jobs. I got thinking to myself this is no bloody life being treated like some sort of animal, so I left. At that time as you know there was the new Quayside shopping centre going up in Limerick and now I'm working on the restoration of Limerick castle. My cousin got me the job. He's been in the building trade for 20 odd years. I've been in it 6 years and now I am a ganger man (foreman). The wages are good. The only problem is when the wind and the rain are a bit heavy but at least I've got my self respect and I can knock off when the works done". (Interview 12.6.90)

A lengthening of the duration of unemployment has contributed significantly to the growth in the numbers unemployed in Ireland. Nationally there has been a 40-fold increase in the numbers of long-term unemployed (unemployed for at least one calendar year) since the mid-1960s, with long-term unemployment increasing each year since 1962 (data supplied by Limerick Unemployment Centre; Unpublished). Within the Shannon context, the average duration of unemployment is a key indicator of the nature of labour market composition. Within the sample, both the rate and increasing length of unemployment suggests that unemployed workers are experiencing greater difficulty in obtaining employment or have been discouraged from job activities. Within the sample 49.8% of 24-45 and 57% of 46-65 year olds are presently long term unemployed. According to data supplied by Limerick Unemployment Centre long-term unemployment in Shannon has increased from 14.8% of those unemployed in 1982 to 42.3% in 1989. The decline in work opportunities and the changing nature of the STLLM was testified to by one respondent when he stated that:

"Whenever I first lived in Shannon I had a really good job and could have left it and walked into one just as good. In them days there was plenty of work I even knew a few lads who worked full-time in one job and did part-time shift work at weekends in another, just so as they could buy a house or take a fancy holiday. There were unemployed lads then I used to think you lot are lazy bastards sponging of the state getting free carpet and things. But its not like that now there just aren't any jobs, not here not anywhere. If there was a job in Galway or Cork I'd pack up and leave but there aren't any. It's all those young lads from the University there set up the old silver spoon in their mouths they just walk into jobs. Me I sit here experience of mechanical engineering coming out of my ears doing nothing. the whole thing has been turned upside down. Twenty years ago it was come to Shannon get a good job, maybe even buy a home. Now its no job for you do nothing" (Interview 3/6/90)

### **6.3. THE FEMALE SAMPLE**

### 6.3.1 Women and Work within the SIE

Although female employment has increased throughout the 1980s and 1990s the participation rates remains very low by European standards. The growth in female participation rate has been stimulated by the deterioration of the male participation rate. For instance, if the male participation rate was still at its 1961 level this section of the labour force would number 129,000 and would be 12% larger than it actually is. However, if female participation rates were at their 1961 levels, the female labour force would be 39,000 or 10% lower. Overall, the total labour force is 90,000 or 8% smaller in 1990 than it was in 1961 (Data supplied by CSO, 1990).

The primary focus of the female sample analysis is not based on originating comparative information in relation to national trends, but instead is founded upon examining the direct consequences of foreign-led industrialisation, the social effects of industrialisation and the respondents attitude toward developments within the SIE.

Female entry into the STLLM has been contingent upon females undertaking gender prescribed education and training programs (Hadjimichalis and Vaiou, 1990). The gender division of labour evident within the STLLM is contingent upon forces in the workplace and the labour market. It is clear that within the SIE the strategies undertaken by employers have reinforced gender inequality. Although employers have produced a distinct gender mix of skills, training and experience, inequality is still based upon a sexist conception of skill, work intensity and discipline (Sayer and Walker, 1992). As noted within the SIE the gendered division of labour is a dynamic process in which female skills are repeatedly downgraded by employers and unions. In relation to the SIE women have been used as an untapped labour reserve due to their low wages composition (for a national view see Jackson, 1987). As noted by Breathnach:

"The female population in Ireland, therefore, includes a substantial latent reserve labour force which, as has been demonstrated by parallel situations elsewhere, presents significant recruitment possibilities to incoming industries, particularly as more liberal attitudes to women working, and accompanying legislative change, developed from the 1960s" (1993, p.22).

Furthermore;

"One may conclude, therefore, that access to female labour from a rural/small town background has been a locational determinant of considerable significance to foreign firms investing in Ireland" (1993, p.23).

Overall 100 women were interviewed which comprised 7% of the total adult female population aged between 24-60 (SFADCo Population Survey 1991). Unlike the male sample non-working participants were incorporated so that various cultural and social perceptions of work could be thoroughly analysed

(Beale, 1986). In seeking to comprehend the relationship between women and work, respondents were categorised by economic activity. Overall 38 respondents were employed within semi/unskilled positions, with a further 16 unemployed, 14 of whom had recently been laid off temporarily, a reflection of the nature of part-time work within the SIE. In relation to unemployment female job losses have not been as distinct or widespread as among males, a situation which indicates both the low level of antagonism between capital and female workers and the labour intensive nature of the electronic sectors. The largest group was comprised of 45 females who in 1990 were undertaking home duties. Within this group 21 women had temporarily suspended themselves from the SIE labour force due to family commitments.

The role of women within the STLLM has become highly significant since the late 1970s. In 1975 the number of women employed in manufacturing within the SIE numbered 584 (15.9% of total employees) a total which rose to 916 (37.9%) in 1989 (data supplied by SFADCO, 1991). As noted in section 4.1.1, during the 1960s and early 1970s, SFADCO had purposively discriminated against the employment of women due to a dual desire to provide employment of a high skills content and remove hostilities from male toward female workers (Share, 1990). The growth in female employment has not been accompanied by a significant increase in the female share of skilled and high income employment. As noted in several SFADCO employment surveys (1978-1991), female employment has never accounted for more than 9.8% of skilled, technical or managerial employment within the SIE. In 1990 84.2% of all females employed within the SIE (excluding secretarial employees) were semi/unskilled employees.

Nationally, women make up 29.7% of the total labour force in Ireland compared to an EC average of 41% (NESC, 1990). This low level of employment has two main stimulants: the failure of Ireland to industrialise until the 1960s, and the role of the Catholic Church in perpetuating a non-working status for women a position which became part of the national ethos (Council for the Status of Women, 1981, 1991a, 1991b; Curtin et al, 1984; Smyth, 1991). Moreover, due to the influence of the Catholic Church the ideological importance of women's attitude to work is especially valid due to religious and civil society being attached political phenomena within Ireland. According to Ward and McGivern:

"the ideological effect on women of the Virgin Mary does not need elaboration; suffice to say that the chaste, pure image of Mary with her impassive unquestioning role, has been a model for all young catholic girls. Women are not given prominence within the theology of the Church, and this, coupled with the worship of God the Father as the only possible object of veneration, is equally damaging to woman's self image (1980, p.12).

Employment presents a distinct predicament for many women who are forced to choose between entering or remaining outside of the labour force due to family commitments (Tansey, 1984). As noted above 21 women had suspended themselves from employment due to child rearing duties. Within this group 12 claimed that they felt morally obliged to put their pre-school children's care



before continued employment. The remaining 9 participants claimed that they had been forced to give up work due to insignificant crèche and child care facilities. Among the remaining 24 women who were engaged in home duties 15 had not worked since becoming married (all of these women were aged over 45), the remaining 9 women claimed that they enjoyed financial security and as such the incentive to work had been removed. Among the 38 women in employment 14 had pre-school aged children whom they had placed in child care facilities in order that they could continue working, 10 claimed that they worked out of economic necessity and 14 welcomed the opportunity to affirm their individuality through engaging in employment. As noted by various respondents the complexity of female employment has several variations:

"it's just pin money, my man has a good job and my bit extra is used for nights out and holidays,. We could do without the money but I like work, it gets me out of the house and I have made friends. I'd have hated being like my mother sitting in the house. Work is hard but it gives you a bit of a lift" (interview 21/3/90).

One respondent vividly noted the pressure that was brought to bear upon her when she decided to take up employment:

"I got a job. We needed the extra cash and my mother went berserk. She said that the kids would suffer and that I was selfish. Other people said that I didn't need the work because my husband had a good job. It even went so far that a priest came up to the house and told me all about the virtues of being a wife and mother. My husband threw him out of the house. I was really upset but I stuck by my guns and took the job. Nowadays nobody would hardly say boo to you if you're a working mother. I think that's a good thing" (Interview 14/4/89)

For another respondent the traditional role of the mother was still considered valid:

" people used to argue that one family should have one job, and I think that is right. I stayed at home and reared the children and that, I believe, was far more important than me working so as we could have extra cash. I look at my three children now, and think to myself that they are so well behaved and polite. I see other working women's children who are ignorant brats. A mother's place is in the home. All this change is no good" (Interview 15/3/90)

The traditional view of motherhood was evident within this sample with 17 women arguing that if women are single their relation to work is endorsed on more equivalent terms to men, but if they are married, they are required to condition their own interests to those of their families. The permanency of this ethos has declined in recent years with the proportion of married women within the female workforce rising from 5.2% in 1960 to 16.7% in 1980 (NESC,1990). However, in comparison to other countries such as the UK where 57.2% of female workforce are married, and Germany where 56.2% of female workforce are married the increase in married female participation has been less pronounced.<sup>2</sup>

The majority of the companies interviewed argued that they did not discriminate against married women and in most cases they believed that encouraging married women to return to work was advantageous due to married women producing a lower turnover rate than their single counterparts and married women possessing relevant production and work experience. High levels of potential labour turnover were evident among the 27 women aged between 15-24 of whom 19 argued that working within the SIE was only part of a process of achieving the necessary finances to facilitate out-migration. As two respondents noted, their main objective was to emigrate, due to the types of jobs on offer within the SIE being unsatisfactory:

"I'm only working for a few years then I will follow my sister to Germany. She's got a great job as a secretary and she says I could get a job easily. Anything is better than working here, you see, your qualifications count for nothing"(Interview 13/5/89).

Similarly:

"When I have saved enough I'm going to England to my brother. He says he can get me a far better job with better money. I hate it here there's nothing to do since all my friends left" (Interview 22/8/90).

### 6.3.2 Types of Female Employment

Women's work within the SIE is not solely an unprejudiced productive actuality, but rather it is also an ideologically domineering role imposed by virtue of gender and power relationships (Philip and Taylor, 1980). Fragmenting production into repetitive and low-skilled stages has created a distinct gender division of labour with an international character (Blackwell, 1988; CSO,1990; Pyle, 1990). Within the Shannon sample of companies 81.8% of all women undertake semi/unskilled employment within the electrical engineering sector. Only 10.8% of managerial and technical posts are held by women, moreover, a mere 8.6% of skilled workers are women (Table 6.4). Women also make up nearly eighty percent of clerical staff. The high level of over-representation within low skilled positions and the insignificant number of women within skilled and well paid positions highlights the tendencies of international capital within the SIE to create a gender division of labour which is highly patriarchal (Crowley, 1991; Harris, 1983; Hunt, 1980).

Table 6:4 Employment Shares by Gender (SIE Sample, 1990)

Category	Male % Share	Female % Share
Technical/Managerial	89.2	10.8
Skilled Manual	91.4	8.6
Unskilled Manual	32.1	67.9
Clerical	12.1	78.9

The sexual segmentation of the labour market is convenient for capital as it permits control through enforcing gender determined labour market status (Baran, 1973; Barron and Morris, 1976; Beale, 1986), a situation which Massey identified as a:

"hierarchical social system of production" (1984, p.140).

Capital, through segmenting the labour market along gender and skill lines, creates an uncomplicated and easily reproduced form of labour which has limited labour and bargaining power. Women are integrated into the labour market in a highly uneven manner. For example, as noted above, the majority of female employment is centred upon the highly labour-intensive electrical engineering sector characterised by a production process composed of assembly, testing and intermediate manufacturing activities (Employment Equality Agency, 1983; Massey, 1984). It is clear that the access to a highly-amenable female labour reserve is an attractive inducement for foreign investors (see also Harris, 1989; Fernandez-Kelly, 1989; Fine-Davis, 1983; Jackson and Barry, 1989; Irish Feminist Review, 1984; Wickham, 1986; Wickham and Murray, 1987).

