NESC REPORT NO. 28

SERVICE-TYPE EMPLOYMENT AND REGIONAL DEVELOPMENT

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NATIONAL ECONOMIC AND SOCIAL COUNCIL

Service-type Employment and Regional Development

No. 28

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- 1. The main task of the National Economic and Social Council shall be to provide a forum for discussion of the principles relating to the efficient development of the national economy and the achievement of social justice, and to advise the Government, through the Minister for Finance, on their application. The Council shall have regard inter alia. to:
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 - (ii) the attainment of the highest sustainable rate of economic growth,
 - (iii) the fair and equitable distribution of the income and wealth of the nation,
 - (iv) reasonable price stability and long-term equilibrium in the balance of payments,
 - (v) the balanced development of all regions in the country, and
 - (vi) the social implications of economic growth, including the need to protect the environment.
- 2. The Council may consider such matters either on its own initiative or at the request of the Government.
- 3. Members of the Government shall be entitled to attend the Council's meetings. The Council may at any time present its views to the Government, on matters within its terms of reference. Any reports which the Council may produce shall be submitted to the Government and, together with any comments which the Government may then make thereon, shall be laid before each House of the Oireachtas and published.
- 4. The membership of the Council shall comprise a Chairman appointed by the Government in consultation with the interests represented on the Council,

Ten persons nominated by agricultural organisations,

Ten persons nominated by the Confederation of Irish Industry and the Irish Employers' Confederation,

Ten persons nominated by the Irish Congress of Trade Unions,

Ten other persons appointed by the Government, and

Six persons representing Government Departments comprising one representative each from the Departments of Finance, Agriculture and Fisheries, Industry and Commerce, Labour and Local Government and one person representing the Departments of Health and Social Welfare.

Any other Government Department shall have the right of audience at Council meetings if warranted by the Council's agenda, subject to the right of the Chairman to regulate the numbers attending.

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- 6. The Council shall have its own Secretariat, subject to the approval of the Minister for Finance in regard to numbers, remuneration and conditions of service.
- 7. The Council shall regulate its own procedure.

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Service-type Employment and Regional Development

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PART I

THE COUNCIL'S COMMENTS ON "SERVICE-TYPE EMPLOYMENT AND REGIONAL DEVELOPMENT"

1. Introduction1

1. In its Report on Regional Policy in Ireland² the Council stated that it would commission research into a number of areas, including "the likely benefits and costs of a policy of encouraging regional decentralisation of employment in the services sector".

2. Accordingly, the Council commissioned a study with the following terms of reference:

- (i) to isolate and define categories of service-type employment which have a proven capability for stability or growth, which are not strongly tied in their location and which could be influenced in their location through regional incentives, the provision of facilities or Government direction;
- (ii) to examine existing policies for service-type employment in other countries and the potential for attracting internationally mobile services to Ireland.
- 3. The study by Dr Michael J Bannon and Mr James G Eustace of the Department of Town Planning, University College, Dublin, and Ms Mary Power of the Planning Department, Offaly County Council is published in full in Part II of this report.

11. Summary of the study

4. The focus of the study is service-type employment. This consists of all types of work in the service sector (e.g. in transport, finance, public administration) together with the "non-production" occupations within the agricultural and industrial sectors (e.g. transport and financial occupations). Four categories of service function are distinguished: old, new, complementary and industrial. The study concentrates largely on trends in employment during the decade 1961–1971, although broad trends since 1971 are indicated. Table A summarises the principal trends in the 1961–71 period, and shows how "service-type" employment cuts across the classification of employment by industrial sector. While there were 459,000 employed in the service sector in

*NESC, Regional Policy in Ireland: A Review, Report No. 4, January 1975.

^{*}A draft of these comments was prepared by the Regional Policy Committee and discussed and amended by the Council at its meetings on 21 October 1976 and 18 November 1976.

Ireland in 1971, in the same year there were 491,000 in "service-type" employment.

- 5. Growth of Service Sector Employment. In most countries, the service sector (the largest component of service-type employment) has in recent years accounted for an increasing proportion of total employment. In a sample of countries (including Ireland and comprising developed and less developed countries), around 1971 the service sector accounted for over 40% of total employment in twelve of the fifteen countries. In six of the countries, the service sector share of employment exceeded 50%. There was an increase in the service sector share in all countries between 1961 and 1971, with the exception of the United Kingdom where the share was static. In Ireland between 1961 and 1971 the service sector share increased from 39·5% to 43·5%. Published estimates indicate a continued increase in the share of the sector up to 1975.
- 6. Service-type Employment in Ireland. Between 1961 and 1971 there was a total increase of 108,700 in employment outside the agricultural sector. Over 50% of this increase occurred in service-type employment, of which about one-third was in the industrial services. In 1971 the industrial services accounted for 25% of employment in the industrial sector as a whole and for 30% of employment within manufacturing industry. By 1971, service-type employment in all sectors accounted for 491,000 or 47% of total employment compared with 434,000 persons at work or 41% of employment in 1961. Thus, service-type employment increased by 13% between 1961 and 1971.
- 7. Within service-type employment in Ireland, the greater increases in numbers were in professional services, industrial services, public administration and defence, and in finance, insurance and business services. The losses occurred mainly in the personal service group which declined by 8,900 jobs between 1961 and 1971, principally due to the loss of jobs in private domestic service. Employment growth occurred mainly in the industrial, complementary and new services which tend to expand in step with increases in the volume of production and per capita income.

TABLE A
Employment Trends, 1961-71

		1971	Percentage change, 1961-71
Industrial Sector		000	%
Agriculture, Forestry and Fishing		273.1	−28.0
Industry (a)		322.7	+25.5
Service		459·0	+10.4
Total		1054-8	+ 0.2
Occupational Group Producers, Makers, Repairers		563-9	- 8.8
Service-type occupations, i.e. 'non-producers'		491 ∙0	+13·1
Total		1054.8	+ 0.2
White-collar employment (within service-type occupations) (In office occupations	(a)	334-2	+21.7
(within white-collar occupations)	(d)	170-3	+37.4

Note: (a) Including Building and Construction, and Electricity, Gas and Water (b) White-collar is defined in paragraph 8.

Source: Table A.5.

8. Growth in White-Collar Employment. The term white-collar refers to occupations such as those in professional, technical and administrative work. In 1971, white-collar employment was 334,200 or 32% of total employment (compared with 26% in 1961). Most of the increase in service-type employment occurred in white-collar jobs. White-collar employment increased by 59,700 between 1961 and 1971, and accounted for 55% of the 108,700 increase in employment outside agriculture between 1961 and 1971. White-collar employment expanded in all sectors of economic activity¹.

¹Between 1961 and 1971, white-collar employment in the Recreation Group and the Defence subgroup proved a minor exception.

9. Expansion of Office Employment. In 1971 there were 170,300 persons in office employment. Most of the growth in white-collar employment in Ireland, as elsewhere, is due to the expansion of office occupations. In the Republic of Ireland, office employment has grown from 12% of persons at work in 1961 to 16% in 1971. The increase of 46,300 in office employment during 1961–71 accounted for 43% of the total growth of employment outside agriculture, and for 78% of the growth in white-collar employment. Within office occupations, the higher level categories (i.e. broadly the professional and administrative jobs) expanded more rapidly than did the clerical jobs. Most of the growth of office employment occurred outside public administration and defence.

- 10. Location of Occupations. In the period 1961–71, there was an increasing concentration of white-collar occupations in the East region: in 1971, 49% of the 334,000 white-collar jobs were located there. In the same year, this region accounted for 59% of all office employment. The higher-level (e.g. professional) office occupations have tended increasingly to be located in that region.
- 11. Projected trends, 1974–1986. Since more up-to-date statistics are not available, extrapolation from 1971 was attempted to illustrate the implications of a continuation of past trends. Past trends in white-collar employment, based on the 1961–71 decade, would result in an estimated 118,000 further jobs in 1986, of which about 105,000 or 89% would be in office occupations. Office employment would then account for approximately 25% of non-family farm employment as projected by Walsh¹, compared with 21% in 1971.
- 12. The concentration of white-collar employment in the East region would increase, since its share of the total would rise from 49% in 1971 to 52% in 1986. The Mid-West region would be the only other region expected to increase its share. Past trends also suggest that in the future, the East region's percentage share of total office occupations would decline slightly, as would that of the South-West. Within all of the regions, office occupations would increase as a proportion of white-collar occupations between 1971 and 1986. The proportion of
- Cf. NESC, Population and Employment Projections: 1971-86, Report No. 5, February 1975: projection 1 based on net emigration of 5,000 p.a. over 1976-86.

- professional, technical, administrative and executive occupations in the East region is projected to increase by 1986 to 52%, the proportion in the Mid-West to remain constant at 8%, and the proportion in the remaining regions is projected to decline. The slight decline in the projected share of office employment projected for the East region would appear, therefore, to be in the lower-order clerical occupations, while the concentration of decision-making occupations in that region would be intensified.
- 13. Communications and Location. The exchange of information and the locus of decision-making are vital to regional development. Complex decision-making, which involves interaction between decision-makers, is principally confined to the relatively large urban centres. Smaller urban centres are dominated by routine communications. Many European governments are currently attempting to relocate complex Public Service work in an effort to foster regional development and attract private sector decision-making to regional centres. This work requires a large volume of communications. In Ireland, relocations have tended to involve routine work, while decision-making and higher level jobs have continued to be concentrated in Dublin.
- 14. Summary of Consultants' Findings. The principal findings can be briefly summarised as follows:
 - (a) Service-type employment and, in particular, within this category, employment in white-collar occupations (especially the office occupations) has expanded significantly in all branches of economic activity.
 - (b) Higher-order white-collar employment (i.e. professional, technical, administrative and managerial work) is an area of rapid growth in all countries including Ireland.
 - (c) Employment in the higher-order office occupations is increasingly concentrated in the East Region.
 - (d) The small content of higher-order white-collar work, especially that engaged in decision-making, in centres outside the East region adversely affects the innovative capacity and development potential of the other regions.
- 15. Summary of Consultants' Recommendations. The consultants list a number of strategies to reduce the degree of concentration of offices

in the East region, and to promote office activities in those regions where there is a dearth of office jobs at present. Any combination of the different strategies could be used. These alternative strategies include the attraction to Ireland of a greater share of the technical and managerial functions of foreign manufacturing concerns which wish to set up in Ireland, and the delegation of authority to regional units of central agencies.

16. These strategies could be implemented by an agency responsible for the location of office activities. This agency could take a number of different forms: the consultants recommend an Office Executive. This would operate within the Industrial Development Authority. The consultants recommend that, within the context of existing agencies, the Industrial Development Authority have regard to office employment creation (as well as creation of employment in goods production). The Office Executive should have responsibility, among other things, for assisting in, and advising on, public sector office relocation, and attracting to selected centres within Ireland, part of the white-collar work of overseas organisations.

17. In the short-term, relatively few office centres could be developed outside Dublin. Widespread dispersal would be very costly and would be unlikely to encourage the transfer and relocation of higher-level work. The consultants suggest that relocation in the public sector might serve to encourage relocation in the private sector. But they emphasize the importance of providing adequate infrastructural services particularly in communications, in any centre to which relocation is envisaged. In advance of any decision on relocation, they consider it essential that a detailed examination should be undertaken of the communications requirements of the staff to be relocated, and of the capacity of the receiving centre to provide the necessary level and quality of services. This is needed if efficiency is not to be reduced. The consultants emphasise that relocation of decision-making functions is essential to regional development: in this way, relocation would also involve decentralisation of power.

18. In order to stimulate the expansion of office employment in selected centres, the consultants suggest a number of possible incentives.

111. The Council's Conclusions and Recommendations19. The study is concerned with medium-term issues. It shows the

extent to which service-type employment in Ireland has grown, and (based on the experience of Ireland and of other countries) the extent to which this type of employment is likely to increase in the period up to 1986. This classification of "service-type employment" is a fruitful one, because it includes service-type employment in industry as well as in services as normally understood. The role of its sub-category—"white-collar" jobs—is important. Most of the growth in Service-type employment has been in white-collar jobs, and in turn the great majority of these have been in offices. The white-collar jobs can be important in a regional context, especially to the extent that they involve high level decision-making and therefore increase the innovative potential of the regions. Moreover, the per capita income in these jobs tends to be higher than average.

20. The consultants' projections indicate that white-collar jobs will continue to grow, and could account for about one-third of the additional employment which, it has been projected, would be required over 1971–86. But these white-collar jobs would account for a higher proportion of the associated increase in real national income.

21. A sustained growth in white-collar employment can be expected only in urban centres which are, by Irish standards, of substantial size. It is noteworthy that office relocation policies in Europe have favoured centres of at least 100,000 population (section 5.9). Service-type employment is not capable of being spread as widely as manufacturing employment. If the centres for office development are too small, there could be continued leakage back to the Dublin region of the management and administrative functions. If there were sufficient support facilities in regional office centres, then it is more likely that there would be a devolution of decision-making by foreign companies to their subsidiaries in Ireland.