### 6.3.3 The Role of Trade Unions

Within the SIE male dominated trade unions often augment and perpetuate a sexual division of labour. This issue is specifically appropriate for women within the trade union movement because they are marginalized both as workers and as women (Brown, 1976, Daly, 1978). As was noted by Pollert:

"weakly organised women workers...have to battle against the bureaucratisation and collaboration of their union at every level, they have to struggle as women against being ground down by a male-dominated union hierarchy (1981, p.180).

To exemplify this phenomenon it is imperative to examine the extent of female participation within unions, at ordinary member status and at elected official status. Contemporary statistics on female trade union membership show that women constituted one-third of total trade union membership in 1990 (data supplied by the Council for the Status of Women, 1991). However, in 1991 they constituted a mere 18% of membership executives. In the 12 unions which represented 88% of female union members, only 5.3% of their elected officials were women (SIPTU, 1992).

Breathnach (1993) has argued that this low level of senior representation is aggravated by the one union and sweetheart deals struck between TNCs and major trade unions. For women, the collaboration between capital and trade unions is also exacerbated by the disinterest that the majority of male union officials have toward issues which concern them (King, 1984). Therefore, instead of challenging gender divisions, the unions actually perpetuate them (Clancy and MacKeogh, 1987; Harris, 1983; MacCurtain, 1984; MacCurtain and O'Corrain, 1978). Within Shannon only two shop stewards are women although women

comprise 41% of total SIPTU membership (data supplied by ITGWU, Shannon). Both of these women argued that the trade union discouraged women to be more active within their trade union organisation. However one shop steward argued that women had generally failed to challenge their employers. For example, in one plant a spray product used on electrical insulations and which had been banned in the US, was readily used. She claimed that the liquid affected the women's eyes and created sores and chaffs upon their hands. However, the women involved had asked her not to press the company on withdrawing the product in case they lost their jobs (Toner, 1989).

Within the sample it was clear that of 32 trade union members 27 argued that trade unions were predominantly men's affairs. As one respondent noted:

"I don't really understand much about the unions. They don't come near me and I don't go near them. If you want to know something about them call back tomorrow my husband will be in then" (Interview 11/7/90).

The effect of specific recruitment policies in obviating militancy was overly apparent. Of the 11 plants (PMS1) which exhibited the highest levels of female employment none had experienced the effects of strike action or go-slows. Of course this does not mean that all women are either apathetic or disinterested in trade unions and the exploitative nature of work. The lack of militancy among women, is more likely to reflect trade union passivity, the patriarchal nature of Irish society and the overriding dominance that TNCs have gained within the SIE. As one of the female shop stewards noted:

"I see a lot of change for women with more jobs and that, but I also see an attitude that thinks having a job is great. Women aren't as worried as men about being exploited and that annoys me. Women get so far and stop. They all think because their mothers had a really shit life that theirs is something special.

"I remember strikes here years ago. At the same time I knew women who were really abused at work. Poor wages and the like, but would they do anything about it? I don't think women in Shannon have it in them to campaign for good pay. Women will take a lot more flack than men, It's bred into them. I suppose most of them don't see their job as being as important as their husbands. They will fight but for silly things like a cleaner canteen or a longer tea break. But when it comes down to pay and working conditions they claim that they don't understand all that jargon" (Interview 22/4/89)

#### 6.3.4 The Growth in Part-Time Employment

The most prominent feature affecting the female STLLM has been the growth in numerical flexibility and subsequent rises in part-time employment, a situation which has permitted capital to intensify production, enhance work discipline and engender inordinate levels of social control. It has been estimated by SIPTU

(Shannon) that the overall proportion of female employment which is part-time has increased from 5.1% to 32.3% of total female employment since 1976 and that the proportion of part-time work which is undertaken by women is over 85% (ITGWU Shannon, 1989. Unpublished). In relation to the sample of 38 respondents in work and 14 temporarily unemployed 21 (40.3%) stated that their employment contracts cited that they were part-time employees although the number of hours worked varied from 10-42 hours weekly. Nationally 22.6% of all industrial female employment is part-time and has increased by 33% since 1978 (NESC, 1991). Among the 52 women who worked or had worked on temporary contracts 38 (74.5%) stated that they had previously held full-time contracts and that the shift to part-time work had been at the instigation of the company worked for. The other 14 respondents, all of whom were under 24 years of age, had always worked on part-time contracts.

According to the 38 women who had been forced to accept part-time work, the modification of contractual agreements had been highly negative due to irregular work schedules and wage reductions. For 27 of these respondents who were capable of supplying wage histories it was evident that real wages had declined from an average full-time wage of £IR 82.35 per week to a weekly part-time wage of £IR 61.38. It was also clear that the loss of full-time work led to a decline not only in wages, but pension contributions, redundancy payments and potential upward career movement. Overall, the growth in part-time work also highlighted the sexual segmentation of the labour market, with over 85% of women undertaking such work within the sample of companies. Domestic duties meant that the acceptance of part-time work was not only feasible but likely to be sustained and reproduced, as many women were prepared to function as a distinct pool of temporary workers due to economic necessity. The limitations of undertaking such work and the effect upon women were noted within an EC Draft Directive which stated that:

"there are clearly disadvantages which some part-time workers suffer in relation to full-timers, it is possible to see this as a price which part-timers, in particular women, are prepared to pay for the opportunity to fit work into other commitments" (cited in Shirlow and Shuttleworth, 1994)

### 6.3.5 Unemployment

At the national level the rate of female unemployment within the female labour force has grown from 1.7% in 1975 to 8.4% in 1990 (unpublished data supplied by Limerick Unemployment Centre, 1991). Within the sample 16 respondents were unemployed of whom 12% were eligible for unemployment benefit. Only 2 female respondents were long-term unemployed compared to 43.2% of unemployed male respondents, a situation which highlighted the availability of part-time work, and the failure of women to be registered as unemployed due to the gender bias of the registration process and the relatively stable nature of female employment opportunities within the SIE.

National unemployment rates, among women, have increased by 12% since 1974 (CSO, 1990) Within Shannon, the share of female employment is 6% lower than that nationally, but has risen from 1% to 10% within the same period. The rise in female unemployment in Shannon should continue since there has been inconsequential evidence of women's educational status changing quickly enough to prepare them for work within dilating job categories such as management and technical work (see Chapter 7). Consequently, there is a risk of women being omitted from the technical job market, as their role becomes more concretely based upon the gender relations which presently endure (Hartmann, 1976; Mageean, 1984; Mailler and Rosser, 1987; McDowell and Massey, 1984).

#### **6.4 Conclusion**

The role and nature of employment conditions within the STLLM point to the failure of development policies to continually produce employment opportunities and reverse significant unemployment growth. This is due to development and macroeconomic policies being centred upon facilitating the long-term growth potential of foreign capital (at a national level see NESC 1990). In relation to the STLLM the adoption of such policies has generally failed to stimulate improved employment conditions.

The obvious importance of the findings of the male sample lies in the overview they provide into the causal mechanisms of local labour market relationships. For example, the reduction of skilled manual jobs is an essential strategy for capital, to mitigate the rigidity and antagonism of previous socio-spatial structures.

A surplus of unemployed has now been created, which it would appear is unlikely to become readily re-deployed within the contracting labour market. Tenured and secure employment is now uncommon within the STLLM, and improved labour market conditions seem remote. The growth within the surplus workforce has augmented the degree of labour control which is directed by capital. This situation highlights capital's desire to promote a MSR which is based upon labour power diminution.

In Chapter 5 it was argued that labour process change has not been based upon the scenario of 'flexible specialisation' and shopfloor democratisation due to a growth in manual worker alienation which reflects the increasing changes in specific conditions of industrial technology and the socio-technical re-organisation of production. The result of workplace restructuring has created a growing awareness of powerlessness, with many workers feeling objectified by their employers and the impersonal systems of technology that are now in use. Within the sample, lack of control over the immediate job and work tasks is an important source of feelings of powerlessness and restricted freedom among

skilled and semi-skilled. This situation has always been relevant as many respondents feel that the role and the amount of variety within their work has decreased.

It is clear that technology has become a divide and rule mechanism within the STLLM as new hierarchical positions, based on education and gender, are created. The socio-economic effects of the international division of labour, as presented here, point to the failure of a development policy based upon foreign capital. The lack of regard for the Shannon labour force and the day to day conditions under which it operates points to the failure of an economic policy that does not encompass social and economic conditions. In relation to unemployment there seems to be no effective State initiative for dealing with this problem. For example, SFADCo do not have a social mandate although their policies create distinct local labour markets. Various conversations with SFADCo staff highlighted the belief that improved labour market conditions could only be achieved through strict adherence to wage cuts and a growth of technical competence within the labour force.

The deterioration in labour market conditions and the subsequent rise in numerical flexibility points to the diminution of labour power within the STLLM. Local trade unionists argue that the increase in part-time work has allowed capital to dictate terms of employment and conditions over an ever increasing share of the workforce. This situation has lessened trade union authority and created a highly vulnerable workforce. It is clear that the growth in numerical flexibility suited the accumulatory need of capital as it reduced capital outlay, down time and trade union authority.

Chapter 6 has examined changes within the STLLM as mediated by the recruitment tendencies of foreign capital. The data presented highlight the relationship between local labour market characteristics and the exigencies of continued location. It is clear that continued location is in itself a form of labour modification.

High levels of unemployment with the STLLM especially among skilled workers is not based upon output/productivity decline but upon the political machinations of employers. Unemployment is actually caused by capital as it continually forms and reconstitutes its labour relationships. For example, the inclusion of women and the adoption of a fragmented production process engenders a localised MSR which gives credence to new accumulatory practices. For example, female employment permits capital to intensify production, enhance work discipline and engender increased labour control.

Human capital is largely controlled and rarely enhanced and the high degree of skills polarisation that exists further emphasises the social construction of production. The need to control the social variant has been based upon capital re-creating labour/capital relationships. In the case of the STLLM this has been

based upon breaking up previous structures of employment in order to reduce manual worker dominance. The extent of capital organisation and the imperative of growth is also explained. The desire to stimulate capital formation has created a changing distribution of waged work in order to control labour market mechanisms. The desire to alter labour market relationships has been based upon capital's reaction toward specific crisis tendencies. Inter capitalist rivalry and the role of competition has led to labour market instability. 'Conjunctural crisis' in the form of market collapse has similarly resulted in an augmented decline of labour power. Moreover, structural crisis in the form of militancy have also been lessened through engendering labour market control. Structural crises have also been removed by firms adopting new forms of labour control through the recruitment of graduate employees (Clark, 1986; Commission of the European Communities, 1987).

It has also been shown that the form of labour control that has been constituted has further heightened the inequality of productive relations. The social nature of labour market conditions further emphasises the role of distinctive accumulatory policies as they relate to technical and social developments. Moreover, this inequality has been extended due to the form of capital support undertaken by SFADCO. The failure of development policies to contain a social dimension has permitted capital to create labour market decline and employment instability. Throughout the analysis it is clear that segmentation is not solely the difference between primary and secondary labour markets but also between the employed and unemployed. Within both the primary and secondary labour markets, there exists further segmentation. Certain jobs are restricted to males while other jobs have generally been undertaken by women

## Notes

1. Those excluded from the register of unemployment include;

a) those over 18 year olds living at home, and whose parents are above the means test threshold receive insignificant payments and in many cases are not registered as full-time unemployed

b) 16-18 year olds who have left school

c) married women with young children are automatically considered unavailable for work but not registered as unemployed

2. The maintenance of a marital bar to employment must also be set against the fact that 90.6% of women compared to 69.2% of men are employees (data supplied by the Council for the Status of Women).



## CHAPTER 7: THE SHANNON YOUTH AND GRADUATE LABOUR MARKETS WITHIN THE SHANNON INDUSTRIAL ESTATE.

### 7.1 The Shannon Youth Labour Market

Discussion now turns to the relationships between the Shannon youth and Limerick University graduate labour markets. Overall three distinct labour markets are identified: the graduate and youth labour markets of the SIE and a third labour market which includes a variety of places and localities and accounts for the role of out-migration from the STLLM. The importance of studying the youth labour markets is dependent upon comprehending the contemporary effects of restructuring with the SIE (Shirlow and Shuttleworth, 1994). As shown in Chapters 5 and 6 labour recruitment structures evident in the period 1960-1980 have been radically re-modified due to the decline of the STLLM as a major recruitment area for manual labour.