22. While Ireland is a relatively small country, there are a number of reasons why an increase in office work in regional centres would be desirable. First, it is Government policy to pursue the development of the regions. Second, there is the example of other relatively small countries which have pursued policies of office development in the regions. Third, there is the great urban imbalance between Dublin and

³That is, 300,000 to 340,000 (see NESC, op. cit., 1975).

other areas. At the same time there is a mismatch between job opportunities and labour availability in the country: most of the job opportunities in white-collar and in office jobs have been occurring in the East region, but there is a widening gap between job creation in manufacturing industry and the appropriate labour supply in this region, while white-collar job opportunities are limited in other regions¹.

23. The primary objective of regional development is to remove, or at least reduce, regional inequalities in living standards and opportunities, within the overall national objective of full employment at rising living standards. The achievement of this objective requires the creation of employment opportunities and amenities in particular places and regions. In its report on *Institutional Arrangements for Regional Economic Development*² the Council stated that this objective could not be achieved by any single body or agency, but required a coordinated effort by the relevant Government Departments, State Agencies and local authorities both at the policy-making and day-to-day executive levels. To achieve this co-ordination, new institutional arrangements were required.

24. In its Report No. 22, the Council set out the institutional arrangements which in its view would involve the minimum change that was desirable and feasible at this juncture. The Council recommended that a Minister should be assigned responsibility for regional policy. It was the view of the Council that it would be useful to have in addition a Cabinet Committee, chaired by the Minister responsible, and including other Ministers concerned with regional policy.

25. The Council further recommended the establishment of a Central Committee for Regional Economic Development to report to the Minister with responsibility for regional policy. The nucleus of the staff of the Committee would be provided from the Staff of the Minister's Depart-

¹A further aspect of the geographical mismatch between job opportunities and relevant labour availability is that a high proportion of males employed in white-collar jobs in Dublin come from outside Dublin County. (See Bertram Hutchinson, Social Status and Inter-Generational Social Mobility in Dublin, Paper No. 48, Dublin: The ESRI, 1970, p. 7.

*No statement was issued by the Government on the occasion of the publication of *Institutional Arrangements for Regional Economic Development* (NESC, Report No. 22, July 1976).

ment, but staff would be drawn from other sources as well. The Committee would consist of officers of the relevant Government Departments and the IDA, and should have power to co-opt additional members, as required. For special studies and analysis of regional problems, the Committee should use experts drawn from bodies that depend wholly or mainly on public funds—for example, the ESRI, the IDA, the IIRS, the IPA, An Foras Taluntais and An Foras Forbartha. Where necessary, this expertise should be supplemented by the use of consultants. These arrangements would ensure that the Committee would be supported by the necessary range and quality of expertise to enable it to carry out its appointed tasks¹.

26. Despite its importance in the context of regional development, service-type employment cannot be promoted in isolation from other aspects of regional policy. It has been the intention of the Council to examine various other aspects of regional policy, but, apart from three reports in preparation, it will not now be possible to complete the full programme before the Council's term of office ends in December 1976 ^a. The Council therefore recommends that the study of the role of service-type employment in regional development should be referred to this

¹The Department of Finance is concerned lest these proposals should convey the impression that institutional arrangements are the key to faster regional development. The Department accepts that institutional changes could be of value, but has stated that constraints on resources and insufficient job creation opportunities are much more important. In regard to Report No. 22, the Department has stated that the report gives no evidence that a major defect in the existing system is lack of co-ordination and that it fails to probe to what extent improving organisational arrangements would bring any new element into the solution of our regional and national development problems. The Department of Industry and Commerce has much the same views on these matters as the Department of Finance. These points were considered by the Regional Policy Committee and the Council when drafts of Report No. 22 were being discussed. No member of the Council dissented from Report No. 22 in the form in which it was presented to the Government.

The Council's report on Regional Policy in Ireland: A Review (NESC, No. 4, January, 1975) makes it quite clear that the Council does not believe that institutional changes are the key to faster regional development. Report No. 22 dealt with institutional arrengements because that was the subject of it. However, care was taken to place its aims in perspective. Paragraph 1.1 of Report No. 22 stated that its aim was "to identify the minimum institutional changes required to provide a coherent organisational framework, which would help to ensure the effective and coordinated performance of existing work at regional level; to help towards the formulation of a regional policy, and to facilitate the spelling out of the regional implications of the National Economic Plan (whose publication is expected later this year)".

^aThis report was completed by the Council at its meeting on 18 November 1976.

proposed Central Committee for Regional Economic Development for consideration in the context of regional development as a whole. That Committee should undertake further research into the problems of relocation which the consultants rightly regard as essential for effective action.

PART II

SERVICE-TYPE EMPLOYMENT AND REGIONAL DEVELOPMENT

by

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Chapter 1

SERVICE FUNCTIONS IN NATIONAL AND REGIONAL DEVELOPMENT

1.1 Terms of Reference and Definations

The terms of reference of this study were:

- (i) to isolate and define categories of Service-type employment which have a possible capability for stability or growth and which are not strongly tied in that location, and whose location might be influenced through regional incentives, the provision of facilities or by Government direction;
- (ii) to examine existing policies for the location of Service-type employment in other countries, and the potential for attracting internationally mobile Service-type employment to Ireland.

It will be seen in Section 1.4 that an examination of Service-type employment is beset by difficulties of measurement and definition. Throughout this study regard will be had to both *Occupational* and *Industrial* classifications. The occupational classification brings together all those engaged in work of a similar nature, e.g. drivers, clerical workers, doctors, etc.; occupational classification provides a guide to employment changes taking place *within* categories of economic activity and it can also give an indication of an individual's social status. The Industrial classification indicates those engaged in the same branch of economic activity regardless of the nature of the task performed. For example, both drivers and clerical workers will be found in the chemical industry¹.

The term sector is used in this study as in EEC statistics, to denote the three principal categories of employment: Agriculture (including Agriculture, Forestry and Mining), Industry (including Manufacturing, Building and Construction and Electricity Gas and Water) and Services (including Commerce, Finance, Insurance and Business Services, Public Administration and Defence and Professional, Domestic and Recreational Services). A group represents a census class within a sector, e.g. the Commerce group within the Service sector. A sub-group refers to any discrete combination of activities within a group, e.g. the

¹W. F. Luttrell, *Study of Office Classification Systems*, Location of Offices Bureau, London (forthcoming) points to the need to adopt Multi-Axial job classifications for much current research.

Retail Distribution sub-group within Commerce. A single activity within a sub-group is described as a *category*, e.g. the Grocery and Provisions category within the Retail Distribution sub-group.

From the occupational classification it is possible to distinguish between "Producers, Makers and Repairers" and workers in Transport, Commerce, Finance, Service and Professional occupations which in this study are collectively described, for purposes of identification only, as "non-producers". The term White-Collar refers to Professional, Technical, Administrative, Managerial, Clerical and Sales occupations and it excludes unskilled and semi-skilled employment e.g. drivers, porters, cleaners, etc. More narrowly the term white-collar may often exclude Commerce (Sales and Proprietors) and refer to persons engaged in the handling, processing and transmission of information. Within white-collar occupations, the term office-workers refers to all those engaged in the use of information who require a place of work conventionally described as an office building. Office-employment figures include the salaried employees within the Industrial sector and much of the white-collar employment in the Service Sector².

The focus of this study is Service-type employment which is defined as all the categories of Service sector work (Transport, Communications, Commerce, Finance, Insurance and Business Service, Public Administration, Defence, the Professions, Personal and Recreational Services) together with the "non-productive" work occupations within the Agricultural and Industrial sectors (i.e. Transportation, Clerical, Commercial, Financial, Service, Professional and Other occupations). These two groups are included as there is often little difference in the nature of their work. Such a broad definition can have regard to employment trends within all service functions, not just the traditionally defined Service sector; it facilitates analysis of employment in terms of both branch of economic activity and occupation. It is broadly in line with the growing body of regional development research and policy which relates to both inter and intra sectoral changes in employment.⁸

In the French Language there exists no word to distinguish between "goods" and "services". The term "bien materiels" and "bien immateriels" more appropriately describe what is meant by the terms "producers" or "non-producers".

*For a discussion of the problems of defining office-employment, see P. W. Daniels, Office Location, An Urban and Regional Study, G. Bell and Sons, London, 1975, pages 26–39.

^aFor example, see: J. B. Goddard, Office Location in Urban and Regional Planning, Oxford University Press, 1975, 60 pages. See also the current EEC sponsored programme of research into Non-Manufacuring Activites in Manufacturing Industry under way at the University of East Anglia.

The study seeks initially therefore to establish the progress of Service-type employment over the decade 1961-71 and in particular the growth or otherwise of the decision-making Professional, Technical, Executive and Managerial occupations. It will examine the extent to which they are distributed between the regions and explore the possibilities for relocation. Following the terms of reference, Chapter Two examines the performance of Service-type employment over time in Ireland with a view to isolating the growth occupations and sectors. Chapter Three examines the regional pattern of white-collar and office employment. Chapter Four deals with the existing policies which have a relevance for the regional expansion of Service functions, largely office activities, while Chapter Five examines the role of communications in both office activity relocation, and the development of urban and regional policies. Chapter Five also provides an overview of communication processes and their potential in terms of relocation, citing relevant European experience. The final chapter submits a number of broad proposals for the establishment and implementation of an effective office activities policy within the overall compass of regional development strategies.

1.2 Recognition of Role of Service Functions in Development

Until recently attempts to expand employment at either national or regional level in Ireland, as well as in most other European countries, have been confined largely to the goods-producing sectors and especially to the creation of additional Manufacturing capacity. Implicit in these attempts is the assumption that the growth of employment in one activity, Manufacturing, would induce further growth in Service employment. In terms of development policy the corrollary that the expansion of the Service function would lead to a further growth of employment was, until recently, almost completely ignored. At the same time the Second Programme for Economic Expansion recognised that some Service functions "are mainly the cause of economic development, others are largely the consequences and many are both". Later, the Third Programme: Economic and Social Development stressed the importance of services in the expressed belief that growth in employment in the services sector is closely related to the general level of economic activity.

At regional level there is a further qualification in that the initial expansion in employment may give rise to a growth increment in another region. This can arise because the location requirements of industry can differ from those of service functions.

Throughout European countries it is now widely recognised that the expansion of service functions can have substantial benefits for development: the regional expansion of service activities, whether due to relocation from within the country or as a result of attraction from abroad, is now regarded as one of the essential means of solving immediate employment and social problems of less developed regions.

More importantly the investment and employment problems of such regions are a consequence of the centralisation of decision-making in a few large centres in the more developed regions. Because of this, countries like France, Sweden and the United Kingdom see in the redistribution of higher order service functions (e.g. professional, technical, executive and managerial activities), a key to a more equitable distribution of population and urban opportunities between regions¹.

1.3 Benefits of Service Function Relocation

1 .4

The expansion of service functions within a region, whether from internal growth or from incoming firms, native and foreign, can have immediate social and economic benefits for the receiving area. The immediate benefits lie in the expansion of employment opportunities, especially for females and the better educated, the impetus to building and construction industry and to local retail trading. Long term social, economic and organisational benefits also result from the relocation or expansion of service functions. The creation of more employment with higher than average incomes per head will generate additional demand for goods and services—and will result in the absorption of excess capacity where this exists, leading to further expansion of employment. The extent to which this additional demand benefits the region will be determined by the extent to which the increment of demand can be met within the region2; where it cannot be met, demand will leak to other regions. Where the leakage is to the relatively developed areas, existing regional disparities will be exacerbated.

The growth of service-functions within a region can be expected to have many socially desirable benefits for the region. These include the expansion of improved promotional opportunities for white-collar

¹For a fuller discussion of the reasons for the redistribution of decision-making, see: *National Settlement Strategies: A Framework for Regional Development, EFTA,* Geneva, 1973, pages 60–124.

*G. Yannopolous, "The Impact of Office Relocation on the Local Economy of the Reception Areas", Office Location and Regional Development (ed. M. J. Bannon) An Foras Forbartha, Dublin, 1973, pages 59–71.

workers within the region, especially if decision-making opportunities are created ¹.

Qualitative change and development progress within a region is influenced by the innovatory capacity of the area. This in turn is dependent upon the availability and accessibility of information. Thus both the presence of decision-makers and the improved sources of information within a region would have to accompany the relocation of power and decision-making. The relocation of decision-making functions would further the development of regions in the following way. The infusion of leadership talents to less developed areas would contribute to the dynamism necessary to foster increased and sustained growth. By increasing the fund of expertise and by diversifying the organisational base it would assist in stabilising the regional economy, making it more attractive generally to investment. Recent work has shown that relocation of routine work with its immediate benefits must be reinforced by decentralisation of higher order decision-making functions if the long term problems of less developed regions are to be successfully tackled. This suggests that regional policy must be expanded to include the improvement of the "contact environment", that is to increase interaction between decision-makers in the various developmental and commercial organisations within the region. Such interaction is required if regional resources and potential are to be effectively exploited. This will involve some transfer of public and corporate decision-making from areas of concentration to other urban centres.