As noted below high rates of out-migration within the Shannon youth labour market (SYLM) emphasises the long-term effects of employment decline within the STLLM (Cowley, 1989). The ideological significance of increased migration lies in the failure of industrial policies to generate improved employment conditions (King and Shuttleworth, 1988). Irish Governments and policymakers have accounted for the increases in youth migration as an example of an augmented brain drain which permits the individual to enhance their career potential before returning to Ireland as an adult labour market participant. For example, Whelan has stated that:

"We regard emigrants as part of our global generation of Irish people. We should be proud of them. The more they hone their skills and talents in another environment, the more they develop a work ethic in a country like Germany or the US, the better it can be applied in Ireland when they return"(1987, p13).

This argument has been echoed by Foster, the Irish World Bank Educationalist, who stated that:

"If we are true EC members and we believe in European integration, we should see the increasing manpower shortage in Europe as a fortuitous opportunity for our young people facing unemployment to think of mobility and migration as normal solutions" (1987, p.16)

In recent years it has become clear that emigration has served to alleviate social and political tension. During the February 1987 election campaign, Fianna Fail pledged government pressure on the American Government to increase the number of permanent visas for Irish emigrants if re-elected although they have continually sustained the argument that emigration is not an example of any major socio-economic structural deficiency. Brian Lenihan (Fianna Fail Presidential Candidate) gave credence to these assertions when he stated in an interview that:

"I don't look on the type of emigration we have today as being of the same category as the terrible emigration in the last century. What we have now is a very literate emigrant who thinks nothing of coming to the United States and going back to Ireland and maybe on to Germany and back to Ireland again. The world is now one world and they can always return to Ireland with the skills they have developed. We regard them as part of a global generation of Irish people. We shouldn't be defeatist or pessimistic about it. We should be proud of it. After all, we can't all live on a small island" (1987).

The degree to which emigration represents a brain drain highlights the failure of emigration analysis to fully comprehend the complexities involved. Although it is clear that 'Third Level' graduates comprise an ever-increasing share of total out-migration it is not evident whether emigrants undertake such an option due to their individual enterprise or the structural collapse of employment conditions at home (Breen et al, 1986). The conceptual analysis presented below argues that without specific examination of distinct labour markets and the role of labour demand structures, the emigration theories noted above are rendered invalid as clearly argued by MacLaughlin:

"Most studies of Irish emigration ignore its structured roots and functional roles" (1991, p.3)

The theoretical construction of this chapter is predated upon the structural effects of restructuring within the SYLM. Main effects include employment decline and the degeneration of traditional recruitment policies. The decline in customary recruitment policies has created a highly segmented labour market which generally favours the recruitment of low paid females or university trained graduates. The low level of recruitment among SYLM males has been augmented due to the nature of the recruitment relationship between TNC's and the Third Level education sector, a situation which has resulted in greater social inequality. The collapse in employment conditions is only one of several factors which have affected labour market structures. For example, one of the main conclusions that arises from the survey is that TNCs within the SIE use educational qualifications in order to perpetuate a distinctive and socially divisive hierarchical structure of recruitment. (for a contrary view see NESCS, 1991).

### 7.1.1 The Sample of Youth Employment within the SYLM

The SYLM survey was directed at a sample of 116 participants and (see section 3.4) was divided by gender and educational criteria due to the significance each of these factors had in relation to employment opportunities. In relation to the total sample 78% of all respondents lived in Shannon. The majority of the sample (56%) were males, aged between 17 and 24 years and came from backgrounds which were self-classified as semi-skilled/skilled manual.

The majority of out-migrants, which included 42 respondents, were males who represented 64.2% of the out-migrants sample (Table 7.0). The lower level of out-

migration amongst females highlighted the relative buoyancy within the female labour market vis-a-vis the male labour market, a feature which was emphasised by the lower rate of unemployment amongst females. The modal year for departure was 1988 when 41% of the sample left.

**Table 7.0: SYLM Respondent Sample**

Group	Living In Shannon	Out-Migrated from Shannon
Females	36	15
Males	38	27
Total	74	42

Education is perceived as part of an industrial policy that provides either the entrepreneurial 'seedcorn' for indigenous development or as the 'human capital' that can attract foreign investment to Ireland by means of an educated/skilled workforce. The traditional liberal conception of education for education's sake still exists but recent publications, the Culliton Report on Industrial Policy and the latest Government Green Paper on Education, have made it plain that there is a perceived need to 'de-emphasise' the bias towards the liberal arts and traditional professions (Sheehan, 1992). Although education can be seen as improving the capital stock in Ireland, and so having economic relevance, it can also be ideologically justified as a means of educating/training surplus labour in order that it can effectively find employment abroad and then return to lucrative employment in Ireland with a harvest of acquired skills and experience (Whelan, 1991).

In relation to formal educational criteria 37% of respondents had no qualifications, a situation which highlighted the high drop-out rate within the Irish educational system (Shirlow and Shuttleworth, 1994). In relation to gender 42.1% of females compared to 30.5% of males had failed to gain educational certification. However, educational deficiency does not suppress employment opportunities. Females who have received no qualifications have the lowest unemployment rate (18.7%) within the sample, and the non-qualified males exhibit the lowest rates of male unemployment (38.4%), a situation which reflects continual recruitment of young female and low skilled male workers by SIE companies.

Table 7.1 provides data relating to those respondents resident in Shannon. As indicated 35.1% of this sample were unemployed. Unemployment rates were highest among males (44.4%) compared to females (26.3%). Furthermore, unemployment rates were lowest amongst those with no qualifications, especially females. The highest male and female employment rates are found amongst those who have obtained Group/Inter qualifications. Respondents who had received no qualifications constituted 45.6% of those in employment. These findings contradict the notion that schooling and the undertaking of training is

part of a meritocratic selection process in which those who succeed educationally are best equipped to find employment. In reality the opposite is true, since substantial sections of those who have no educational or training credentials acquire employment more easily than their better educated and state trained counterparts.

**Table 7.1: Educational Attainment and Educational Qualifications within the SYLM Sample (Living in Shannon)**

Males	In Employment. Total and % of Category	Unemployed Total and % of Category
No Qualifications	8 (61.5%)	5 (38.4%)
Group/Inter	6 (50.0%)	6 (50.0%)
Leaving	6 (54.4%)	5 (45.4%)
% of all Males	55%	44.4%
<b>Females</b>		
No Qualifications	13 (81.2%)	3 (18.7%)
Group/Inter	6 (66.6%)	4 (33.3%)
Leaving	7 (70.0%)	3 (30.0%)
% of all Females	73.6%	26.3%

When migration data were analysed the effects of educational criteria was also pronounced. Only two of the fifteen female migrants had not received educational qualifications. The low level of migration amongst females within the no qualification group emphasised the demand within the SIE for semi-skilled female operatives of school leaving age. The high level of out-migration among males with no qualification (37% of all males) emphasised that although employment opportunities in Shannon were greater for this group than for other educational groups a disequilibrium in demand was still evident. The propensity to emigrate and the high level of unemployment amongst the most qualified groups emphasised the collapse in the relationship whereby educational achievement enhances employment opportunities.

### **7.1.2 Unemployment within the Shannon Youth Labour Market**

As a background to discussion of change within the SYLM, trends in the national youth labour market and the sectoral distribution of youth employment are briefly described using annual data collected on the economic status of school leavers one year after leaving school (Economic Status of School Leavers, Department of Labour, 1970-1992). In common with the UK, these data show a decline in employment and a rise in unemployment (and also state training) with the added ingredient of an increase in the rate of school leaver emigration rising from less than 1% for the 1980-81 school leavers to 9.9% for the 1988-89 school leavers (Sheehan, 1992). For 1989 school leavers it was highest for leavers with leaving certificates and lowest for those with no qualifications. The most noticeable feature has been the decline in employment opportunities. For

leaving certificate students employment opportunities fell from 60% in 1980 to 35% in 1985.

In effect unemployment expansion is primarily due to the contraction in labour opportunities both nationally and within Shannon. Youth unemployment in Shannon rose from 8.6% to 25.1% in the period 1980 to 1990, due to significant declines in employment opportunities. Walsh (1989) has argued that Irish youth unemployment can be attributed to the phenomenon of "settling down", a period characterised by complicated labour market entry, and periods of unemployment. According to Walsh unemployment rates are artificially high due to young people displaying irrational job-holding patterns as they search for improved employment conditions. Furthermore average durations of unemployment are relatively short, due to the cyclical availability of work and the need for youth participants to gain employment experience.

Evidence within this chapter disputes Walsh's turnover hypothesis by arguing that the highly segmented nature of the SYLM is based upon socio-political considerations. As argued below, many of those who fail to find employment are highly educated and well trained. Walsh's argument does not permit a valid comprehension of labour market control mechanisms and the nature of hierarchically motivated recruitment. In further countering the turnover thesis, it is important to note that unemployment within the SYLM is not solely the preserve of those who have recently joined the live register.

Within the next section training criteria are included in relation to present economic status. The findings contradict Sexton and Horner's (1988) argument that high rates of unemployment are associated with training deficiencies.

### 7.1.3 Respondents who have received no State training

Fifty respondents had received no state training and constituted 43.1% of the total youth sample. Table 7.2 provides information relating to the employment, unemployment and migration status of all 50 respondents. The sample included 24 males and 25 females. The majority of respondents (34) resided in Shannon and were in employment. Employment and unemployment totals amongst males living in Shannon were identical. However, among the 20 females living in Shannon only five were unemployed. Among the 16 who had migrated the majority (10) were males. In relation to overall educational criteria a less significant demarcation was evident than among the other educational/training samples.

Initial deficiencies in educational attainment are not likely to be compensated for by later skill acquisition. Each member of the no state training sample had received insignificant training at work and had remained unqualified and unskilled. This predicament was reinforced by the low pay received, especially by those working in Shannon. The average hourly rate for those working in

Shannon was £IR 2.16 per hour compared to £IR 4.10 among the migrant group. In both cases the hourly rates obtained were significantly lower than amongst those who had received training.

**Table 7.2: Employment Classification among Non-Trained Sample**

Educational Group	Employment in Shannon	Unemployed in Shannon	Migrated
<b>Males</b>			
No Qualifications	2	3	5
Group/Inter	2	2	3
Leaving	3	2	2
<b>Females</b>			
No Qualifications	7	3	2
Group/Inter	4	2	2
Leaving	4	0	2
<b>Total</b>	<b>22</b>	<b>12</b>	<b>16</b>

Source: Author's Survey

#### **7.1.4 Training**

In theory training is devised to correct the deficiencies that exist within the local and national labour markets. All of the training that is included within the analysis of Shannon is presently under the auspices of Foras Aiseanna Saothair (FAS) the government training board (previously ANCO). According to FAS (1993) training is based upon three basic theoretical aspects which include:

- 1) eradicating the inadequacies and deficiencies which exist within the national labour market;
- 2) fostering equality and countering the cyclical determinants of unemployment;
- 3) contributing toward and enhancing skill levels.

Training is considered to be beneficial to the trainee. FAS believe that their schemes impart a greater level of individual skill and encourage a general enhancement of human capital. It also believes that non-pecuniary benefits exist in the form of a better sense of fulfilment, the likelihood of better working conditions and the achievement of higher occupational status. Overall 56.8% (66 participants) of respondents had received training on one of the three FAS courses: Apprenticeships, Vocational Preparation and Training Programme (VPT) and Basic Training Programmes. This figure is twenty percent higher than that nationally (FAS, 1990), and is a reflection of the geographical positioning of a training centre in Shannon. In Ireland 19 full-time centres for youth training are

in operation and it is common to have higher than national participation rates where facilities have been established. Combined with this has been SFADCo's efforts to encourage youth onto training courses through their involvement with the local secondary schools.