1.4 Problems of Measurement

Any study of service functions is likely to be fraught with numerous definitional and measurement problems, especially if the study incorporates international comparisons. In respect of employment, the relatively high proportion of non-unionised labour, the numbers of

¹A large number of studies attest to the need to create professional and administrative and even clerical jobs in greater numbers throughout Ireland in an attempt to reduce the need to migrate to fulfil occupational aspirations: See D. Hannan, Rural Exodus, Chapman, London, 1970, 348 pages. Cooper and Whelan highlighted the limited development of Research and Development opportunities by Irish industry: see C. Cooper and N. Whelan, Science, Technology and Industry in Ireland, Stationery Office, Dublin, 1973, pages 20–25. More recent work by the Cork Scientific Council demonstrates the inadequacy of employment opportunities for Dairy Science Graduates.

See Chapter 5.

part-time and casual employees as well as the number of non-insured workers make it difficult to get accurate figures. Problems of measurement also arise from growing labour specialisation and job refinement within service functions. This is seen particularly in the fields of research and information—so much so that the relative and absolute growth of employment in the Service sectors of developed countries is erroneously equated with the "white-collar" expansion which has transformed the labour structure of both the Industrial and Service sectors in recent decades.

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The growth of service functions has not only resulted in expansion of employment in the Service sector but has also led to occupational changes within all sectors, whereby increasingly high levels of skill are required. This in turn has had an impact on the location, organisation and work environment of the firm concerned. The need for increased levels of skills is reflected in the expansion of occupations related to Market Research, Operations Research and Computer technology, and in continuous retraining within particular occupations such as that of the ambulance driver who within a few decades has been upgraded from little more than a driver to being a skilled paramedic.

Measurement of productivity in services poses many intractable problems. The outputs of many service functions are often consumed in goods manufacturing, and whether these services are classed as part of the Industrial or Service sector may often depend upon the size of the firm and the degree to which it can meet its own service needs. Much of the contribution of research and development work, professional expertise, efficient management systems and Government activities will be reflected in the growth of the output of goods-producing sectors rather than in the direct output of services alone. The rate of technological change and the increasing substitution of capital for certain kinds of labour, which is evidenced in the growing use of equipment ranging from floor sweepers to computers, renders it difficult to measure the contribution of any one service over time. In addition, demand for a product is dependent in part upon the quality of the associated services. Apart from price, the sale of consumer durables such as washing machines or cars, will be influenced by the effectiveness of the advertising and retailing organisations. The range of service functions is also greatly affected by changing social customs and attitudes; thus family shopping and the customer's willingness to co-operate in "self-service" has greatly reduced the labour-force in some services. At the same time, with the growth of per capita income, these same groups consume a very wide range of social, educational and recreational services. In the Irish context the distinction between sectors is somewhat confused though the high degree of involvement of the public sector in industrial development, e.g. Bord na Móna and the Irish Sugar Company. Since many categories of service-work are concerned with the handling of information or data, there often exists no quantitative or tangible measure of output and consequently estimates of productivity often understate the productivity of service functions, leading in turn to a belief that service functions contribute to serious inflationary pressures.

1.5 Classification of Service Functions

Growth and development trends within service-functions may be more easily understood if they are classified into the following four-fold grouping.

- A. New Services—all those services whose consumption tends to be a by-product of increasing affluence and enlightened social policies. These include the provision of universally available education, improved health and welfare services as well as recreational services and the tourist industry generally. Growth of these services is highly sensitive to growth in per capita income but they can also be stimulated by "foreign" demands as in the case of tourism.
- B. Old Services consist of those which flourished prior to industrialisation and whose employment size and contribution have almost continuously declined since then. Domestic service and repair work are examples of old services for which new industrial products have had to be substituted.
- C. Complementary Services include those services whose production normally takes a sharp upward turn with the rise of manufacturing production. Complementary services include banking, finance, transport, wholesale and retail trade providing services to agriculture and industry as well as to individual consumers. These services can be regarded as complementary to the growth of industry in two ways: as complementary factors to urbanisation and as necessary links in the process of specialisation of production. The extent to which some of these services will be provided within manufacturing firms depends upon the size and policy of the firm. Complementary services have been shown to account for over half the total Service sector employment in both Developed and many Developing countries¹.

¹Y Sabolo, et. al., The Service Industries, ILO, Geneva, 1975, page 59, Table 20.

D. Industrial Services refer to the rapid growth of white-collar and other Service-type occupations within industry which now account for upwards of one-third of the total labour-force in manufacturing industry. Empirical researches have shown a close interrelationship with Complimentary services in terms of skills and location¹. The size of the labour-force in this category will often depend upon such factors as the size of the firm, its market area, its regional, national or international policies, the degree to which it provides its own services within the organisation, and the extent of its Research and Development work.

Industrial services are partly comprised of routine clerical and management functions. Furthermore, by means of its Industrial services, a firm has easy access to the external, "uncontrollable", and casual sources of information which often are the catalyst for innovation within the firm generally, thus enabling the firm to maintain or improve its competitive edge². Industrial services include workers in management, research, professional and clerical occupations. Since innovation depends on information availability, there is a need for many firms to have easy access to the large volume of information in large, often capital, cities.

The four-fold classification of service functions adopted here helps to explain the relative growth of service functions in economies at different stages of economic development³. It must be emphasised,

¹The East Midlands Economic Council's report on *Office Services in the East Midlands*, 1971, which reported on a survey of 569 office establishments found that manufacturing firms used more "business services" than Service sector firms.

*This view of the role of the office in the firm derives from B. Thorngnen, "External Economies of the Urban Core", Urban Core and Inner City, Leiden, 1967, pages 413–420. See also the results of a service linkage study of 87 Ontario manufacturing plants—J. N. H. Britton, "Environmental Adaptation of Industrial plants—Service Linkages, Locational Environment and Organisation" in Spatial Perspectives on Industrial Organisations and Decision-making (F. Hamilton, ed.), John Wiley, NY 1974, pages 363–390.

^aThe first three groups correspond to the conventional Service sector and are based on a classification by Katouzian. See M. A. Katouzian, "The Development of the Service Sector: A New Approach", Oxford Economic Papers, New Series, Vol. 22, No. 3, 1970, pages 362–282. The fourth group is derived from the growing corpus of very recent research in Sweden, the UK and Ireland but was isolated by Weintraub and Magdoff who identified five types of service industries, including those salaried persons attached to commodity-producing industries. See D. Weintraub and H. Magdoff, "The Service Industries in Relation to Employment Trends", Econometrica, Vol. 8, 1940, pages 289–311.

however, that the major importance of Industrial services lies not in the magnitude of numbers employed but in the importance of management and research expertise in the overall development of an economy or region.

1.6 Employment Trends within the Service Sector

In Ireland in 1971 there were 491,000 persons employed in Service-type Employment ("non-producers", Table 1.1). In the same year the Industrial services accounted for over 16.3% of Service-type employment. Industrial service employment accounted for 24.9% of all employment in the Industrial sector in 1971—see Appendix, Table A.1.

TABLE 1.1

Employment in each Sector of Economic Activity classified by Occupation in Ireland, 1971

Sector	Total Employ-	Producers'	Non- Producers'*	Percentage	Distribution
	ment 1971	Repairers' Occupa- tions	Occupa- tions	Producers Makers Repairers etc. %	"Non- producers"
Agric. incl. Forestry and Fishing	273,079	271,776	1,303	48·2	0.3
Industry**	322,749	242,449	80,300	43 ·0	16-3
Service	459,011	49,637	409,374	8-8	83-4
Total	1,054,839	563,862	490,977	100-0	100-0

^{*}Term "Non-Producers" used in accordance with definition in Section 1.1 and Appendix, Table A.1.

Source: Census of Population 1971, Vol. III, Table 7a and 7b in which occupational data includes employed persons only.

^{**}Including Building and Construction, Electricity, Gas and Water.

Because of the lack of comparable data on international trends in Service-type employment, changes in Service sector employment are taken as an indication of the overall trend in employment in all service functions in this section of the study. It is difficult to obtain internationally comparable statistics on Industrial services employment.

Within both the developed and developing countries, employment in the Service sector, in most cases, showed both an absolute and a relative increase. In a study of twenty-five countries Galenson demonstrated that over the period 1952-1962 approximately all countries with the exception of Ireland experienced an absolute growth in the numbers of workers in the Service sector. He states that over the period studied, employment in the Service sector "was increasing at slightly over 1% a year regardless of the rate of increase of manufacturing employment". More recent work by Sabolo et. al. confirms this trend towards Service sector growth, especially in the developing countries where the strong rural-urban migratory patterns have led to a situation where "it was mainly from the primary to the tertiary sector that transfers of employment occurred"2. Using a large number of countries at different levels of development, but not including Ireland, Sabolo shows that in almost all cases the Service sector was a much more rapid consumer of labour than the Industrial sector.

The pattern of labour movement from Agriculture to Industry and subsequently to Services which happened in the developed countries may not be duplicated in the developing economies. Empirical work suggests that prior to the stage of development the supply of labour, especially urban labour, may create its own demand and result in an upsurge of employment in old services³. In the early stages of industrialisation there may be a shift of employment from old or traditional services into manufacturing which Bhalla concludes may be reversed later under conditions of modern technology where manufacturing is not likely to be a major source of new employment.

An examination of employment trends in fifteen countries, including Ireland, shows that there has been a decline in the Agricultural labour-force in all fifteen between 1926 and 1971. Of these countries, Ireland had the lowest proportion of employment in the Industrial sector in 1926

and the fourth lowest proportion by 1970, All the fifteen countries witnessed an increase in the proportion of Service sector employment between 1926 and 1970 with Ireland's proportion rising from 33.6% of total employment in 1926 to 42.5% in 1966. Table 1.2 gives an overall view of employment change by sector from 1961 to 1971. Employment in the Irish Service sector increased by 3.7% points compared with 1.9% for France, and a loss of 0.2% points for the UK. The average increase for all fifteen countries was 6.6 points with three countries, Spain, Sweden and the USA increasing by over 10 percentage points (Table 1.2.)

Changes in the ratio of Industrial to Service employment for the fifteen countries are shown in Table 1.3. It appears that countries with a strong Industrial sector had a more rapid growth of employment in the Service sector. The relatively large increases in Service sector share of employment, particularly in the case of Ireland, indicate the success of industrial development policies over the period. It can also be suggested that, in terms of employment, the expansion of the Service sector does not require a continually expanding Industrial sector. This is suggested by the experience of the USA, the UK and Belgium. Employment relationships between sectors are not independent of capital and technological change, particularily in the Industrial sector. An increase in capital intensity may lead to a fall in employment and an increase in total income. In turn increased income will generate further demand for goods and services.

It is evident from Table 1.2 that, regardless of stage of economic development, the relative importance of Service sector employment continued to increase and that by 1971 its share ranged from 34.7% in Portugal to approximately 64% in the USA (Figure 1). The UK is exceptional in that a decline is shown in all three sectors up to 1971 (Table 1.2). However, the statistics in Table 1.2. indicate an overall shift towards the Service sector irrespective of stage of economic development or the types of service which are causing this recorded growth of employment.

1.7 Reasons for the Growth of Employment in Service Functions

The growth or decline of employment in any particular service function depends upon a number of factors, including the nature of the service in question. As indicated earlier, a decline in or lack of industrial opportunities may lead to an artificial growth in old services as labour supply

¹W. Galenson, "Economic Development and the Sectoral Expansion of Employment", Int. Lab Review, Vol. LXXXVII, 1963, page 510.

^{*}Y. Sabolo, et. al., op. cit, pages 14-15.

^{*}A. S. Bhalla, "The Role of Services in Employment Expansion", Int. Labour Review, */ol. 101, 1970, pages 519–539.

TABLE 1.2

Percentage of Employment in each Sector in Selected Countries

		Time Pe	riod A			Time Pe	riod B	
	Agri- culture	In- dustry	Ser- vice	Other	Agri- culture	In- dustry	Ser- vice	Other
Austria Belgium Canada Denmark France Germany (Fed.) Ireland Italy Netherlands Norway Portugal Spain	22·8 7·2 12·1 17·5 19·8 13·4 35·2 28·3 10·7 19·5 42·3 41·3 13·8	41·0 45·8 33·1 36·5 37·7 48·6 25·5 39·4 42·2 36·5 28·2 31·4 45·1	35·1 44·1 51·8 44·3 41·4 37·9 38·8 29·4 46·6 43·6 27·0 26·3 40·8	1·1 2·9 3·0 1·7 1·1 0·1 0·5 2·9 0·5 0·4 2·5 1·0 0·3		41·9 42·4 29·5 35·7 39·3 48·0 31·3 42·2 38·2 37·3 30·1 37·5 40·2	42·4 49·0 58·5 50·8 43·3 44·1 42·5 36·5 55·3 50·9 34·7 36·4	2·0 4·1 5·3 2·9 2·3 0·4 0·8 4·9 0·2 5·(
Sweden U.K. U.S.A.	3.1	46.6	49·6 54·2	0·7 4·3	2·5 4·2	1	49·4 64·3	5·

Time Period A: Austria '61, Belgium '61, Canada '61, Denmark '60, France '62, Germany '61, Ireland '61, Italy '61, Netherlands '60, Norway '60, Portugal '60, Spain '60, Sweden '60, U.K. '66 and U.S.A. 1960.

Time Period B: Austria '71, Belgium '70, Canada '73, Denmark '70, France '68, Germany '70, Ireland '71, Italy '71, Netherlands '72, (estimated from 1972 Eurostats.), Norway '70, Portugal '70, Spain '70, Sweden '70, U.K. '71 and U.S.A. 1972.

Agricultural Sector: Agriculture, Forestry and Fishing. Industrial Sector: Mining, Manufacturing, Building and Electricity, Gas, Water.

Service Sector: Banking, Insurance and Business Services, Commerce, Transport and Communication, Professional, Personal and Recreational Services and Public Administration/Defence.

Other: Activities not adequately described and those seeking work for first time (in some cases).

Source: I.L.O. Yearbooks, Table A.

TABLE 1.3

Ratio of Industrial to Service Sector Employment, 1926-1970

		io of Industri vice Employr			age Change Ratio
Countries	1926	1966	1970/71	1926-66	196671
Sweden	103.6	95.6	75.4	7·4	21·1
U.K.	100.6	92.6	83.5	8∙0	9.8
U.S.A.	74.7	56⋅3	554-1	24.6	3 ⋅9
Ireland	38.4	67.2	70.3	+75∙0	+4.6
Portugal	58.4	76.0	85.6	+30.1	+12.6
Spain	94.0	112.2	110.7	+19.4	1.3

Source: I.L.O. Yearbooks and Y Sabolo, et. al., The Service Industries, Chapter One.

See Table A.2, Appendix for all fifteen countries.

attempts to create its own demand. The absolute number in service employment can also be expected to increase with the growth of population. However, traditionally, three principal approaches have been adopted to explain the continued growth of employment in services. These are: (a) the employment approach, (b) an income and expenditure approach and (c) the productivity approach.

(a) The Employment Approach seeks to correlate the growth of service employment with the growth of employment in industry. This approach has been in wide currency despite the apt warning by Galenson that it is "clearly dangerous to attempt to predict this relationship for any country without examining its specific circumstances". The employment approach suggests that service employment is dependent for expansion upon employment growth in industrial activities. The concept has been critically assessed by Blumenfeld who argues that as an analytical technique the employment approach is only relevant to small simply-structured communities and is beset by boundary and other definitional problems. Despite its drawbacks the approach has been widely used in regional analysis. Recent work by Baker and Ross has demonstrated that many categories

W. Galenson, op. cit., page 5.2.

²H. Blumenfeld, "The Economic Base of the Metropolis", The Techniques of Urban Economic Analysis (ed. P. Fouts), Chandler-Davis, New York, 1960, pages 229–277.

^aT. J. Baker and M. Ross, *Employment Relationships in Irish Counties*, ESRI, Paper No. 81, Dublin, 1975, 66 pages.

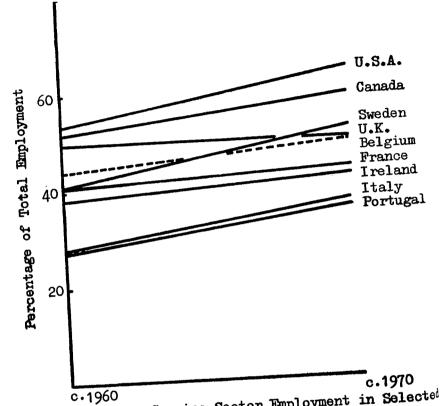


Fig. 1 Trends in Service Sector Employment in Selected Countries

of service functions (Tourism, Public Building, The Social Professions, Public Administration/Defence) are indeed capable of stimulating regional expansion, leading to further expansion of what they term the Induced employment (Retail Trade, Other Trade, Transport, Domestic service and Miscellaneous categories) within the regions. From Table 1.2 it can be seen that in some countries service employment expanded independent of growth in the Industrial sector, e.g. in Belgium, Netherlands, Sweden. Many types of service functions can generate national and regional expansion leading to the further growth of the economy. Indeed the view now current suggests that "a modern

economy seems to require a certain minimum superstructure of commercial, government and other services to support manufacturing" and that a large metropolitan area exists and grows because the quality of its services enables the speedy and efficient adoption of innovations throughout all sectors. Rather than the simple one-way employment relationship sometimes posited whereby increased employment in industry leads to increased employment in services, a complex interactive relationship appears to exist between employment change in the Industrial and in the Service Sectors.

- (b) The Income and Expenditure approach seeks to explain the relative growth of employment in services as the result of increased income leading to greater demand for goods and services. By definition the growth of "New services" is related to the growth in both per capita income and leisure time. Studies show that a significant relationship exists between the growth of income per head and employment growth in "New services", and that income elasticity of demand (a measure of the responsiveness of demand for goods or services to a change in income) for such services was significantly higher than for services generally. Thus, part of the increased demand for services and for service employment derives from the increased affluence of society and the differences in the income elasticity of demand between services.
- (c) The Productivity Approach derives from a belief that labour productivity is relatively lower in services than in goods production. Thus a higher volume of labour is needed in services to produce the same amount of output and since labour costs are high relative to other factors of production this may cause inflationary pressures⁴. In fact the evidence on labour produc-

¹W. Galenson, op. cit., page 514.

^aH. Blumenfeld, op. cit, page 276.

^{*}Y. Sabolo, et. al. *op. cit.*, page 49. However, Fuchs rejects this view, explaining employment growth in services in terms of low productivity in V. R. Fuchs, *The Service Economy*, NBER, New York, 1968, page 76.

⁴T. Hermensen, "Service Trades and Growth Centres", Regional Policy in EFTA, Geneva, 1968, page 150. However, Baumol's "Law" must be borne in mind here, that is, since services are relatively labour intensive, and labour price tends to rise more rapidly than the cost of other inputs into production, the price of services increases faster than price of goods. This point was cogently argued in the NIEC Report on Full Employment, Stationery Office, Dublin, 1966, para 148, pages 111 and 112.

tivity in the service sector is conflicting and derived from inadequate sources. Productivity is defined as the ratio between output and the total input of factors required to achieve it. Because of the problems of measurement, it has been concluded that throughout a considerable part of the Services sector e.g., Public Administration, Education, Health, Financial Institutions, the concept of productivity is not very meaningful. In addition "since the real output of the services sector is calculated as a residual, the estimate bears the brunt of inaccuracies in all the other figures" *.

Despite the problems of measurement, the results of comparative studies do indicate that service productivity lags behind productivity increases in manufacturing. In an examination of eighteen categories of service industries in the US over the 1939-1963 period, Fuchs discovered positive growth-rates in output per worker for sixteen of these. Overall, the rate of growth of productivity in the goods sector exceeded that of services by 1.74% per annum3.

On the other hand, data compiled by the International Labour Organisation do show that over time the differential between average productivity in goods and that in services has not changed significantly, the difference in each country being about the same at the beginning and at the close of the period. It is also shown that the growth of production in the Service sector is by no means solely the result of the growth of employment, in as much as there is a very fast increase in labour productivity in that sector taken as a whole4. With the constant infusion of technology and a higher level of worker skill, there is little reason to expect lower productivity or lower output per worker in service activities.

In Ireland, as in other countries, there is no satisfactory measure of the output of some service categories. In the case of some categories, such as transport, volume indicators such as passenger miles or freight-ton miles are available as output measures. 1.8 Reasons for Growth: Concluding Note

Service sector of other countries (Table 1.5).

Research on the growth of the Service sector is hampered by inadequate data and the unquantifiable nature of some of the factors involved. Both the productivity and income explanations would appear particularly relevant to Ireland where the growth of productivity in services appears to lag behind that in other sectors and where there has been rapid expansion of employment in new services, dependent on growth in income.

However, official figures for productivity in Public Administration

are based on total employment related to base year remuneration

(1968). While such figures do provide an index of change over

time, it is probable, according to Kennedy³, that the rise both in

real product and real product per worker is understated in some

categories of service activity. He expresses particular concern

at the zero rating of change assumed in the productivity of

Government and some other work where he feels technology

has been substituted for many routine labour functions and where the real product of workers should also be rising because of

improved educational standards, better technical knowledge and

greater job specialisation. However, it can be argued that

especially in the field of Public Administration, there exists many

barriers to the ready adoption of innovations; these include the

absence of competition, inacessibility to information, as well as

a variety of social and institutional barriers which may be parti-

cularly strong in public services. That these deficiencies have been recognised is implicit in the establishment of the State Sponsored

Companies whose function is associated with national develop-

A study of the Irish Service Sector has shown it to contain "some

of the highest productivity sectors and some of the lowest"1.

Productivity was found to be quite high in Transport and

Distribution but to be relatively low in Banking and Domestic

service and to be particularly low in Public Administration and

Defence (Table 1.4). In terms of real output per sector for the

1959–1969 period there was a relatively poor performance of

the Service sector within Ireland in contrast to the output of the

ment and the contribution to efficiency of all sectors.

¹K. Kennedy, op. cit., page 19.

^aD. J. Cogan, Productivity in the Irish Service Sector, unpublished Ph.D. Thesis. UCD, 1975, page 276.

²K. A. Kennedy, *Productivity and Industrial Growth: The Irish Experience*, Clarendon Press, Oxford, 1974, page 24.

^{*}R. Fuchs, "A Statistical Analysis of Productivity in Selected Service Industries in the US, 1939-63", Review of Income and Wealth, September 1966, pages 211-237. See also Manpower Problems in the Service Sector, Supplement to Main Report OECD, Paris, 1966, page 30.

⁴Y. Sabolo, et. al., op. cit., page 101 and Appendix 6.

Table 1.4

Service Sector Groups 1956-71 Output, Employment

			1956–1971			1956–1966		-	1966–1971	
		Output	Employ- ment	Labour Prodty.	Output	Employ- ment	Labour Prodty.	Output	Output Employ- ment	Labour Prodty.
	Total Foodowy	3.34%	3.34%0.43%	3.77%	2.69%	2.69%0.55%	3.24%	4.67%	4.67%0.20%	4.87%
		1.45%	2.98%	4.43%	0.85%	2.51%	3.36%	2.68%	3.92%	%09-9
3		5.32%	1.22%	4.10%	4.81%	0.88%	3.93%	6.34%	1.90%	4.44%
6	Service	2.85%		2.43%	2.17%	0.16%	2.01%	4.23%	0.95%	3.28%
	Service									
	Distribution and Transport	3.60%	0.21%	3.39%	2.87%	0.14%	2.73%	5.10%	0.34%	4.76%
	Public Administration and Defence	1.48%	1.18%	0.30%	0.55%					0.86%
	Other Domestic	2.59%	0.66%	1.93%	2.05%	0.37%	1.68%	3.70%	0.07.1	
		-								

Source: Calculated from Tables 7 and 10 of D. J. Cogan, of

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TABLE 1.5
Changes in Real Output by Sector 1959–1969'
(per cent per annum): International Comparisons

Country		Total	Agriculture	Industry	Services
Belgium		3.6	1.7	3.8	3.7
Canada		4.8	2.0	5.6	4.8
France		5.6	1.6	6.6	5⋅6
Germany (Fed.)		6∙7	2.6	8.0	5⋅8
Italy		5.4	2.6	7⋅6	5⋅0
Netherlands		5⋅1	2.7	6∙0	4⋅8
Sweden		4.0	0.4	5⋅0	4.4
U.K		2.6	2.2	2.9	2.2
U.S		3⋅8	1.0	3⋅8	4.2
Ireland		3.4	1.7	5⋅3	2.9

*1956–1972 for Ireland; 1956–1968 for Belgium; 1950–1968 for Canada; and 1955–1969 for France.

Source: National Accounts of OECD Countries, 1950-1968, Paris, OECD, 1970 and estimates for 1969. (Derived from Cogan, op. cit.).