#### 7.1.4 Apprenticeships

Apprenticeships have long been considered as the conventional path to acquiring skilled manual employment in Ireland. FAS has a national responsibility for apprenticeships in industry and it works with the Department of Education in providing training and education. Apprenticeships primarily operate in a number of 'Designated Trades' which include, engineering, construction, motor, electrical, printing and furniture making. Nationally there are about 12,000 apprentices in forty separate trades. Apprenticeships last four years. The normal pattern is to spend the first year of training in either FAS Training Centres and Regional Technical Colleges learning the practice and theory of the trade. At the end of this time the apprentice sits the national Junior Trade Examination. The remainder of the apprenticeship is spent in employment with further release to a technical college for theoretical instruction. The Senior Trade Examination is taken by the most competent trainees with a National Craft Certificate being awarded upon satisfactory completion of the apprenticeship.

Twenty-three respondents (19.8%) had undertaken an apprenticeship scheme, of which a mere 21.7% were females. The low proportion of females highlights the lack of technical based subjects undertaken by this group and the failure traditional failure of women to be admitted to skilled posts (Breathnach, 1993). Apprenticeships tended to be the domain of males who have achieved at least 5 grade passes at the Group/Inter level. Overall 30.4% of respondents had gained full-time employment, a level of employment which is only bettered by the 'Basic Training' group. Present levels of employment must also be set against the background of decline in the number of apprentices who have received full-time employment (Interview, FAS Shannon 1991).

Within the sample 33.3% are unemployed and residing in Shannon and 33.3% have migrated due to the unsatisfactory nature of employment conditions within the STLLM. In relation to migration no single respondent had been able to secure employment in Shannon. The change in work practices and the general decline of male dominated manual positions has led to a discernible and specific deterioration in apprenticeships. The decline in apprenticeships has been most prevalent since 1978 when it was estimated that around 200 posts for skilled apprenticeships were on offer within the SIE (ITGWU, Shannon. Unpublished). According to FAS, companies within the SIE have significantly reduced the recruitment of apprentices to an estimated 23 in 1990. The perverse nature of this outcome has also been replicated nationally (NESC, 1985), a situation which highlights not only the lack of employer demand but also signifies the shift of

recruitment practices within the SIE. In determining the low level of employment amongst apprenticeships in Shannon it is clear that the high level of recruitment among graduates from Limerick University is a determining factor. An employee from FAS, who did not wish to be identified, outlined the effect of competition for jobs between apprentices and university graduates:

"These lads are well-trained and educated but they are in direct competition with University graduates. They could probably do the same jobs but for the rate of change of technology. Their background just doesn't have the same theoretical background to pick up change as quickly as the University lads could do. It's all to do with resources. The University lads have a greater understanding of computers etc. We really need to find a way to upgrade the apprenticeship scheme. Firstly, have less time spent on on-the-job training and more teaching background. Its a tight labour market and you can't expect fair competition against university graduates who have the opportunity to avail of better resources" (Interview 12/6/90).

In relation to apprentices being forced into unemployment or migration, E. Walsh, President of Limerick University, contended that this was a reflection of the needs of industry and that the failure to gain employment was based on an individual's lack of sufficient educational or skills training. SFADCo officers also argued that the primary objective is to provide skills training to meet the existing and future needs of the economy. For SFADCo it is appropriate that stability is preserved between the volume of those courses which are envisaged as imparting specific skills for exclusive and distinguished demands and those which provide basic intercessory skills which can be implemented across a range of occupations. Therefore, according to SFADCO, as long as the TNCs within the SIE are capable of recruiting as many University graduates and unskilled workers as are essential to their requirement needs then the programme is functioning coherently. The fact that many skilled and well educated members of the youth labour market are unable to find employment is, in relation to SFADCos position generally less relevant.

Amongst the eight apprentices who have gained employment in Shannon the average hourly wage was £IR 3.11 per hour compared to £IR 5.75 for the eight migrants (£IR 3.89 for sample). The wage rate among the migrant group was the highest in relation to other groups and emphasises the earning potential of skilled employees.

#### 7.1.6 Full-Time Vocational Training at Second-Level

The Vocational Preparation and Training Programme (VPT) is provided by the Department of Education in the second-level schools and aims to prepare young people for the world of work. Nationally over 20,000 trainees took this programme in 1990.

The scheme operates at 2 separate levels: VPT 1 and VPT 2. VPT 1 is a one year programme designed as a preparation for work or as a basis for entry into a further year of vocational training. It is aimed at young people in the 15-18 year



age group who are proposing to enter the labour market but who require basic vocational training to enhance their prospects of employment. VPT 2 is a one year, self-contained programme aimed at those who have successfully completed VPT 1 or an equivalent programme or who have formal qualifications but lack vocational training or experience.

The VPT programme consists of the following components:

1) Vocational Studies; there is a wide range of designations to choose from including commerce, construction, engineering, secretarial, catering, agriculture, craft and design and electric/electronics.

2) Preparation for Working Life; a school programme and work experience.

In comparison to apprenticeships the course is not as soundly based in skills training although some level of industrial experience is achieved. Moreover most training is based upon clerical and bookkeeping courses. This group involved 22 respondents (18.9% of the sample). Overall 36.3% of were in employment in Shannon, 18% were unemployed and 44.5% had migrated.

#### 7.1.7 Basic Training Courses

This group contains 24 respondents (20.6% of the total sample) all of whom came from the no qualification category. Several managers noted that the scheme was utilised as a vetting system for potential male (but not female) employees. In each case it was argued that female employees did not need such elementary state training as they already were well disciplined and generally amenable. 'Basic Training' provides an elementary scheme which offers a basic training provision. These courses cater for unskilled persons of fairly low aptitude and ability and cover basic manual instruction as well as imparting a knowledge of general work practice. Some persons on these courses may show sufficient aptitude to subsequently progress to more advanced skill related forms of training, but the majority are destined for the semi-skilled or unskilled sector of the labour market. Various forms of non-apprentice training exist and are organised into four courses:

- 1) basic training courses;
- 2) skill related programmes;
- 3) career development and other programmes not specifically skill related;
- 4) community based initiatives.

The sample findings point to the highest level of recruitment in relation to training with 58% working in Shannon (Table 7.9). Male employment rates stand at 53.3%, a situation which reflects recruitment policies which favour the employment of low educational achievers who have undertaken the most basic form of training. Only 8.3% of basic training respondents are presently unemployed which tends to suggest that the recruitment of semi/unskilled workers is still relatively buoyant.

**Table 7.9: Employment Status of Basic Training Sample**

Group	Working in Shannon	Unemployed	Migrated
Males	8	2	5
Females	6	0	3
<b>Total</b>	<b>14</b>	<b>2</b>	<b>8</b>

Source: Author's Survey

The advantage conveyed by training appears to have the most significant impact upon those without formal educational qualifications (Basic and VPT courses). For the group consisting of unqualified respondents who had not received training the unemployment rate was 24.1% compared to 34% among apprentices. This implies that training does not convey any significant benefits within the *STLLM*, a circumstance which is based upon the re-modification of labour market relationships. As shown below, the recruitment of well paid and highly trained employees has uncompromisingly favoured those who have entered Third Level education. The desire to promote the employment of a university based workforce has been detrimental to those who have gained both a good second level education and have been involved in the most skilled forms of state training (Smyth, 1991)

The results also reveal serious imbalances in the structure of female training provision. Females make up an unrepresentative 37.5% of those who have received training, an inordinate proportion of which is based within the VPT Programme. National data provided by FAS shows that only 8% of overall female training is industrially based compared to 62% for males. This female training deficiency is an extension of a corresponding technical and scientific deficiency which exists in second level education and also reflects the nature of patriarchal capitalism. This high degree of gender segregation emphasises the extent of a social and cultural system which purposefully differentiates men's from women's roles in adult life.

## 7.2 GRADUATES AND EMPLOYMENT IN SHANNON

### 7.2.1 Graduates and Employment

The findings of this section will explore the ways in which Third Level education is used as a mechanism to provide foreign industry with its most skilled shopfloor workers. The sample of graduates includes 102 respondents. One of the outstanding features of this group was its middle-class background. The four-fold increase in total enrolments in Higher Education since the 1960s, has not significantly reduced the disparities between social groups in Ireland. The majority of graduates within this sample come from professional and managerial backgrounds. An insignificant number of graduates (11 respondents) within this sample came from a parental group comprised of skilled, semi-skilled, unskilled and unemployed groups although this group comprises 52.5% of the national population (CSO, 1992).

The main factor that determines entry to university in Ireland is financial. Unlike the UK only 4% of students are capable of gaining full financial assistance to attend university, which is usually reserved for those whose families are below the poverty line or in which one or both parents are deceased (McGrath, 1991). Many of those who have the necessary educational qualification cannot afford to enter University-based Third Level education due to the expense of fees and general living costs. This situation actually contravenes the Irish state's notion that education, at all levels, should be based on merit and personal fulfilment and not solely on parental economic stature. As was noted by the Department of Education:

"Each human being is created in God's image. He has a life to lead and soul to be saved. education is therefore concerned not only with life but the purpose of life. And since all men are equal in the sight of God, each is entitled to an equal chance of obtaining optimum personal fulfilment". (Department of Education, 1971).

### 7.2.2 Education and Industry

The affiliation between education and industry is illustrated by the transformations within Third Level education. The principal developments have been aimed at expanding technology-based education. This functional and highly pragmatic conception of higher education has been ardently endorsed by various governments. The section relating to Higher Education in the 'White Paper on Educational Development' promotes an education policy within which:

"higher education provision matches labour market needs" (1980, p.21).

Part of this national policy which ties education with general labour market needs is related to the:

"...increased development of management, marketing, design, research and development skills which are recognised as an essential prerequisite for the stability and expansion of foreign-owned industry and the development of indigenous industry. This is particularly the case where emphasis is being placed on the development of total businesses." (NESC, 1988, p.177)

The University of Limerick rose from National Institute of Higher Education to full university status. Only 14% of students are involved in humanity-based subjects compared to 54% nationally (University of Limerick, 1990). The development of a skilled workforce and the fostering of technological innovation have become the major objective of educational policy. Within Limerick University the importance of creating a highly skilled workforce is now regarded as an integral part of labour market policy and regulation within the Mid-West (Sklair, 1988). The pace of technological and industrial development within the foreign sector of the Mid-West of Ireland gave the University its main impetus according to the University's President B. Walsh when interviewed.

Restructuring within the foreign sector and the desire to find recruitment alternatives have conferred a specific and distinctive role upon the university. The high level of restructuring and reorganisation of shopfloor practices among TNCs has run in parallel with the development of the university. The relationship between the university and foreign-based industry is the key to understanding the role of Third Level education within the Mid-West of Ireland (Sklair, 1988). According to University representatives, when interviewed, there are a number of benefits which relate directly to the development and employment of highly skilled manpower including:

- 1) the augmented significance of education to cultivate an industrial disposition;
- 2) the enhancement of graduate attitudes and perceptions of industrial employment;
- 3) the compression of industrial experience through direct involvement during the instructive period;
- 4) regulated access by industry to a source of tested and amenable workers;
- 5) improved attitudes and perceptions of both industry and education to each other's roles and needs.

As is argued below the educational system, particularly within the University of Limerick, has become a socialising agent determined to produce a labour force with appropriate skills and, more importantly pro-industry attitudes. In reality future occupational status is largely determined by educational attainment which in turn is disproportionately determined by social class.

When the Irish government permitted the creation of NIHE in Limerick, in 1981, it was explicitly stated that the institution would be required to react directly to the specifications of industry. The World Bank helped to fund the first phase (1981-1987), and the European Investment Bank the second (1987-1993). It was within this second phase that the NIHE was given University status in 1988. The choice of the first Director (later renamed as President) of NIHE was Dr E. Walsh, who was behind the original concept of NIHE/University. Walsh had worked for several years in Iowa State University before returning to Limerick. On his return he purchased 450 acres of land on the outskirts of the city which he then sold to the government along with his concept of technology/industry-based education. Walsh's personal role within the University highlights the determination of Irish government to facilitate the labour needs of TNCs and Irish industry. His ethos and that of the previous Fianna Fail Governments has been to establish academic institutions that service the direct needs of international and indigenous business. Walsh, who is a strong supporter of Fianna Fail and a close friend of many high ranking government ministers, personally believes that most skilled recruitment should stem from universities:

"In the past there have been labour difficulties. You had in Shannon a large skilled manual workforce which was out of step with the labour policies over the past ten to fifteen years. Amongst any skilled manual workforce you always will find a troublesome element. To counter that, we have directly solved the problem by creating a new workforce that will not be troublesome or militant. Technology has solved many problems, in that it has given control back to the companies themselves. But it can not solve all the problems on its own. The only way to maintain international investment is by creating the best possible workforce and that is where the University comes in. We can supply all the labour needs of TNCs in the Mid-West and thus solve all their labour problems. A Limerick University graduate wants to work and also wants to work with their employer, and that is what creates industrial success in Ireland.

"As I said before Ireland is a small country and we can never create employment for everyone so we must be selective. We must give the foreign companies the best and most amenable workforce possible. What we have created here in the Shannon Region is unique in that we are establishing the best possible conditions for international firms.

"We have rid the workforce of unsavoury elements and that in itself has created the best possible basis for success. This is a new phase of industrial growth that is no longer measured in the number of jobs created but instead on productivity gains and creating a highly profitable environment. The type of graduates we produce would never have found work among Irish owned companies. It is the foreign owned corporation that has brought about opportunity for this section of our community" (Interview 20/12/90).

It is clear from Walsh's statement that the task of selling the university package to foreign entrepreneurs has been central to industrial policy in the Mid-West. From its inauguration SFADCo comprehended that in order to flourish it would have to acquire an affiliation of ideological support from the business, political and academic community toward the foreign-owned sector. In relation to the SIE it became apparent throughout the 1970s that the attraction of foreign-owned industry was not sufficient in relation to employment creation. Policy evolution

has catered toward the demands of foreign industry, an example of which has been the growing importance of direct recruitment from the university in order to enhance managerial control. Sklair identified this relationship as the Shannon-Plassey package which he identifies as being:

"in the interest of foreign corporations, whether or not these coincided with the goals of national development"(1988, p.174).

Sklair clearly criticises development in Ireland due to the close connections between international capitalism and those who control economic policy and Third Level education within the MidWest. As one manager noted about his company's relationship with Limerick University:

"We had to replace many of our previous manual workers since they were incompatible to our goal of technological advance. In the Co-op (Limerick University students on placement) students we are looking not just towards their skilled background but to their attitudes. Put it this way we have changed a lot of our technology base of the last ten years and we need results as quickly as possible. The only way to do this is to have a skilled workforce that is prepared to work with management, and that workforce comes from the University. If they work with us we can fully utilise our resources and that is vital in a competitive market. Some people might say that all we are trying to create is a workforce full of firms men, and that is totally true. We don't have time for troublemakers or Trade Unions. What we want is to increase productivity and to function at 100%. SFADCo and the University have promised a workforce that satisfies our goals and that is why we are in Shannon" (Interview 12/5/90).

As noted in Chapters 5 and 6, the impact of technological change has been associated with the continual breakdown within traditional job titles and traditional activities and skills. The redesigning of job functions has meant that many skilled craftworkers need to possess multidisciplinary skills. Within the SIE mechanical engineers and craftworkers have been compelled to acquire computing, electronics and software skills. However, the redefinition of tasks has not been accompanied by a growth in re-training of manual workers within Shannon but instead the recruitment of university graduates. As several managers noted, employing graduates ensures the recruitment of a trouble free and competent workforce in which it has overriding confidence. SFADCo and the University of Limerick are involved in altering the type and mode of recruitment in order to obviate industrially based militancy and enhance productive capacity. This ideological support of foreign industry through the production of a graduate workforce is highlighted within a SFADCo promotional leaflet entitled 'Shannon: A profitable Experience', in which SFADCo promote the ethos of providing a University-trained workforce which ultimately reduced the possibility of industrial unrest:

"The University is now the main source of skilled recruitment in Shannon. The university will gladly provide your labour requirements....it is worth noting that since the local university has become the main source of recruitment 9 out of 10 Overseas Companies in Shannon have not been involved in industrial disputes....in Shannon the recruitment of graduates leads not only to higher

productivity but a lessening of labour costs. The average wage amongst graduates in Shannon is less than one half of those in the U.S." (SFADCo, 1990).

The principle and intent of the University in relation to creating employment has been questioned, rather bluntly, in Hatch 33 the Newsletter of Limerick Centre for the Unemployed which stated in its Easter, 1991, issue that:

"Ed Walsh and his cronies in the University of Limerick are the direct agents of foreign industry. They care little for the unemployed and in truth do all they can to keep unemployed people out of the labour market. They do this by setting up relationships with the major employers which favour their graduates. It is well known that foreign companies have shed many jobs over the years in the Limerick-Shannon area but nobody is interested in this. Instead time and money is spent on giving those from middle-classes the best opportunities. The fact that there are few enough jobs about is itself an injustice, but all the more so when those who get the best jobs come from the University.

"There exists a selective recruitment policy within the area that is based on the recruitment of graduates at the expense of working class youth. The result of this is that the youth of our community are forced on to the dole or into emigration. Ed Walsh claims he is helping to support industry in Ireland when he is really working against the working class. He is trying to create a sterile conservative workforce that is full of yes men.

"Injustice is everywhere in our society but no more so in relation to those who are given employment and those who are not. The University of Limerick is nothing more than a job centre for foreign industry, it does nothing for the majority of people who live in this community and does not wish to".

### 7.2.3 The Co-operative Education Programme

Limerick University presently runs a "Co-operative Education Programme" that seeks to create benefits for students, employers and the University. The students gain practical work and interview experience, increased awareness of the relevance of academic work and an introduction to a potential employer (information supplied by Co-operative Education and External Affairs Division, Limerick University). The employer is also presented with the opportunity to recruit and assess potential full-time employees and to develop links with the student's academic department. The University obtains access to outside resources and facilities and receives important feedback relating to its academic programmes.

Despite the recession and the major cutbacks in employment, the number of graduates finding employment has continued to increase, which in turn has augmented the potential skill level of certain sections of the workforce. The rise in graduate employment must be put into the context of job loss within SIE. During the period 1982-1990 the increase in graduate employment of 583 has replaced a third of the 1382 job losses within the SIE and 50% of the skilled manual positions lost within the same period (data supplied by SFADCo). As noted below the growth in business functions has not been as pronounced as has been claimed and the majority of graduates tend to be involved in either

shopfloor management or direct production (see section 5.2). In relation to the employment of graduates the motivation of managers, operating in Shannon, to provide such employment is not based upon some philanthropic idealism. It is instead based on the dual desire to produce a highly competitive, undemarcated, non-trade union based, highly skilled and motivated workforce. The increasing emphasis which promotes the development of high-technology-based production systems has been the essential turning point in the recruitment of graduates. Although new technologies increase competitiveness they have also wrested control away from skilled manual workers. Limerick University has been successful in providing a suitable workforce, a situation which means that any understanding of productive restructuring is set against the ideological significance of Limerick University. As one manager noted:

"Employing university graduates has saved us thousands of dollars. Firstly we have convinced HQ that the university can supply us with production managers which has meant that staff have not needed to go to the US to be trained. You must also consider that the use of graduates means we get the best labour at the cheapest prices. Ireland is unique. They don't have the industry to employ graduates amongst their indigenous stock so that means a surplus exists for the foreign companies to choose from. The last situation we need is a tight labour market and competition for staff"(Interview 17/8/90).

Between 1985 and 1989 321 undergraduates have undertaken their placement in Shannon and of these it has been estimated that 40% have been offered full-time posts by their training company (Limerick University 1990). The University of Limerick produced 617 graduates in 1990 of which 87% found employment within their first year of leaving university and 5% entered post-doctoral or Masters programmes (Co-operative Education and External Affairs Division, Limerick University).

The criteria by which graduate respondents were selected was based on whether or not they had undertaken placement with a manufacturing firm in Shannon. All 321 graduates who had undertaken placements within the SIE between 1985 and 1989 were contacted. Overall 112 (34.8% of all those contacted) respondents were successfully contacted through the Career Services Unit at Limerick University. The sample was related solely to those who had undertaken Computer Systems, Electronic and Mechanical Engineering, Electronic and Mechanical Production Engineering as these were the main subjects in relation to employment and industrial training within the SIE. These subjects make up 56% of all graduates and highlights the technological base of education within the university. The main emphasis of the respondent based sample was to record employment rates and subsequent work histories of those involved, and the effect this has had upon the Shannon labour market.

#### **7.2.4 Mechanical and Electrical Engineering**

The number of respondents within this sample numbered 71 (63.3% of the graduate sample). 11.2% of graduates within this classification were female and



2.8% of the sample were presently unemployed a situation which promoted D. McGinn, Head of the Co-operative Education Programme, to state that:

"there seems no doubt that engineering is still the professional career with the best long-term prospects of all. I personally know of no engineering from our 1986-1988 output who is presently without a job.

"This new situation has meant that we have raised the profile of employment in Shannon. The days of employing the traditional apprentice will never return. Demand has gone for ever it's supply that is important"(Interview, 21/12/90).

Within the Mechanical and Electrical Engineering sample 37 (52.1%) are presently employed in the SIE. Thirty two of those working in the SIE are employed engineers compared to five who are employed as R+D personnel. A situation which reflected the direction production activity of technical staff employed within the SIE.

Engineering as a source of recruitment as noted above has led to a decrease in recruitment of skilled personnel from the apprenticeship scheme. Graduates and apprentices have similar knowledge of manufacturing industry, but the former are more likely to gain employment due to the familiarity of working within a specific company. The majority of engineers, as noted above, work directly on the shopfloor and are not visible representations of the flexible specialisation argument. Although most have some computing experience only 21% claimed to part/fully program the machinery with which they work. Combined with this, 63% stated that they were not permitted to undertake maintenance of the machinery with which they worked. This would suggest that the engineering recruits are basically being used as direct replacements for the skilled manual workers. For example, the majority of those who work within the industrial estate claimed that they did exactly the same job as that of skilled manual workers who had preserved their jobs. In many ways the engineering graduate is "over" qualified for the post that he/she undertakes, in that their relevant computing and managerial skills are not fully utilised.

The effect of constraining job structures meant that a quarter of the sample had declined job offers or left employment within the SIE. The main grievance cited by the majority of respondents was that the jobs they were given were neither demanding or stimulating. Most felt that their technical background and knowledge of computer systems and management were not fully utilised and ultimately that career structures in Shannon were restrictive. For example, several respondents felt alienated in that they were not involved in decision making in relation to their chosen occupation and that although they were considered as technical staff they were in fact skilled manual replacements. As one respondent noted:

"I undertook my undergraduate dissertation on design and planning in relation to high-tech engineering and now all I do is put computer programmes in machines and make sure they work

properly, its really boring. I would love to have a more research based element in my work but that is controlled in HQ in the US and as long as I have been here nobody has been promoted within my section (Interview, 3/6/90)"

Among the 34 mechanical and electrical graduates who did not work in Shannon 18 had left previous posts in Shannon. Of the remaining 16 four had declined job offers in the SIE. The majority (21) of those who did not work in the SIE had emigrated from Ireland. Overall 19 had migrated to the South East of England or the European Core (including France, Germany and Luxembourg). The failure of the Irish economy to provide prime job opportunities and the constraints of the branch plant economy have led to a redefinition of migration trends. According to this sample migration is the only solution to gaining secure and technically competent posts in which respondents are specialised. Moreover, those who were presently employed in Shannon or who worked for TNCs elsewhere in Ireland received lower wages compared than those who had emigrated. Those who had emigrated earned on average 34.2% higher wages than their counterparts. In relation to wages and other career distinctions a member of staff (who did not wish to be identified) within the Co-operative Affairs division of Limerick University claimed that the role of the engineer was largely proscribed by the dictates of the employers and the confines of the course structure:

"I feel that many of our graduates are under employed. In many ways they are being pressured into posts that they see as advantageous. In reality they have been hand picked and are in relation to their careers the lesser partner. I would like to encourage many of them to broaden their horizons but this is impossible since it would disrupt the relationship we have with foreign companies" (Interview 8/12/90).