Employment growth in Service functions is largely dependent on demand, which may be either complimentary or final, i.e. services may be used as part of the production process or by a final consumer which may be an organisation, Government or individual. Complementary demand is stimulated in a growing industrial economy and this explains much of the growth of both Industrial and Complementary services. At national and local level growth is also stimulated by Government consumption and investment patterns, which give rise to demands similar to those in the Industrial sector. Policies of income transfers, subsidies and tax inducements, together with the individual's willingness to spend more on services, such as insurance or recreation, explains much of the growth of New services.

Whatever the explanation in traditional terms, an absolute and relative growth in service employment now appears to be the almost universal trend. In terms of choice of career, it appears that people increasingly seek out Service-type jobs where income prospects tend to be better for equal qualifications, where the work is more related to educational programmes and where there are more opportunities for a growing female workforce.

In addition, a host of psychological factors attract prospective workers towards occupations which are predominantly included in the Service sector.

1.9 Occupations within Service Functions

Sections 1.6 to 1.8 have been confined to an examination of growth in the Service sector in aggregate. No account has been taken of the growth in Industrial services nor of major differences within the Service sector itself. The Third Programme foresaw that the analysis of the Service sector required tools quite different from the other sectors, and that such a diverse sector should not be treated as a single entity:

"If, as international experience would suggest, economic growth brings an expansion in services employment . . . many basic questions are raised as to the policies which should be adopted towards the growth of employment and output in this sector. It is not as if either the structure or the type of labour needed in services was similar to that engaged in industry—the composition of employment in services by age, sex, education and hours of work is quite different—while a large-scale shift into services could pose location problems. Moreover, the heterogeneity of the sector makes it impossible to treat it as an entity for policy purposes".1

In terms of employment analysis, an understanding of service functions requires that they be studied in occupational terms which transcend sectoral divisions. Service jobs often have closer ties and similarities to occupations in other sectors than to job functions within the same sector. The concept of occupations or job functions is central to the understanding of why there has been continued growth of services in the more developed countries. A greater understanding of the environmental and locational requirements of both worker and job are most likely to emerge from an occupational analysis of employment. Figure 2 provides a generalised view of the links and flows between functions and shows a hierarchy of job functions paralleled by a hierarchy of linkages to other organisations. This culminates in senior personnel who engage in a great deal of communication with other organisations which because of the need for face to face meetings often require a central location². Automation has removed the dependence upon unskilled or even semi-skilled workers, while at the other extreme new and more complex management systems, the increased investment in Research and Development and more sophisticated marketing systems

¹Third Programme for Economic and Social Development: 1968–1975, Government Publications Office, Dublin, 1968, page 107.

for increased volumes of production have all required a rapid expansion of the white-collar work force-persons engaged in administration, the professions, clerical occupations and sales workers. This hierarchy of iob functions and the need for inter-organisational personal contact has led generally to the concentration of executive power in the larger cities at the expense of towns in the less developed regions-and this applies equally to Government, the Arts, the Media, Finance, Commerce, Industrial Corporations, the Professions and Trade Unions.

Fig. 2: Diagrammatic representation of an activity system consisting of job functions connected up by links and flows.

LINKS and FLOWS JOB FUNCTIONS ADMINISTRATIVE FUNCTIONS Direct personal contacts Decision - making, planning, negatiations, search, product development etc. Control direction of INFORMATION FLOWS production, information - A_2 processing, services to Accountning, routine A_3 office work, services to A1 and A2 etc. Contacts via telephone and correspondence SERVICE FUNCTIONS Buying and service trips Business services Household services MANUFACTURING FUNCTIONS MATERIAL FLOWS Processing of materials. D hondling of goods, construction, etc. PRIMARY FUNCTIONS Agriculture, mining. energy production, etc. Goods transportation A=Administration D=Production

Source Reproduced from: Gunnar E. Tornqvist, "Contact Requirements and Travel Facilities", Lund Studies in Geography, Series B, No. 38, 1973, p. 87.

The hierarchy of job-function outlined in Figure 2 is paralleled (as will be shown in Section 1.10) by a hierarchy of administrative organisations

J. B. Goddard, "Office Employment, Urban Development and Regional Policy", Office Location and Regional Development, op, cit., page 21-29, and M. Bannon, The Development and Organisation of Office Activities In Central Dublin, Ph.D. Thesis, T.C.D., 1972, 257 pages.

with the central policy-making and senior jobs concentrated at the centre of power. Traditionally this concentration of power has required the close proximity of a supply of less skilled white-collar workers, including clerical staff. The real contrast between the developed and less developed regions may be seen in the poverty of "contact sources" and lack of decision-makers in the latter regions whether measured in terms of organisational headquarters or senior administrative personnel. Figure 3 and Table 1.6 illustrate the growth rate of most white-collar occupations in the fifteen selected countries between 1960 and 1970. With the exception of Italy, the proportion of white-collar employment increased in all countries during the decade and the rate of growth broadly reflected the stage of economic development of the country concerned. The rates of increase were especially rapid in the Scandinavian countries.

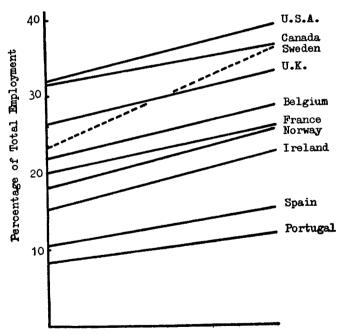


Fig. 3. Change in Proportion of Employment in Administration, Professional or Clerical work in Selected Countries—see text.

Source: ILO Yearbook 1960-1975.

White Collar Employment (Professional, Administrative, Managerial* and Clerical) as a percentage of Total Employment:

TABLE 1.6

	Countr	r y		Time Period A	Time Period B
Canada				31.1	36.0
U.S.A.				31.7	39∙0
Austria				18-4	24.6
Belgium				21.9	28⋅5
Denmark				18-3	26.7
France				20-2	25.8
Ireland				15.3	22.7
Netherlands				24.6	N.A.
Norway				18⋅2	25.5
Sweden				23.5	38.6
U.K.		•••		26.4	32.7
Italy				25⋅0	N.A.
Portugal				8.4	11.7
Spain	• • •			10∙9	15.4

Time Period A: Canada 1961; U.S. 1960; Austria 1961; Belgium 1961; Denmark 1960; France 1962; Ireland 1961; Netherlands 1960; Norway 1960; Sweden 1960; U.K. 1966; Italy 1964; Portugal 1960; Spain 1960.

Time Period B: Canada 1970; U.S. 1969; Austria 1971; Belgium 1970; Denmark 1970; France 1968; Ireland 1971; Netherlands N.A.; Norway 1970; Sweden 1970; U.K. 1971; Italy N.A.; Portugal 1970; Spain 1970.

*Executives specified in Time A but not in Time B for most countries.

Source: I.L.O. Yearbooks, Table B.

Most white-collar work is involved with the handling, processing, transmission or use of information for increasingly literate and inquiring societies. A study of the expected growth of information in eighteen OECD countries has predicted a growth of 650% between 1971 and 1986 which, allowing for improved technology, still holds the prospect of continued growth in white-collar employment¹.

1.10 Location of White-Collar Work

Much of this report is based on the belief that a "strong motive force in the process of urbanisation—and particularly in the concentration of certain activities in the large urban regions—is the need for contacts

¹G. Anderla, Information in 1985: A Forecasting Study of Information Needs and Resources, OECD, Paris, 1973, 131 pages.

in the exchange of information between specialised work functions in society". Many white-collar occupations, excluding sales, are fixed in location by the direct nature of the final demand for their product, e.g., teachers, general practitioners, nursing staff and most of the religious professions. Most other white-collar workers may be regarded as office workers requiring an office working environment.

Offices, as such, may be small single units tied in location to a retail, wholesale, transport or industrial concern. An office may be a small professional consultancy firm benefiting from a location within a major city and serving a variety of firms or individuals. Alternatively, the office may function as a regional headquarters for a public sector or private agency controlling a number of units or plants within a part of the country. Again, it may be the central office of a Government, Financial or Commercial concern, with or without regional sub-offices controlling a large number of units or establishments throughout the country.

1.11 Concentration of Office Employment

Concentration of office employment tends to occur in a limited number of urban centres, usually including the national capital. The degree and scale of concentration is often lessened within Federal States with their devolved power structure and a large number of urban centres. The almost universal growth of the office industry is confined to a relatively small number of urban centres. Thus, 40% of office jobs in France are in the Paris region; in the UK 43% are in the South East region; 45% are located in the Atlantic Region of N.E. United States, while the East Region in Ireland contains 59% of all office jobs. Until quite recently, virtually all of this work was located within the cores of the built-up areas of these regions.

Because of differences in land costs between city centre and suburbs, the chronic congestion of inner cities, their pollution and their general overcrowding coupled with the availability of surburban offices, the increased work force of married women, the ease of mobility within the suburbs and the general improvements in advanced forms of telecommunications, firms have an incentive to move all or part of their office operation to surburban sites, particularly to pre-planned office parks. Some evidence of this movement can also be seen in the increasing movement of offices to the suburbs of Dublin.

¹G. Törnqvist, Contact Systems and Regional Development, Lund Studies in Geography, Series B, No. 35, 1970, page 26.

1.12 Growth of Service-type Employment

Growth of Service-type employment is largely a consequence of the continued growth of white-collar occupations in all branches of economic activity. In turn, white-collar growth has been largely confined to persons engaged in the handling or exchange of information, mostly office workers.

¹The Office Location Review, Department of the Environment, Urban Affairs and Commercial Property Directorate, HMSO, London, 1976, Sections 2.24–2.25.

Chapter 2

AN OCCUPATIONAL-INDUSTRIAL ANALYSIS OF **EMPLOYMENT TRENDS**

2.1. Introduction

As indicated in Chapter 1, it is not sufficient to analyse employment solely in terms of industrial classification; it is also necessary to examine occupational trends to isolate changes in the type of workers required and also provide an indication of the socio-economic status of employees. An understanding of occupational structure is extremely important in both development and planning studies; it is especially relevant to analysis of service functions where there is little uniformity of product and where levels of skill are crucial and changing rapidly.

Throughout this chapter, employment trends in Ireland will be analysed by sector and by occupation, sectors being defined as in Section 1.1. above.

2.2 Overall Trends

From 1926 to 1971 sectoral trends in employment have been characterised by a steady, but accelerating rate of decline in the Agricultural sector and a fluctuating trend in both the Industrial and Service sectors. An analysis of these trends suggests that four broad periods may be discerned. The first, from 1936 to 1946, witnessed an average annual decline of 0.6 per cent in the Agricultural sector labourforce compared with growth rates of 1.2 per cent in the Industrial sector and 0.4 per cent in the Service sector. In terms of job numbers, there was an average annual loss of 3,873 jobs from Agriculture, compared with increases of 2,482 and 1,764 jobs in the Industrial and Service sectors, to give an annual net gain of 373 jobs. (Table 2.1 and Figure 4.)

In the immediate post-war period, Agricultural employment declined at a rate some four times faster than in the preceding period; an average annual decline of 2.9 per cent resulted in a loss of 15,745 jobs. In the same period, the growth rate of the Industrial sector increased to 6.8 per cent per annum as a result largely of the quadrupling of the growth rates in manufacturing to 4.5 per cent per annum. Employment in the Service sector declined at an average annual rate of 0.4 per cent, resulting in an average annual loss of some 1,964 jobs.

The third period, 1951-61, was one of depression with employment declining in all sectors to give an average annual loss of 16,717 jobs:

TABLE 2.1 Average Annual Change in Employment by Sector, 1926–1971

Sector	Agricult	tural	Indust	rial	Servi	ce
	Number	%	Number	%	Number	%
46 51 61 71	- 3,873 -15,745 -11,698 -10,641	-0.6 -2.9 -2.6 -3.2	2,482 16,105 3,044 6,557	1·2 6·8 -1·1 2·3	1,764 -1,964 -1,975 4,314	0·4 -0·4 -0·1

Source: Census of Population, Industrial Volumes, 1926-1971.

of these, 70.0 per cent occurred in the Agricultural sector, 18.2 per cent in the Industrial and 11.8 per cent in the Service sector. The final period, 1961-71. was one in which primary emphasis was placed upon the necessity for productive investment. During this decade the rate of decline in the Agricultural labour force increased from 2.6 to 3.2 per cent per annum, or an average loss of 10,641 jobs. Employment growth

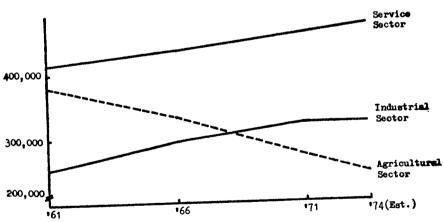


Fig. 4. Employment Trends by Sector.

in the Industrial sector compensated somewhat for this decline with a growth rate of 2.3 per cent per annum, adding an average of 6,557 jobs per annum. Meanwhile, Service sector employment grew by 1.0 per

cent per annum, its highest ever level, increasing Service sector numbers by an average of 4,314 per annum (see Fig. 4).

From the foundation of the State, development policy, whether aimed at production as in the 1930's or export led growth as in the 1960's, focused almost exclusively on the manufacturing sector and to some extent on the development of tourism. As a consequence, the Industrial share of total employment more than doubled from 12.9 per cent in 1926 to 30.6 per cent in 1971. Between 1961 and 1971 its sectoral share increased by 6.2 percentage points, compared with 11.5 in the preceding 35 years, reflecting the more aggressive policies of the sixties as implemented by the Industrial Development Authority in respect of manufacturing.

2.3 Employment Change 1961-1971

Over the 45 years 1926–1971, there was a net loss in total employment and a radical redistribution of employment between the Agricultural and Industrial sectors. In the Agricultural sector the percentage share of total employment declined from 53.5 per cent to 25.9 per cent, while that of the Industrial sector more than doubled, rising from 12.9 per cent to 30.6 per cent. Progress in the Service sector if slow was steady, increasing from 33.6 per cent to 43.5 per cent of total employment. (Table 2.2.)

TABLE 2.2

Percentage Share of Employment by Sector, 1926–1971

(%)

1971 1946 1951 1961 1966 1926 1936 Sector 25.9 31.3 49.6 46.8 40.7 36.1 53.5 Agriculture 27.6 30.6 23.6 24.4 16.9 12.9 16.2 Industry ... 43.5 41.1 34.2 36.3 35.7 39.5 33.6 Service 100.0 100.0 100.0 100.0 100.0 100-0 100.0 Total

Source: Census of Population, Industrial Vols., 1926-1971.

The 1960's showed a dramatic upsurge over the preceding 35 years. Between 1961 and 1971 the growth rate in the Service sector increased to 1.0 per cent per annum, almost a twenty-four fold increase compared

with the 60 per cent increase (to 2.28 per cent per annum) in the Industrial sector. This represents an increase over the decade of 65,000 jobs in the Industrial sector and 43,100 in the Service sector which, when balanced against the decline in the Agricultural sector, results in a net gain of 2,300 jobs between 1961 and 1971, compared with the 167,800 jobs lost between 1926 and 1961 (Table 2.3).

TABLE 2.3
Changes in Employment by Sector, 1926–1971

_	No	ımbers Emplo	oyed	Percentag	ge Change
Sector	1926	1961	1971	1926-1961	1961-1971
Agriculture Industry	652,671 157,453	379,491 257,178	273,079 322,749	-1·54 1·41	-3·2 3 2·28
Service	410,160	415,870	459,011	0.04	0.99
Total	1,220,284	1,052,539	1,054,839	-0.42	0.42

Source: Census of Population, Industrial Volumes, 1926-71.

2.4 Jobs and Population

The significance of these changes in terms of job per capita, is not easily discerned, given that parallel changes were occurring in population size and structure. Population declined from 2,972,000 in 1926 to a low of 2,818,300 in 1961 but, with the dramatic fall off in emigration in the 1960's, rapidly recovered to 2,978,200 persons by 1971. While there may have been little difference in size between the 1926 and 1971 population, there were significant differences in population structure with dependent groups (those under 15 and over 65 years) accounting for 42·3 per cent of the population in 1971, compared with 38·3 per cent in 1926.

Allowing for dependency, the number of jobs per thousand population between 14 and 65 fell from 666 in 1926 to 614 in 1971, the major changes occurring in the Agricultural and Industrial sectors. In the Agricultural sector the number of jobs fell from 365 to 159 compared with an increase from 86 to 188 in the Industrial sector. Advance in the Service sector was slow with an increase of 32 jobs per 1,000 population between 1926 and 1961, compared with an increase of 12 jobs per 1,000 population in the 1960's (Table 2.4).

TABLE 2.4: Number of Jobs by Sector per 1,000 Population Aged Between 14 and 65 years

1936	1946	1956	1961	1966	1971
220.50	040.40	077.45		1	1
107.45	316·43 113·93 245·05	277·45 160·74 243·45	233·39 158·17 255·76	200·84 176·87 264·18	159·02 187·94 267·29
663.74	675-41	681 -64	647-32	641.89	614-25
			7 220 70 210 00	4 220.70 240.00 210.00	4 226.70 245.03 245.45 245.23 641.89

Source: Census of Population, Industrial Vols., 1926-1971.

While it appears that growth in the Service sector was slow, a better perspective of its performance is gained by viewing it against an international background, as follows.

2.5 International Trends in Employment

In common with the other fourteen countries examined, the share of employment in Agriculture declined but the Agricultural share remained highest in Spain, Portugal and Ireland, accounting for 24-8, 29-6 and 25-4 per cent respectively (Table 1.2). In 1926, Ireland had the smallest share in the Industrial sector; by 1971, Ireland had improved its relative position to twelfth of the fifteen countries. In Canada and the USA the relative decline in the Industrial share can be attributed to the rapid growth of Service sector employment. Of the developing countries, only Spain and Portugal had a smaller proportion in Industrial employment than Ireland in 1971, although during the 1960's the Irish figures show the second largest points shift in favour of industry, exceeded only by Spain (Table 1.2). During the 1960's, Ireland's ranking in terms of Service sector share of employment remained about the same. The greatest advances in Service sector employment occurred in the more industrialised economies, e.g. Sweden, USA, Canada, while the figures show that Ireland experienced the slowest Service sector growth of the less developed economies during the 1960's (see Table 1.2 and Figure 1). These trends were also evident from Table 1.3, showing the ratio of Industrial to Service sector employment.

2.6 Labour Productivity—resume

As seen in Chapter 1, Table 1.5, the evidence available also suggests that increases in productivity in Services in Ireland lagged behind that of the Industrial sector and fell seriously below growth of Service sector productivity in all other countries except the United Kingdom. As might be expected, the growth of the Industrial sector output generated demands for related services such as Distribution and Transport which resulted in a modest growth in productivity in Distribution, Transport and Communications as shown in Table 1.4.

2.7 Occupational Change in Industrial Sector

An understanding of the favourable growth record of the Industrial sector or the poor employment growth of the Service sector requires an examination of the composition of the various sub-sectors and occupations within each. Employment outside the Agricultural sector increased by 108,712 jobs between 1961 and 1971 (Table 2.2) of which the Industrial sector accounted for 65,571 or 60.3 per cent. The major increases were in manufacturing industry, which increased by 35,854 jobs, and in the Building and Construction group. While the number of jobs and the rate of increase varied between industrial groups, there were also occupational changes of major concern to this study (Table 2.5).

During the decade, employment in the Industrial sector increased by some 65,571, rising from 257,178 in 1961 to 322,749 in 1971. Employment in occupations not directly engaged in production rose by 20,723 jobs, representing a faster growth rate than in production. This accounted for 31.6 per cent of the additional employment in the decade. Almost all of the increase occurred in "white-collar" jobs which increased from 13-7 per cent of total Industrial sector employment to 15-8 per cent in 1971.1 During the period the proportion of "Producers Makers and Repairers" fell slightly from 76.8 per cent in 1961 to 75.1 per cent in 1971. The number of "non-producers" in Mining and Turf Production rose by 89 per cent, increasing their share of group employment from 13.8 per cent to 24.6 per cent in 1971.2 In contrast, the percentage share of Service type employment in the Electricity, Gas and Water group remained at about the same level.

¹Throughout this chapter data on white-collar employment has been derived from Tables 7A and 7B of Census of Population, Vol. III 1966 and 1971 in which Occupational data includes employed persons only. The 1961 data have been adjusted for each Industrial Group in line with 1971 data. As comparable data were not available at the regional level for 1961 or 1966. Chapter 3 adopted a slightly different and somewhat wider set of regional statistics on white-collar employment. In both chapters, consistency of definition over time is maintained, see footnote 1, page 79.

*The term "non-producers" is used for identification purposes in accordance with the definition in Section 1.1-"biens immateriels".

TABLE 2.6 yment in the industriel Sector 1961–19	Į.	-
	4061 40	
	2.5 1. december 9.	
		yment in the

			Ö	hanging E	mployme	nt in the	Industrie	Sector	Changing Employment in the industriel Sector 1961-1971				
	Occupational Group			Employment Numbers	t Numbers	:		Eπ	Employment Change 1961-71	hange	ď	Percentage Change 1961-71	ange
	Industrial Group	Total	laj	Makers Producers Repairers	ers icers irers	Non- Producers	Non- ducers	Total	Makers Producers Repairers	Non- Producers	Total	Makers Producers Repairers	Non- Producers
		1961	1971	1961	1971	1961	1971						
		9,640	10,420	8,307	7,903	1,333	2,517	780	-404	1,184	8 · 1	-4 .9	8.8
	Mining and Turt Production Percentage of employment	100 .0	100 · 0	86.2	75.8	13.8	24 · 8	24.8 100.0		1		1	1
•	Manufacturing	677,771	213,633	127,717	149,025	50,062	64,608	35,854	35,854 21.308	14,546	20.2	16.7	29.0
9	Percentage of total employment in manufacturing	100 · 0	100 · 0	71 -8	8-69	28.2	30 · 2	30.2 100.0	59 .4	40.6	l	I	
50	Building and Construction	59,587	84,533	54,884	76,273	4,703	8,260	24,946	24,946 21,389	3,557	41 · 9	39.0	75.8
	Percentage of Total employment in B&C (%)	100 · 0	100.0	92 · 1	90.2	7.9	8.6	9.8 100.0	85.7	14 · 3	ı	I	1
	Electricity Gas and Water	10,172	14,163	6,693	9,248	3,479	4,915	3,991	2,555	1.436	39.2	38·2	41 · 2
-	Percentage of total Employment in Electricity, Gas. Water (%)	100 · 0	100 ·0	65·8	65-3	34 · 2	34 - 7	34 -7 100 -0	64.0	38 · 0	l	1	
	Total Industrial Sector	257,178	322,749	197,601	242,449	59,577	80,300	65,571	44,848	20,723	25.5	22.7	34.8
	Percentage of employment in Industrial Sector (%)	100 ·0	100.0	78.8	75.1	23.2	24 - 9	24.9 100.0	68.4	31 -6	l	l	ı
•	Source: Census of Population, Vol. III, 1966 and 1971. Tables 7A and 7B.	f Population	n, Vol. III, 1	966 and 1	971. Tables	7A and 7							

Within the Manufacturing industry group 30·2 per cent of the 1971 labour-force was in Service-type occupations, while the proportion of white-collar workers grew from 16·4 per cent in 1961 to 19·0 per cent in 1971. While the total employment in manufacturing increased by 20·2 per cent, the white-collar occupations increased by 39·6 per cent from 1961 to 1971. The growth of white-collar employment in the Chemical and Printing and Publishing subgroups has been particularly important. Within the Industrial sector there is a continuing increase in the levels of skills required; parallel to the decline of the unskilled labour-force, there has been a rapid expansion in Managerial and Professional occupations which in turn are served by an expanding clerical labour force. As was indicated in Chapter One, the growth of the Administrative unit is of major importance to a manufacturing firm; its growth requires the provision of office space and has implications often for the location of the whole firm or for major blocks of work within it.

2.8 Growth of the Service Sector, 1926-61

To provide what is considered to be a more sound basis for comparison, growth in the Service sector is compared with growth in the Industrial sector and then with that of the combined Industrial and Service sectors. This course is adopted to avoid the deflationary effect of the continuous decline of Agricultural sector employment upon the national figure.

Between 1926 and 1961, employment in the Service sector remained virtually static, increasing by 0.04 per cent per annum to give an increase of 5,710 jobs. This contrasts with an average growth rate of 1.41 per cent per annum, and an increase of 99,725 jobs in the Industrial sector (Table 2.3). The principal area of decline lav in the Personal Services industrial group—a prime example of Old Services (see Section 1.5)—where a loss of 50.3 per cent of jobs over the period (loss of 64,157 jobs) reduced its sectoral share from 31.1 per cent in 1926 to 15.2 per cent in 1961. There was also a loss of 46.8 per cent of jobs in Public Administration and Defence (35,762 jobs) reducing its share from 18.6 per cent to 9.8 per cent of Service sector employment. However, the decline of Public Administration and Defence between 1946 and 1951 is explained by the transfer of categories of economic activity out of Public Administration, such as Education, which was transferred to Professions, and Office of Public Works employees who are now classified under Building and Construction.