### 7.2.5 Production Engineering

The branch of engineering called 'production' is not easily separated from the production function. The production engineer is the technological expert of the production team as well as a trained manager, compared to the mechanical/electrical engineer who works where the product is being made. Within the sample 13 (11.6% of total graduate sample) respondents were identified. In relation to employment within the SIE, production engineers plan and design new production facilities, revamp or revise existing equipment or arrangements, look for ways to improve production methods, speed production, cut costs, or counter new competition. Production engineers appraise the possibility and examine the requirements of new machines and machine tools, oversee any automation exchange and plan the layout of production lines for optimum productivity. The production engineer is an economic specialist and must be capable of justifying production change. Production engineers also deal with the problems of industrial relations on the shopfloor. The production engineer has taken the post originally held by the foreman within many of the plants in Shannon.

All 13 respondents have opted to work in Shannon. In relation to engineering posts the respondents tended to have a different relationship with their employer. All claimed that they were satisfied with their position and that they believed that their technological expertise was fulfilled. This highlights how those with both the most skilled and prestigious posts are fulfilled at work. This group also received an average wage of £16,000 which was well above those of general engineers. These results highlight a division between graduates and points to the general engineer's position as a replacement for manual labour within the STLLM. Unlike the general engineer, production engineers claimed that they fully utilised their breadth of knowledge in relation to information and analytical/problem solving skills and their understanding of new technologies and management, a situation which is emphasised by the high level of contentment.

### 7.2.6 Computer Studies

Twenty-eight respondents (25%) had undertaken employment in Shannon with Computer Studies degrees. Computer programming is commonly divided into systems working at the hardware-software interface and applications, at the software-user interface, but this does not prevent people moving between them, and there are areas of programming which do not fit into either. All the respondents in this sample are systems programmers who may also be called software designers or engineers who work upon the most complex programming systems. This includes writing operating programs, compilers, etc. which are needed to make systems work, and also to translate applications programs.

All systems programmers work alongside the engineering/electronic engineers and may be called software engineers. Most of the programmers in this sample did not write completely new programs, but mainly loaded them ensuring they worked properly and administered maintenance which entails mending, modifying, improving, up-dating and tidying programs which have been in use for some time. Constant minor amendments, extra routines and tidying up complicated systems is all part and parcel of the job. Once the programmer understands the specification, the first step is to break down what the program must do first into separate components, and then step-by-step sequences which must be logical and interlocking, so that there is no ambiguity or missing step. The second stage is to convert each step into instructions in a high level language. Programmers then work straight on to the machine, via keyboard and visual display screen, with all the debugging and testing done continuously as the program is written. The machine has first to put the program through the compiler to convert it to its own code system. This generally produces errors to be debugged, probably several times. Once it runs properly, the program must be tested exhaustively with samples of data to see what errors in logic there may be and ultimately correct them.

The need for programmers is directly tied to the growth in CNC machinery which has been predominant over the past ten years. All of those who employed computer programmers claimed that hands-on experience was essential and that the benefits of the Coop scheme were crucial in relation to this point.

Within the Computer Studies sample all respondents had undertaken employment in Shannon. Only 8 (28.5%) have remained working in Shannon. The main reason for such a high labour turnover has been based on most programmers feeling that the loading of programming systems does not take account of their technical expertise. This has come about due to the lack of R and D opportunities in Shannon. Many respondents feel that working in R and D enables career growth and a greater level of job satisfaction. The job of application in which the initial R+D behind the program is carried out elsewhere by the parent company. Only two of the companies within the sample undertake conception and execution of programming in Shannon. Overall Shannon exhibits a high technology base which needs programmers but not specifically in R and D computer specification. Of the other 20 (71.4%) computer graduates, 10 (50%) had refused employment opportunities in Shannon, 4 (14.2%) had not received job offers and 4 (14.2%) had left employment within the SIE. Five (17.8%) had remained in Ireland, 5 (25%) had migrated to London and 8 (28.4 %) had migrated to the European Core and 2 (7.1%) now worked in the Middle East. The reasons for migrating were similar to those in relation to engineers such as the unsatisfactory career structures and lack of technical sophistication within jobs. As one respondent noted:

"I left on a Tuesday and went up to Dublin on Friday I had a new job which meant an extra £IR 3,000 per year in a job that I actually enjoyed. If I had stayed in Shannon I would have still been doing the same boring job on a lot less money. That's why I did computers, so as I would have independence and control over my career. Computers are an international language which give you a freedom other jobs don't. I could go and work anywhere I wanted" (Interview, 4/5/90).

Another respondent spoke in a similar vein:

"The type of job you got in Shannon had little to do with the breadth of knowledge that you have when you leave college. The job I did was so repetitive and boring, and as for the money that was nothing but a joke. We never did and really designing or re-analysis and that is what I really wanted to work in full time. I left and went to Germany and then Belgium about two years ago. At present I earn over £IR 5,000 more than I would if I had stayed in Shannon" (Interview, 5/7/90).

Although there is a high turnover the number of graduates coming through keeps up with demand. It is interesting to note that over the past three years the Scottish Development Board have continually advertised posts for computer programmers within the Limerick-Shannon area due to an under-supply of Scottish graduates. Computer graduates have been incorporated into the SIE labour market and it is estimated that around 231 are in employment in the SIE (University of Limerick, 1991). This group has become more relevant due to the changes in the technological base in Shannon and have been incorporated due to the rise of CNC machinery. Yet again women are underrepresented and only 1

female respondent was recorded. James Donan the President of the Irish computer Society claims that university graduates are two times more likely to find employment in Ireland than their FAS trained counterparts (Co-operative Affairs Limerick University 1990)

### 7.3 CONCLUSION

Management of TNCs has been fully involved in the introduction of new technologies and its implications for the future development of the firm. In particular the desire of management is to support a selective criteria which has helped create a unique relationship between education and employment (for a contrary view on a national scale see Geary, 1986; Geary and Murphy, 1988). This relationship has been explored in Section 7.2 where the flow of managerial and technical talent has increased in recent years. In effect an internal brain drain has come into existence which strongly benefits international capital.

It is clear that education and training are part of the apparatus of social regulation within Ireland insofar as education and training investment is seen as a precondition for industry (Breen, 1984, 1986; Breen et al, 1986). At the same time it is implied that education and training are necessary to ensure the successful emigration of those who are unsuccessful in the domestic labour market, a similar role to that envisaged in Northern Ireland for education and training (Bean et al, 1986) as a means of keeping unemployment within containable limits. Nowhere is this more true than in the SIE, with the establishment of the technology based University of Limerick and the emphasis on training under the auspices of the national state training organisation FAS. Within Shannon, state policies of education and training, in both the University and FAS have created out-migration because a labour force is being trained for jobs that have been lost through restructuring. For example, technical developments have boosted demand for graduates, reducing the need for skilled apprentices reflecting the polarisation of the labour market. Moreover within the SIE there is no simple application of meritocratic principles. The central conclusion is that the social consequences of technology are rarely the result of the inherent features of technology as its function is based upon social and political criteria which are controlled by capital. This is most commonly witnessed by the manner in the skilled workforce has been transformed and reconstructed (Chapters 5 and 6).

It has been argued that improved education and training are the best means to increase productivity and employment in Ireland because of the close links that exist between education and future success in the labour market (Breen et al, 1986; Breen, 1991). Moreover, in a similar vein, the personal benefits from education and training in maximising individual well-being have also been noted. The aims of training and education in Shannon are twofold: first, to create a trained labour force which is in itself incompatible with the restructured labour market within the SIE. Secondly, training as a route to migration, which seems

to be much more realistic in terms of the opportunities available in the locality where the possession of middle-level qualifications is no guarantee of success in a highly polarised labour market in Shannon which increasingly recruits from highly-skilled and unqualified labour segments.

It is true that the provision of training allowed young people to remain in the locality for a short while. However, measures to increase the supply of trained labour did nothing to address the reduced demand for labour of this type. The training received, in a sizeable minority of cases, was for jobs elsewhere but not for employment in the STLLM.

The SYLM survey has illustrated the links between global and economic forces, labour market restructuring, education and training, and migration. In this locality economic restructuring has broken the ties between success in the labour market and training. Instead of training, as in the conventional view, being linked to the success in the labour market, it appears to over-qualify young people for some jobs and under-qualify them for others and thereby falls between two schools. At the national level, measures to increase certain types of human capital might make sense but in the STLLM investment in training hardly seems to be effective in the ways that would be envisaged by human capital theorists. For young people with second level qualifications and an apprenticeship the accumulation of human capital does not offer a secure path to advancement in the local labour market. Instead the jobs they would formerly have taken have become the preserve of either unskilled workers or of graduates. This challenges conventional nostrums of the utility of training.

In the Shannon area economic restructuring and changing recruitment practices have led to a different outcome where, as has been argued, the possession of educational and vocational qualifications is no guarantee of success in the labour market. Indeed, unexpectedly, those with no qualifications may fare better (at least in the short-term). The processes acting upon the youth labour market in Shannon can be conceived as being a squeezer with the middle segment of school leavers, those with leaving certificates who take apprenticeships and aspire to skilled manual employment, under threat from both unskilled mainly female workers and graduates from the University of Limerick. The STLLM has in the 1980s become polarised into low-skill and high-skill segments. Accordingly, though labour is still trained, there is reduced demand and migration from the area.

The experience of the SYLM suggests ambiguities within education and training policy within Ireland (Clancy, 1982). Education policy, conditioned by the investment in employment policy, is seen as a means to an end. The objective is, by means of human capital, to foster indigenous industry or to attract foreign-owned enterprises. At the local level this policy appears to be mis-guided as the mismatch between the education/training systems and employment access in Shannon is apparent. However, even at the national level, a similar

phenomenon is observable with reference to third-level education where attempts as labour force planning (for example the attempt to increase the output of engineers to meet forecasted demands) has merely ended in increased rates of emigration as demand has failed. At the same time the accuracy of the implicit assumption that education and training are in part preparation for emigration is borne out.

Employment is based upon capital's understanding of gender and educational standing. Moreover, training policies fail to reduce the inequality of recruitment policies. Employers' discernment of training, education and gender roles is based upon labour force compliancy not labour/capital mediation. In effect the localised MSR presently dictates that recruitment should be based upon either the recruitment of low educational and unsophisticated trainees or university graduates. Furthermore, such policies emphasise the manner of augmented significance of education in order to cultivate an industrial disposition. The localised MSR promotes the comprehension of industrial experience through direct involvement during the instructive period. Moreover, education is not based upon general social development but upon the production of a non-antagonistic and numerically flexible workforce.

### 8.0: SUMMARY AND CONCLUSION

Generally in relation to FDI in Ireland policies and practices have created a successful economic structure for TNCs and a highly unsuccessful set of socio-economic conditions. Satisfactory social gains have not been forthcoming due to a TNC-controlled regime of accumulation producing significant increases in productivity which are not associated with a more progressive set of social relations (for an EC perspective see Dunford, 1991; Massey, 1984).

Overall the thesis has concluded that economic and social advancement has been either totally ignored or reversed in relation to distinct groups and classes due to the nature and evolution of the NFR within Ireland. The globalization of economic activity, although responsible for the employment of 90,000+ manufacturing workers within Ireland, has failed to halt a significant growth in unemployment due to increased capital intensity, the emergence of productive structures which are solvent and interchangeable and an insignificant level of economic linkage with Irish industry. Moreover, the productive structures necessary for economic growth and social benefaction within Ireland have not been engendered due TNCs promoting a globalised process of resource reallocation.

The results of the branch plant and labour markets surveys show the importance of locality and of local class conditions in responding to economic restructuring. For STLLM participants the dominant local forces in the beginning were the creation of a working class in the area in the 1950s and the 1960s, the rise of union power on the crest of a world economic boom and comparative ease in attracting foreign inward investment. This was followed in the late 1970s by economic crisis as TNCs struggled to come to terms with international economic disorder. As a result of this crisis, measures were required to maintain the attractions of the area for foreign capital and to respond to the changed labour demands of TNCs. But another strategy, that of investment in technology, was followed as part of the economic restructuring of the 1980s and 1990s.

In some ways the power to influence events was outside the hands of the State as firms located in the STLLM substituted high-cost and possibly militant male labour for female workers. However, it did intervene through the establishment of the avowedly technical University of Limerick. Its existence enabled employers to realise their aspirations to find local labour to cope with the increased application of technology to production. In summary, this put further pressures on the skilled manual segment of the STLLM.

As such distinct social relations have been constituted around the manual section of the workforce. The role of manual employees has been set against the decline in aggregate employment within the SIE, and the 14% decline in full-time employment between 1978 and 1986. In relation to this point the survey of



companies has shown that 66% of job losses among the companies located in Shannon in 1990 have been among skilled manual employees.

In relation to the STLLM there was a 38.5% decline in manufacturing employment between 1975 and 1990. This decline has been paralleled by a growth in male unemployment with Shannon Town from 6% in 1971 to 24.1% in 1990. As shown in Chapter 6, 48.4% of the adult male sample who were unemployed had previously held skilled manual posts, a situation which reflects the extent and nature of restructuring within the area.

As, argued in Chapter 5, 6 and 7 contemporary policies are no longer based upon supporting male industrial workers but upon a new socio-technical alliance which favours the employment of university graduates from middle income backgrounds (Smyth, 1991). Technical upgrading is in itself not the basis of a new regime of accumulation but an attempt by capital to reorganise shopfloor activities and promote competitiveness (Hudson, 1992).

The net result has been the destruction of traditional male employment and the former modes of entry by young people to the STLLM. Economic restructuring has weakened the position of males and young people, especially, seeking to enter traditional employment. Paradoxically, State intervention in the labour market has been contradictory. Policies, such as training for skilled manual employment, associated with one round of accumulation, are contradictory in the light of changes in the labour market which have led to occupational polarisation and the loss of this kind of work to female unskilled employment on one side and graduate employment on the other. Training for employment might be a dominant paradigm in the rest of Ireland, but in the STLLM it is not the panacea that might have been imagined by the State nor the young people who receiving it.

As shown within the SYLM survey high-rates of out-migration (38.2% within the survey) emphasises the long-term effects of employment decline within the STLLM. Furthermore, as shown within this sample those who have not received advanced educational qualifications or training are more likely to be in employment. Such findings are not replicated within the graduate survey. Graduates are 3 times as likely to be in employment as SYLM participants, an employment feature which reflects the 3-fold increase in graduate employment within the SIE since 1981.

SFADCo has an ideological openness and desire to promote foreign capital a feature of its policy making in which it has been wholly successful. For example, it acknowledges that production skills and manufacturing capabilities have become decisive in relation to perpetuating international competitiveness. International competitiveness depends on economic and industrial performance and the need for local regulation and restructuring. In order to restore investors confidence and ensure the reproduction of the SIE, SFADCo opted for a policy

which was overwhelming concerned with augmenting capital accumulation through funding the 'electrical engineering' sector and supporting the technical training initiatives within Limerick University. It was argued by SFADCo that the engenderment of structures which favoured the employment of female and technical workers not only removed conflict between skilled workers and capital but also stimulated employment practices which increased the competitive capabilities of the SIE branch plant economy.

Internationalised forms of management and the logic of managerial control must be identified as actually creating disequilibrium and should be addressed by developmental criteria which promote full employment. In order to overcome disequilibrium the benefits of economic development must be directed towards Shannon as a locality. A process which should be encouraged through the creation of democratic structures which encourage local participation within the economic decision making process.

### **8.1.1 TNC-Led Forces of Production**

The development of TNC-led forces of production has distinct social costs, a feature that is identified by the eradication of 40.6% of skilled posts within PMS 2 companies. New work practices have undermined the role of the traditional manual worker and reduced labour's role, a process that is related to trade union decline, the growth of the University-based labour market and the creation of a technological framework that does not facilitate the active commitment of manual employees.

Female employment has fared better in that gender has been used as a divide and control mechanism in relation to employment opportunities. Such high level of segmentation within the Shannon labour market reflects the high level of productive reorganisation instituted by FDI. Moreover, women workers have been extensively excluded from admittance to skilled and highly paid posts. However, the basis for skill distinctions is not a simple technical matter. Within Shannon, skill definitions are permeated by gender bias, a predicament for women which is fully exploited by TNCs. Overall, gender is exploited as a means of labour market control that segments and divides labour and decreases skill manual dominance. Female employment reflects the fragmented nature of varied productive processes.

It is clear that in relation to the STLLM the previous MSR based upon the employment of skilled manual workers has been dramatically altered, a feature which has directly affected the character of unemployment growth. New tendencies within the accumulation of capital and the need to promote increased productivity has directly affected the political economy of the SIE. In effect localised structures and control mechanisms over labour have been constantly reproduced and modified. The inactivities of job loss and the duration of unemployment are only two measures of the personal costs associated with

economic and social dislocation. As shown in Chapter 6 workers not only lose jobs, but in many cases the new job they eventually acquire do not provide as much income or status.

In relation to Shannon a distinct production process based upon the accumulation of capital by TNCs has been related to a localised set of socio-economic structures which guarantee a balance within class forces. Shannon, as a society, changes as employers seek to adopt changing markets, competitive conditions, new technologies and restructured work practices. It is evident that the re-working of TNC-controlled accumulation strategies is accompanied by increased segmentation and disequilibrium within the STLLM insofar as the sustainment of location is contingent upon TNC labour demands. More importantly, it is clear that job allocation by TNCs is a principal means of social stratification due to labour demand being set independently from labour supply.

A major element in the emergence of a more flexible workforce has been the alteration of the role played by skilled manual workers within the SIE due to the emergence of technical staff capable of transferring across the previous skills demarcations and the rigidity and inflexibility within trades. Previous to the contemporary flexible MSR, skilled manual employment impeded the implementation of a production process more compatible with shifts in markets and competitive pressures. Moreover the socialisation of labour affects the competitiveness of firms not just in terms of the cost of input (labour power) but also in terms of how these units can be used.

This more flexible MSR is based upon the Fordist principle of unit cost reduction, capital utilisation shift working, weekend working and the inclusion of contractual hour, accompanied by the greater use of contract/semi-skilled workers, whose technical control is facilitated through machine modification and a complex set of shift patterns. This process of work redistribution ultimately leads to high levels of social modification.

Individual orientation of technical workers undermines the solidarity and bargaining power of organised labour. Segmentation within the SIE labour market has been extended due to the replacement of skilled employees by technical staff due to a process which casts less skilled-employees into employment which is of a less stable and secure nature. Technical-based recruitment has increased productivity due to a new and extended supervisory role over manual staff. Technical staff are relied upon to facilitate a reorganised but specific production process due to their inherent skills being used to permit greater control functions on the shopfloor through re-integrating older and newer technologies.

It is clear that the labour market, as an institution, is not internal and self-sustaining but directly influenced by external and socio-political pressures. In criticising 'flexible specialisation' theories it is also evident that FDI is not

centred upon the mutual prosperity and co-operation of labour and capital through stimulating local pools of expertise (Brusco and Sabel, 1981; Hirst and Zeitlin, 1991; Sabel, 1989). FDI is not locally co-ordinated and integrated within the STLLM. Furthermore it is evident that in relation to embeddedness, Shannon as a locality depends upon TNCs more than TNCs depend on Shannon due to the nature of external ownership and control and the fact that the context of the division of labour within the SIE provides employees with little knowledge or control over arcane details of technical markets and investments elsewhere.

Flexibility is used negatively, through weakening trade union representation, reducing the involvement of manual workers, promoting unstable employment relations, reversing social gains and stimulating high levels of social dumping. These flexible production strategies have been centred upon global automation and computer integration, the removal of workplace skills, advanced fragmentation of the labour market and the use of relatively high levels of unemployment in order to maintain labour market discipline and competitiveness (Leborgne and Lipietz, 1990). As noted by Martinelli and Schoenberger

"the erosion of the power of organised labour and the dismantling of important protections acquired after decades of struggle. This weakening of organised labour is partly achieved by means of an increased segmentation of the labour market...We believe that this increased precariousness of labour is a major underpinning of the new model of regulation (1992, p129-130)

### 8.1.2 The Applicability of Regulation Theory

The understanding of the relationship between labour market processes and other economic and social phenomena has been improved in recent years due to the advent of Regulation Theory. Regulation Theory, permits a fuller informative analysis of the capacity and function of job reorganisation/modification both internationally and locally. Through identifying localised crisis tendencies (labour hostility/branch plant reorganisation/recomposition of skills hierarchies) the role of capital accumulation is placed within a suitable framework of analysis. This framework, in turn, permits an analysis of the highly complex yet dynamic process of labour market and capital constitution and reconstitution (Aglietta,1979; Boyer,1990; Lipietz,1987, 1988).

As with other European examples there has been a transformation within workplace structures through the reproduction and modification of pre-existing labour systems and capital investments (Amin and Thrift, 1991; Bardou et al, 1982). The contemporary MSR within the STLLM is centred upon a form of labour flexibility which maintains the dominance of capital over labour through the social dumping of wage earners who are not compatible with reorganised

production (for a European context see Dunford and Kafkalas, 1992; Preteceille, 1990). As shown in Chapters 5 and 6 the decline in the relative position of skilled manual employees has been centred upon what Swyngedouw (1992) terms as 'disempowerment and subordination'.

Subordination which is related to the transformatory nature of the regulatory mode within the SIE, a regulatory mode confined to producing a unity between productivity growth, multi-skilling and the degradation of skilled manual tasks. This has been achieved through altering the system of domination removing skilled manual concessions and re-modifying inflexible recruitment and demarcated skills structures. In effect the emergence of functional and numerical flexibility has been reflected in the sphere of technological development and the re-casting of the nature of labour input. It is also evident that the labour processes presently underway generally emphasise a renewed phase of FDI-led industrialisation (Boyer, 1988).

The contemporary MSR within Shannon is multi-dimensional and includes methods of wage and income determination, employment and recruitment modification, changing methods of production, new divisions between mental and manual labour and control over work being continually concentrated in the hands of technologists and managers (for a larger EC perspective see Leborgne and Lipietz, 1988). However, the skills and human resources of the STLLM are the major determinants of its developmental potential, a potential which has been removed by a process of rationalisation and re-modification of mass production based industries. A process which excludes large sections of the working class from participation within the SIE.

However, Regulation Theory needs a greater understanding of class composition and reorganisation (Sayer and Walker, 1992). This should be achieved through supplying more detail on the tendency for variation across time and space, and the tendency for contradictory processes to destroy conditions of their own further development (Boyer, 1988). Analysis of social regulation must strive to explain the cohesion of the whole order and its maintenance especially with regard to the organisation of collective forces, the unification of ideologies, socialisation and the cultural essence of society.

## **8.2 THE NATIONAL LEVEL**

The politically dominant NFR of accumulation augmented by TNCs has also been highlighted by its generally ungovernable nature of profit repatriation etc. The low level of value added and linkage creation also heralds the failure of the Irish state to create a non-dependent regime of accumulation. Furthermore, the failure to create sustainable and non-dependent development reflects the power relations which are dominant within globalised production systems, and as noted in Chapter 5 the continuation of dependent production actually removes

the evolution and participative leadership needed to create shopfloor democratisation.

The socio-economic conditions examined within the STLLM are also reflected at the national level. The growth in unemployment and the failure of productive reorganisation to produce socio-economic benefits is a nation-wide experience. Overall the low level of capital retention, the failure of Ireland to control its own productive resources and the growth of a distinct socially objective mode of accumulation has reduced socio-economic growth within the Irish economy. An inequality in productive structures is further emphasised by the conditions of reproduction. The changing nature of labour conditions as effected by variations within the inter capitalist system and its broader structural organisations. Such relationships highlight the reproduction of socio-economic structures which actually shape the space economy through technical and social developments.

The extent of the socio-economic crisis within the Irish economy is reflected in the nature of labour force participation and unemployment growth. The Irish unemployment rate has consistently been much higher than the EC average, with the differential widening during the late 1980s and early 1990s (O'Toole, 1993). As is shown in Table 8.0 employment as a percentage of the total population has fallen from 35.7% in 1970 to 32.1% in 1990. Moreover, in the same period there has been a 8% fall in active labour force participation. In relation to European OECD countries employment as a percentage of the labour force was 5.9 percentage points lower in Ireland (OECD, 1993).