The principal gains offsetting these declines were in the Professions (46,894), Commerce and Finance (43,823) and Transport and

TABLE 2.6:

Service Sector Employment by Industrial Group, 1926–1961

			9			Average	Change
		- N	Service Propriet	Number	*	Annual	. <u>.</u>
	,	Number Pariot	Sector	Employed	Sector	Change	Employ-
	Industrial Group	nakoidua (000	Chors	1961	Share	1926-61	ment
		1926	algue C	5		*	1926-1961
							15 202
	Transport and Communication	38,885	စ လ်	54,167	130	<u> </u>	707'01
					(0	7.000
	Commerce, insurance, canning,	115,268	28·1	159,091	38.3	₽ •	45,023
			9	40 580	8.6	-1.8	-35,762
	Public Administration and Defence	/6,342	P. 0	200,01)		
5			6.9	85.193	20.5	2.3	46,894
2	Professional Service	38,233))				
		127 771	31.1	63.314	15.2	-2.0	-64,157
	Personal Service	1/#//71	- 5				
		877.4	1.5	10,986	2.6	2.4	6,210
	Recreational Service		•				
		9119	2.5	2,539	9.0	-3.7	- 6,580
	Other Services						
		410,160	1000	415,870	900	0.0	01/6
	Service Sector				(;	90 725
	TOTOM September	. 157,453	100.0	257,178	100.0	4.	93,750
				-		0.40	105 435
	Combined Sectors	. 567,713	 9 0	673,048	9	£	
		_	-	-			

2

Source: Census of Population, Industrial Vols, 1926–1961. Figures are unadjusted for each Census date with consequent enlargement of some Groups, especially Public Administration and Defence prior to 1951. See Section 2.8 above.

TABLE 2.7:

Service Sector Employment by Industrial Group, 1961–1971

		-	8		8		Change
		Number	Sector	Number	Sector	Average	.s ·
	and Group	Employed	Share	Employed	Share	Annual	Employ-
		1961	1961	1971	1971	Change	ment 1961–1971
•	Transport and Communication	54,167	13.0	60,122	13.1	1.06	5,955
	Commerce	142,695	34.4	148,286	32.3	0.38	5,591
	Finance, Insurance. Business Service	16,396	3.9	23,992	5.5	3.90	7,596
5		40,580	ဆ တ	48,869	10.6	1.86	8,289
3		85,193	20.5	109,078	23.7	2.50	23,885
	Personal Services	63,314	15.2	54,441	11.8	-1.50	-8,873
	Recreational Services	10,986	2.6	10,851	2.6	-0.10	- 135
	Other Services	2,539	9.0	3,372	0.7	2.85	833
	Service Sector	415,870	100.0	459,011	100.0	66.0	43,141
	Industrial Sector		100.0	322,749	100.0	2.29	65,571
	Combined Sectors	. 673,048	100.0	781,760	100.0	1.63	108,712

Source: Census of Population, Industrial Vols, 1961-1971.

,,,*

Commerce 150,000 125,000 Professional Services 100,000 75,000 Transport/Communications Personal Services Public Admin. & Defence 50,000 Insurance, Banking & Business Services 25,000 Recreational Services Other Services 171 **166** 161

Fig. 5: Service Sector Trends by Industrial Group. Source: Census of Population, Industrial Vols., 1961–1971.

Communications (15,282 jobs) groups, almost all Complementary Services. Of these, only Professions, whose average increase in employment was 2·23 per cent per annum, exceeded the 1·4 per cent growth rate of the Industrial sector, more than doubling its sectoral percentage share of 20·5 per cent by 1961. Recreational service increased its share of employment to 2·6 per cent and had the highest growth rate of any industrial group, but added only 6,210 jobs because of its initial small employment base.

In the 1961–1971 decade the rate of expansion of the Service sector increased to almost 1·0 per cent per annum compared to 2·3 in Industry and 1·6 per cent per annum in the combined sectors. Growth occurred in all industrial groups with the exception of Personal Service, where decline continued near the rate in the 1926–61 period, leading to a loss of a further 8,873 jobs. In Recreational Services there was also a slight decline between 1961 and 1971 compared with the growth rate of 2·4 per cent per annum experienced over the period 1926 to 1961 (Table 2.6, 2.7 and Figure 5). In contrast the high growth rate in employment in the Professions (2·5 per cent per annum) improves on the earlier trend. Public Administration and Defence, mostly New Services, expanded at an average annual rate of 1·9 per cent. The larger increase was in the Insurance, Finance and Business Services group which experienced a growth of 3·9 per cent (over 8,000 jobs), compared to a growth of 2·3 per cent in the Industrial sector as a whole.

2.10 Employment Change in Insurance, Finance and Business Services Group

As was stated in paragraph 2.9, the fastest rate of growth, between 1961 and 1971, occurred in this industrial group which constitutes part of the Complementary Services (see Section 1.5). This resulted in an addition of 7,596 jobs, the third largest absolute increase in employment within the Service sector. Of this increase, 39.9 per cent was within the Banking Sub-group, with a further 17.5 per cent in the Insurance Sub-group (Table 2.8).

All sub-groups experienced rapid growth, but there were some interesting occupational changes. Workers here are largely white-collar, accounting for 93·6 per cent of all employment in the Group by 1971 (including all Commercial occupations). Of the increase in jobs, 7,214 (95·0 per cent) resulted from the expansion of white-collar occupations. Service occupations such as office cleaners declined in absolute and relative importance (Table 2.9).

2.11 Employment Change in the Commerce Group, 1961–1971

Commerce is subdivided into wholesale and retail distribution. The growth rate of the sector as a whole is low at 0.4 per cent per annum and this growth is attributable entirely to job increases in the wholesale sub-group. In wholesaling there was an employment increase of 5,943

1

TABLE 2.8 Employment Change within Insurance, Finance and Business Services Group, 1961-71

Industrial			Cha	nge	Percenta in t	ge Share otal
Sub-groups	Numb Emplo		Numbers	Per- centage	Sub-	
	1961	1971	1961–71	1961–71	1961–71	1961–7
Insurance Banking Finance	6,688 5,993 1 558	8,020 9,027 2,439	+1,332 +3,034 + 881	+19·9 +50·6 +56·5	40·8 36·6 9·5	33·4 37·6 10·2
Auctioneering, etc. Advertising	1,477 680	2,010 1,157	+ 533 + 477	+36·1 +70·1	9·0 4·1	8·4 4·8
Other Business Services*	_	1,339	+1,339			5.6
Total Sub-Group	16,396	23,992	+7,596	+46.3	100.0	100-0

^{*}Other Business Services includes Information Processing and Hiring of Personnel

Source: Census of Population, Industrial Vols., 1961 and 1971.

between 1961 and 1971 to give an average annual growth rate of 1.8 per cent. In the retail sub-group there was a loss of 352 jobs over the decade to give an average annual decline of 0.03 per cent.

2.11 (a) Employment Change in the Wholesale Sub-Group The category showing a major decline in employment was in Wholesale Dealing in live animals which fell by 34.5 per cent from 3,255 in 1961 to 2,131 in 1971. This was followed by Clothing, Textiles and Footwear which lost 452 jobs. The categories Paper, Stationery and Books and Seeds, Fertilisers and other agricultural supplies together lost 460 jobs. The total decline in employment in these categories was 2,036 jobs.

The major source of employment growth was the category of Building Materials which expanded by 3,276 jobs, with a further 1,544 in the Food and Drink category (Table 2.10). Three categories account for 379 additional jobs, while the increase in the other Non-Food sector is 2,780. Two categories shown separately in 1961 and 1966

						į	ì
		1961	. 33	1971	71	Change	Change
	Occupations	Number	%	Number	%	1961–71	1961–71
	Producers, Makers and Repairers	139	0.85	305	1.27	166	+119.42
•	Transport, Communication and Ware-housemen	533	3.25	821	3.42	288	+54.3
	Clerical Workers	9,579	58.43	14,189	59·14	4,610	+48·1
57	Workers in Commerce, Insurance, Finance	4,178	25.48	5,379	22.42	1,201	+28.8
	Service Occupations	474	2.89	402	1.68	-72	-15.2
	Professional, Technical, etc.	318	1.94	872	3.63	554	+17.2
	Other Occupations	1,175	7.16	2,024	8.44	849	+72·2
1	Total all Occupations	16,396	100.0	23,992	100.00	7,596	+46.3

Source: Census of Population, Vol. III, Table 7A, 1966 and 1971.

within the Wholesale TABLE 2.10

							Dorrog	Dercentage of
		-					sub-group in	oup in
	Sub-Group Categories		Employment	/ment	Change	- Juge	each category (%)	agory (%)
	-	<u> </u>			Number	Percentage		
			1961	1971	1961–71	1961–71	1961	1971
			3,255	2,131	-1,124	-34.5	10.5	5.8 8.0
	Live Animais		2.028	1,576	- 452	-22.3	9.9	4.3
	ig, lextiles, rootwe	:	3.199	2,739	- 460	-14.4	10-4	7.4
58	Others	:	0.482	6.446	-2,036	-24.0	27-5	17.5
3	Total declining Categories	:	9,405				6	18.7
	Builders Materials	:	2,869	6,145	3,276	114.2	, ,	<u> </u>
	Food, Drink	:	7,133	8,677	1,544	21.6	73.0	23.5
	Hardware, Chemists, Petroleum	<u>۔ ۔ .</u>	5,189	5,568	379	7.3	16.8	15·1
		:	7,240	10,020	2,780	38.4	23.4	27.2
			22,431	30,410	7,979	35.6	72.5	82.5
	Total Growth Categories			930 90	F 943	19.2	1800	100.0
	Total Sub-Group	:	30,913	20,050				

Source: Census of Population, Industrial Vols, 1961 and 1971.

were subsumed into other Non-Food in 1971, making identification of growth areas impossible. However, based on trends in the amalgamated categories, it is estimated that the employment in dealing in the Timber and Scrap and the Wool and Skins categories accounted for 60.0 per cent of the increase, i.e. some 1,700 of the additional 2,780 jobs. The balance falls into the residual non-food category as defined in 1961 (Table 2.10.).

2.11 (b) Employment Change in Retail Sub-Group, 1961-1971. Changing shopping patterns underlie the major area of decline in the retail sector. Employment in the Grocery category fell by 34.3 per cent between 1961 and 1971 with a loss of 10,606 jobs. Substantial losses also occurred in Toys, Leather and Sports Goods categories, as well as in Clothing, Drapery and Footwear. At the same time, employment in Department Stores increased by 55.5 per cent providing an additional 1.874 jobs, see Table 2.11. Retail sales in Department and Variety Stores increased from £306,286 per establishment in 1959 to £710,653 per establishment in 1971, while sales for all retail establishments increased from £7.131 in 1956-1959 to £22.408 in 1975 at market prices.1

The other major categories showing an increase are Motor Vehicles Public Houses, T.V. Rentals, Hardware and Electrical goods—areas where the income elasticity of demand can be presumed to be still high 1.

Thus, within the Commerce group, the net loss of employment in Retail Distribution was offset by the growth of the categories within Wholesale Distribution, But, as in other cases, it is necessary to examine occupational change within both sub-groups to understand the real changes taking place and their significance for employment and regional policy.

2.12 Occupational Change in Wholesale and Retail Trade

Examining changes in terms of occupation, it can be seen from Table 2.12 that an expansion of the white-collar labour force within the Wholesale sub-group accounted for 63.6 per cent of all additional employment between 1961 and 1971. Most of the white-collar

¹Census of Distribution, 1956-1959, Stationery Office, Dublin 1962 and Census of Distribution: Summary Results for Retail and Wholesale Trade, 1971, Stationery Office, Dublin, 1975

¹J. Pratschke, Income-Expenditure Relations in Ireland 1965-66, ESRI, Paper No. 50, Dublin, 1969, 36 pages.

TABLE 2.11 Employment within the Retall Distribution Sub-Group, 1961–1971

14.0 54.6 100.0 18.3 10.8 45.4 4.7 9 12·1 12.3 18.2 2.8 Percentage of sub-group In each category (%) 1971 11.8 42.3 1000 12.9 3.0 5.5 13.0 13.0 57.7 9.1 1961 27.6 4. Percentage 1961–71 28.7 6.0 55.5 -21.6 40.6 19.3 23.7 18·1 -30.6 9 - 7.1 Change -13,903 1,465 1,946 -1,035 5,879 1,874 2,387 13,551 Number -1,388 874 1961-71 15,563 60,835 111,430 20,345 5,249 7,641 3,508 50,595 3,143 13,663 12,037 20,281 **Employment** Total Sub-Group ... 111,782
Source: Census of Population, Industrial Vols. 1961 13,176 47,284 3,375 64,498 14,466 10,091 4,543 14,537 4,531 30,887 1961 and Electrical Toys, Leather and Sports Goods Clothing, Drapery and Footwear : Sub-Group Categorles Grocery and Provisions, Grocery and Public House T.V. Rentals, Hardware Goods Expanding Categories Declining categories Department Stores Public Houses ... Motor Vehicles Others Others

employment expansion was confined to the Other Non Food, Builders Materials and the Food and Drink categories, and the trend in whitecollar employment mirrored the overall trend in the sub-group and categories in question.