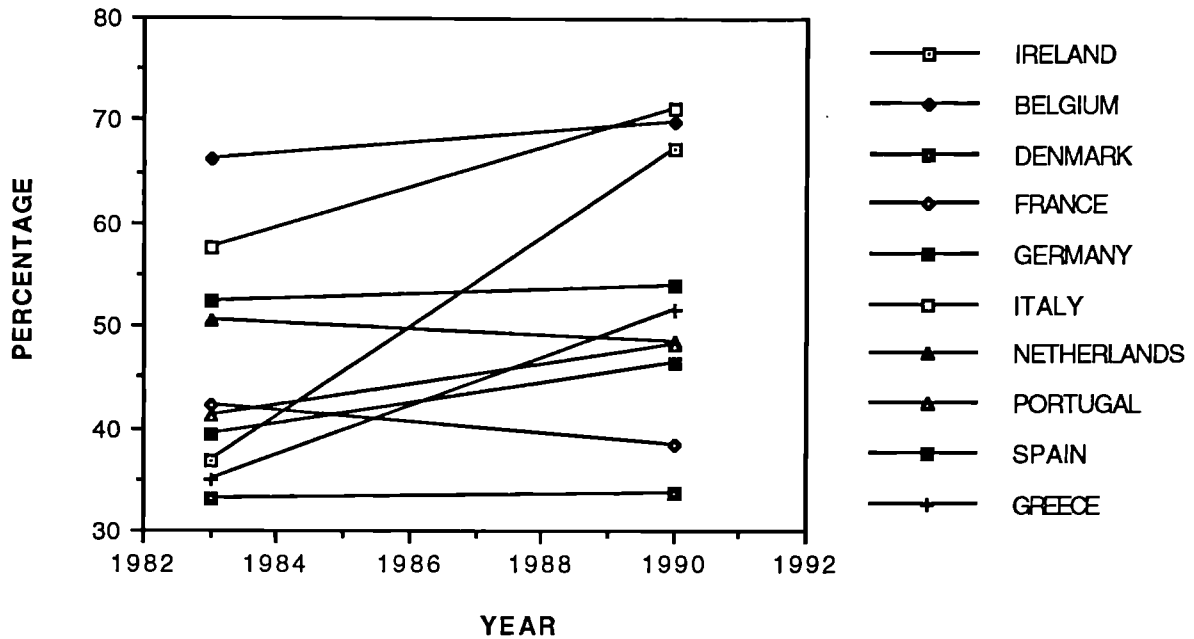
**Table 2.0 a Employment and Labour Force Participation in Ireland and European OECD Countries.**

	1970	1980	1990
EMPLOYMENT AS A % OF TOTAL POPULATION			
IRELAND	35.7	34.0	32.1
OECD EUROPE	40.7	39.7	40.9
EMPLOYMENT AS A % OF THE LABOUR FORCE			
IRELAND	94.2	92.7	86.3
OECD EUROPE	96.7	93.7	92.2

Source: OECD (1993).

Irish unemployment statistics make for disturbing reading with the current Irish unemployment rate almost twice the EC average. The structural severity of unemployment has also been reflected in the extent and composition of long-term unemployment (those unemployed for more than 12 months). In comparison with other EC states Ireland has produced the highest growth in long-term unemployment from a below average 36.7% in 1983 to the third highest rate of 61.2% in 1990 (Figure 2.0).

**Figure 2.0: Percentage of Long-Term Unemployed (1983-1990)**



Source: OECD (1993)

In recent years the primary objective of the inward investment programme has been to secure from TNCs, at an acceptable cost to the Irish exchequer, a direct contribution to the Irish economy in terms of sustained highly-skilled employment and increased input of local materials and services. One of the major incentives used to achieve these objectives has been non-repayable cash grants paid to TNCs by the IDA and SFADCo.

As is shown in Table 8.1 TNC-based employment has remained relatively static in the period 1980-1991. However, within the same period the TNC-controlled sector shed 90866 jobs. Such a high level of employment change and recomposition has had obvious repercussions for labour markets directly affected by closure and rationalisation. Employment gains have largely been dissipated by losses. The number of jobs lost per 1000 within the TNC sector has risen from 4 per thousand in 1979 to 49 per thousand in 1990 (see also ITGWU, 1990; O'Hearn, 1987).

Of the 848 foreign-owned (non-food) manufacturing firms located in Ireland in 1980 employment has continually fallen from 91,020 to 58,785 (-35.5%). These firms had previously employed 112,992 at their respective peaks (mostly in the late 1970s) and had experienced net job losses of 35,212 (-31.1%) prior to 1980. In the period 1980-1992 these companies received £IR 222.4 million in additional grants.

An additional 712 foreign-owned plants undertook location in Ireland between 1981 and 1992 and were in receipt of £IR 479 million in grants. By 1992 25.5% had closed. This sub-set produced 64,280 jobs of which 15,621 had been lost by 1992 (-24.3%). A total of 88,385 jobs were approved for these companies of which 34,484 (39.0%) were created (author's calculations from IDA data). A situation which supports the argument that a poor correlation exists between State expenditure on industry and net employment creation.

**Table 8.1: Aggregate Overseas Manufacturing Employment and Yearly Gross Gains and Losses (1980-1991)**

YEAR	AGGREGATE EMPLOYMENT	GAINS	LOSSES
1980	95301	8552	7941
1981	94132	7677	8846
1982	92972	6840	8000
1983	89263	7536	1124
1984	87117	7535	9681
1985	85140	6907	8884
1986	85230	6647	6557
1987	84323	6069	6976
1988	87328	7694	4689
1989	91048	8392	4312
1990	93308	8246	6346
1991	94320	7790	6778
TOTAL GAINS/ LOSSES		89885	90866

Source: Data supplied by the IDA and SFADCo (1993)

The failure to generate significant employment growth at the national level emphasises the similarity of conditions within the SIE. Furthermore, the NFR has also promoted deficit spending problems for the Irish state. State financing and the high levels of fiscal support given to TNCs (£1.4 billion in taxes foregone 1992) has failed to reduce unemployment levels.

#### **8.4 CONCLUDING REMARKS**

It is clear that the global hierarchy of cores and peripheries is continually underlined by a global division of labour and an interstate socio-economic regime of reproduction. It is evident that competition and innovation is a common organisational form among TNCs who take advantage of economies of scale/speed through monopolising innovative technologies (Schoenberger, 1988).

The need to provide more representative jobs through increasing and integrating the range of direct and indirect tasks performed by manual employees is a fundamental need for Irish society. Representativeness should be merged with accountability within the economy in order to meet the main social and economic aspirations of the nation especially in regard to the elimination of poverty and a significant reduction in unemployment and emigration.



The creation of a single European market without minimum social legislation and workers' consultation rules has allowed TNCs to choose to concentrate production in the places where it can exact the greatest concessions from the workforce and to use the national and local government subsidies offered to secure better deals elsewhere. Such moves are partly occasioned by the restructuring of economic activities within the single market. Removal of non-tariff barriers makes it easier to supply the European market from fewer locations and further reduces the incentive to locate inside national markets.

Competition to attract and retain investment has intensified. Localities and national governments bid against each other through subsidy wars. Each seeking to offer higher tax concessions, higher grants and so on, taking into account differences in the attractiveness of locations for investors in terms of wages, skills and access to markets. Such EC-wide competition for limited global investment is wasteful and irrational. The globalization of economic life and the parallel localisation of politics, as national governments lose economic sovereignty and local economic initiatives proliferate, reinforces this process and creates major asymmetries in power as single TNCs negotiate with a multiplicity of competing local political actors. Major investors can exploit this one-to-many game, playing one location off against another and using concessions from one to exact greater concessions from rivals. Furthermore, in many cases subsidies are given to investors in sectors in which there is excess European capacity, consequently displacing capacity and jobs in other EC countries.

There is a need to control incentives competition. But there is also a need to find new means of leverage over investment locations in order to equalise developments throughout the EC. One way forward is for governments of peripheral areas to co-operate and set targets for investment in different areas, which are then implemented in planning agreements made with all major European firms and inward investors. Any subsidies could assume the form of equity contribution that give local communities a stake in local investments.

Such steps would require a countervailing political power, as an alternative to territorial competition, at the supranational level at which capital and finance operate. What is also required is an effective strategy for full employment. Power could also be moved downwards to regional authorities concerned with indigenous development. This could involve regionalised public investment decisions, integration of TNC investments into communities, and local content rules to limit 'hollowing out' and value added and strengthen local multiplier effects.

In conclusion it is clear that the EC needs to integrate responsibility for industrial policy, to end the senselessness of peripheral regions with scarce resources competing to attract mobile investment. Furthermore, the downside of foreign investment needs to be tackled. Tax evasion and the use of Irish resources to

create economic growth elsewhere must be controlled through company law reform and a more democratic social partnership between the public and private sectors.

A5 Irish company designing and manufacturing telecommunications. This company was originally US owned but was bought out by Irish management.

A6 Assembly of smoke alarms and home security devices. Most manufacture takes place in USA. Products assembled in Shannon are moved into US market.

A7 Assembly and part manufacture of computer parts (chips/capacitors/wafers) Crucial manufacturing undertaken in Pennsylvania, U.S.A.. Final goods sent to EC and world market.

A8 Electrical parts assembled and part manufactured for the automotive trade. Parts analysis and distribution manufacturing completed in California, USA and Puerto Rico.

A9 Assembly of various switchgear which is used in special industrial engines. Crucial stages of manufacturing are located in Austria. Location in Shannon is largely based upon gaining access to EC markets.

A10 Assembly and manufacture of connectors and various components. Parent company in Illinois, USA permits control functions in Shannon. A mixture of final assembly, complete manufacture and R and D.

A11 US company which produces designs and manufactures controls for computers. One of the most sophisticated companies located in Shannon.

B1 Manufacture of Deburring machines and surface measurement instruments. R and D based in USA

B2 Assembly of manufacture of special solid carbide tipped cutting tools. R and D in London.

B3 Assembly and manufacture of industrial crane-safety equipment and vehicle weighing equipment. Shannon is the sole division of the company specialising in these goods.

B4 Manufacture and assembly of plumbing/automotive tools and equipment. Shannon used as EC distributor.

B5 High precision tools manufacture for EC market

B6 Irish company that undertakes all stages of dental equipment manufacture.

B7 Assembly of internal gear in rotary pumps. Manufacture divided between Shannon and US plants.

B8 Manufacture of high precision machine tools which are sold to EC market.

B9 Manufacture of tools, precision moulding, general engineering, painting and coating of various metals.

B10 Manufacture of laboratory gas generators and precision metering pumps. Final products sold onto the EC market.

C1 Sorting of natural and synthetic diamonds and other superhard abrasive products. RSA company exploiting niche in EC market.

- C2 Printing and bookbinding of international manuals and promotional goods.
- C3 Manufacture of chemical products for agricultural industry. Sophisticated manufacture takes place in UK.
- C4 Manufactures plastic bag enclosures

Appendix 8: Companies who left Shannon industrial estate 1979-1990

Air Shields Europe    Airtech Ireland Ltd    Apatial Ltd    Avonmore Enterprises  
 Brookfield Inst. Ltd    Butt Knit    Clare Bio-Medicals    Compugraph Int.    Danepco  
 Decenty Ltd    Devcon Ltd    Electrovert Europe Ltd    Ezi-Diaroc    Foster Wheelan    Killeen  
 GAC Ltd.    Glo-Flo Ltd    Healthdyne    Kates Canada    Killeen Ltd    L and B Eng.    Lab Data Control  
 LDC    Mascon Int. Ltd    Mitel Delta Comm.    Molex    Morton Plc.    Norton Christensen Ltd  
 Oxy-Dry Ltd    Raymen Int. Ltd    Retos Ltd    SAI International Ltd.    Shannon Wire Weavers  
 Shannon Prec. Eng    Simpson Europa    S.M.T Ltd    Thormac Ltd    Unitrode B.V    Vitcom Magnetics  
 Western Gear PLC.

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