TABLE 2.12 White-Collar Occupations within Wholesale Sub-Group

Sub-Group Categories 1961 1971 Change 1961-71 Change 1961-71 Live Animals 2,386 1,468 -918 -38 Food and Drink 4,290 5,037 747 17	1
Live Animals 2,386 1,468 -918 -38 Food and Drink 4,290 5,037 747 17	ige
Food and Drink 4,290 5,037 747 17	-71
Food and Drink 4,290 5,037 747 17	
Clothing, Textiles and Footwear 1,638 1,327 -311 -18	3∙9
Hardware and Electrical 1,071 1,134 63 5	5∙9
Builders Materials 1,415 2,469 1,054 74	4.5
Paper, Stationery and Books 713 521 -192 -26	8∙9
Chemists Wares 508 730 222 43	3.7
Petroleum-Products 1,025 1,263 238 23	3∙2
Seeds, Fertilisers 997 892 -105 -10).5
Other Non Food 3,843 6,822 2,979 77	7∙5
Total White calles Employment in	
Total White-collar Employment in	
Wholesale Sub-Group 17,886 21,663 3,777 21	1 • 1
White-collar employment:	
Percentage of Total Wholesale	
Employment (%) 59·9 58·8 63·5 —	

Source: Census of Population, Vol. III, Table 6, 1961 and Table 8, 1971.

Within the Retail Distribution sub-group, the overall loss of employment between 1961 and 1971 was 352. Between 1966 and 1971 employment declined more rapidly, leading to a loss of 4,078 jobs during the quinquennium.

Despite the overall decline in employment, the number of whitecollar workers increased by 5,388 or 6.5 per cent and account for 79.0 per cent of all employment in Retail Distribution. The number of workers in Clerical, Professional or Managerial occupations increased by 9.4 per cent and accounted for 9.4 per cent of the total employment in Retail Distribution in 1971. Here again, white-collar employment showed a capacity for continued growth, replacing some of the jobs lost in other occupations.

TABLE 2.13:
White-Collar Occupations within Retail Sub-Group, 1961–1971*

		loved	Cha	nge	Percent Total	tage of Retail
Category	Numbers E	mpioyeu	Numbers	Percentage (%)	Employn	nent (%)
	1961	1971	1961–71	1961-71	1961	1971
Total Retail Employment	111,782	111,430	-352	-0.3	100	100
Total White-Collar	82,662	88,050	5,388	6∙5	74 · 0	79 ∙0
Clerical, Professional. Managerial	9,600	10,500	900	9.4	8.6	9·4

*See Table A.3 for further details. Source: Census of Population, Vol. III, Table 6 unadjusted, 1961 and Table 8, 1971.

2.13 Occupational Changes within Commerce Group

In 1961, white-collar employment accounted for 70.5 per cent of the total employment in the Commerce Group and this figure had increased to 74.0 per cent by 1971 (however, if Sales and Proprietors, i.e. Commercial occupations, are excluded from white-collar workers, then only 10.6 per cent in 1961 and 12.3 per cent in 1971 could be

TABLE 2.14

Changes within White-Collar Occupations in Commerce, 1961–1971

		Numbers I	Employed		Change 1	1961–71	Perce Change (9	
Category	То	tal	White	Collar	Total Employ- ment in	White Coilar Employ-	Total Employ- ment in	White Collar in
	1961	1971	1961	1971	Com- merce	ment in Com- merce	Com- merce	Com- merce
Wholesale	30,913	36.856 111.430	17,886 82,662	21,663 88,050	5,943 -352	3,777 5,388	19·2 -0·3	21 ·1 6·5
Retail Total	142,695	148.286	100,548	109,713	5,591	9,165	3.9	9.1

Source: Census of Population, Industrial Vols, Table 6, unadjusted, 1961, and Table 8, 1971.

called white-collar) ¹. This consisted mainly of a growth of 24·5 per cent in the total number of Clerical Workers, representing over 3,000 additional jobs between 1961 and 1971.

2.14 Employment Change in the Professional Group, 1961-71

After the Insurance, Banking and Business Services Group, the Professional Services group experienced the next highest annual rate of growth at 2·5 per cent and the largest absolute increase (23,885 jobs) accounting for 55·4 per cent of employment increase in Service sector employment between 1961 and 1971.

Professional Service functions include all Legal, Commercial, Medical, Engineering and other specialist services which may crudely be divided in terms of final and complementary demand. In 1961, 87-4 per cent of the total employment in the Professional Services group was attributable to final demand consumer services, with 74,479 persons engaged in the provision of Religious, Educational, Medical and Other services. By 1971 the share of final demand had declined to 85-2 per cent of total, despite an increase of 18,470 jobs (Table 2.15). The proportion of the group's total employment accounted for by the complementary demand services such as Consultancy and Trade Associations increased during the decade from 12-6 to 14-8 per cent. This represented a growth of over 50 per cent, or 5,415 jobs between 1961 and 1971 (Table 2.15).

There was an increase of almost 10,000 jobs in the Educational subgroup, which ranged from 1,899 in Primary to 3,986 in Secondary education. There was a decline of 1,348 jobs in other education mainly in those working in the "Other Education" category. The University and Vocational levels increased employment by 2,776 and 2,527 persons respectively. Those engaged in Public Sector Medicine accounted for 56·0 per cent of all employment in Medicine and Dentistry in 1961 and this fell slightly to 54·1 per cent by 1971. Within the Medical sub-group the largest employment increase occurred in the Private-sector Hospitals but this was offset by a small decline in the Other Medicine category. In Local Authority Hospitals and Local Authority medicine there was a combined increase of 4,436 jobs (Table 2.16). One of the largest percentage increases occurred in Dentistry which increased by 58·1 per cent, from 864 to 1,366 persons.

¹See definition of White-collar employment in Section 1.1.

TABLE 2.16 Employment Trends within the Professional Services Group, 1961–1971

Religion	7 0000	300000	Number Employed	mployed	Change in	Percentage Share (%)	Share (%)
Final Religion 14,564 13,905 -659 17.1 1 Final Demand Education 29,584 39,424 9,840 34.7 : Final Demand 29,584 39,620 9,289 35-6 : Final Demand 74,479 92,949 18,470 87-4 87-4 Accountancy 2,019 3,086 1,067 2.4 1,067 2.4 Law 4,123 4,441 318 4.8 1.7 1.7 Complementary Veterinary Surgery 853 983 130 1.0 1.6 Associations 2,070 1,832 3.302 3.19 1.9 Complementary 10,714 16,129 5,415 1.2-6 Planning and Research 10,714 16,129 5,415 1.2-6 1.9 Pomend	Category	Employment	1961	1971	1961/71	1961	1971
Final Education 29,584 39,424 9,840 34.7 : Final Demand 30,331 39,620 9,289 35.6 Final Demand 74,479 92,949 18,470 87.4 Accountancy 2.019 3,086 1,067 2.4 Law 4,123 4,441 318 4.8 Complementary Veterinary Surgery 853 983 130 1.0 Associations 693 890 197 0.8 Professional 1,600 1,832 3 1.9 Complementary Complementary Other Professional Services 1,600 1,832 3 1.9 Demand Pomenand		•	14,564	13,905	-659	17.1	12.7
Final Demand Medicine and Dentistry 30,331 39,620 9,289 35-6 Final Demand Accountancy 2,019 3,086 1,067 2-4 Law 4,123 4,441 318 4-8 Consulting Engineering, etc. 1,426 2,827 1,401 1.7 Complementary Veterinary Surgery 853 983 130 1.0 Associations 693 890 197 0.8 Planning and Research 1,600 1,832 2,302 1.9 Other Professional Services 1,600 1,832 1.9 1.9 Professional Service Group 109,078 23,885 100.0 1		Education	29,584	39,424	9,840	34.7	36.2
Final Demand Accountancy 74,479 92,949 18,470 87-4 Accountancy 2,019 3,086 1,067 2-4 Law 4,123 4,441 318 4-8 Consulting Engineering, etc. 1,426 2,827 1,401 1-7 Complementary Veterinary Surgery 853 983 130 1-0 Associations 693 890 197 0-8 Planning and Research 1,600 1,832 2,302 1-9 Complementary 10,714 16,129 5,415 12-6 Professional Service Group 85,193 109,078 23,885 100-0 1			30,331	39,620	9,289	35.6	36.3
Complementary Compleme	Final Demand		74,479	92,949	18,470	87.4	85.2
Complementary Complementary Veterinary Surgery 4,123 4,441 318 4.8 Complementary Veterinary Surgery 853 983 130 1.0 Trade and Professional Associations 693 890 197 0.8 Planning and Research 1,600 2,070 1,832 1.9 Other Professional Services 1,600 1,832 5,415 1.9 Professional Service Group 10,714 16,129 5,415 12.6 Service Group 85,193 109,078 23,885 100.0 1			2,019	3,086	1,067	2.4	2.8
Complementary Complementary Complementary Veterinary Surgery 1,426 2,827 1,401 1.7 Complementary Trade and Professional Associations 693 890 197 0.8 Planning and Research 1,600 2,070 1,832 1.9 1.9 Complementary 10,714 16,129 5,415 12.6 Professional Service Group 85,193 109,078 23,885 100.0 1		: :	4,123	4,441	318	4.8	4.1
Complementary Veterinary Surgery 853 983 130 1·0 Trade and Professional Associations 693 890 197 0·8 Planning and Research 1,600 1,832 2,070 1·9 Complementary Demand 10,714 16,129 5,415 12·6 Professional Services Group 109,078 23,885 100·0 1			1,426	2,827	1,401	1.7	2.6
Trade and Professional Associations 693 890 197 0·8 Planning and Research Other Professional Services 1,600 1,832 2,070 2,302 1·9			853	983	130	1.0	6.0
Planning and Research 1,600 1,832 2,302 1-9 1.9 1,832 1.9 1.9 1,832 1.9 10,714 16,129 5,415 12.6 10.0 1			693	890	197	8.0	8.0
Other Professional Services			,	2,070		,	1.9
	,	Other Professional Services	900'- 	1,832		<u>s.</u>	1.7
roup — 85,193 109,078 23,885 100·0	Complementary Demand		10,714	16,129	5,415	12.6	14.8
	Professional Service Group		85,193	109,078	23,885	100.0	100.0

Source: Census of Population, Industrial Vols. 1961-1971.

TABLE 2.16
Employment Changes within the Medical Services Sub-Group, 1961–1971

			Cha	nge		
	Num Emple		Numbers	Per · centage (%)		entage
	1961	1971	1961-71	1961–71	Shar	e (%)
Local Authority Hospitals	14,668	18,646	3,978	27 · 1	48 · 4	47 · 1
Local Authority Medicine, etc.	2,303	2,761	458	19∙9	7 · 6	7.0
Other Hospitals	9,460	14,145	4,685	49 · 5	31 ⋅ 2	35 ⋅ 7
Other Medicine, etc	3,036	2,702	-334	11·0	10.0	6.8
Total Medical Categories	29,467	38,254	8,787	29 · 8	97 · 2	96 6
Dentistry	864	1,366	502	58 · 1	2·8	3.4
Total Sub-Group	30,331	39,620	9,289	30 · 6	100.0	100 · 0

Source: Census of Population, Industrial Vols., 1961-1971.

Within the complementary demand services there was a 52.9 per cent growth in Accountancy (Table 2.15), a 98.2 per cent growth in the category of Consulting Engineers, including Architects and Surveyors, and smaller increases in the numbers engaged in legal and other

TABLE 2.17
Occupational Change in Professional Service Group, 1961–1971

	Producers, Makers Repairers	Transport and Commun. Workers	Clerical Workers	Commer- cial, Ins. and Fin- ance Workers	Prof. Tech. Workers	Service Workers	Other Workers
1961 1971	3,512 3,821	491 777	6,048 9,315	47 6	64,844 81,199	10,111 13,371	140 589
Change	+309	+286	+3,267	41	+16,355	+3,260	+449

Source: Census of Population, Industrial Vols, 1966-71, Tables 7a and 7b.

consulting services. These categories represent prime examples of Complementary Services whose growth are likely to interact with the expansion of employment in goods production.

In terms of Occupations, most of the increase of 23,885 jobs in Professional Services between 1961 and 1971 derived from an expansion of white-collar work (excluding Commerce), accounting for 20,071 jobs or 84.0 per cent of total employment in the group (Table 2.17).

2.15 Employment Trends in Public Administration and Defence Service Sector Group, 1961–71

This Group, comprising employment in Government Departments, Local Authorities, the Garda Siochána and the Army, accounted for 10·6 per cent of Service sector employment in 1971, having increased by 1·86 per cent per annum over the decade, rising from 40,580 to 48,869 jobs. During the 1961-71 period, employment growth was almost entirely confined to the Administration sub-group. Employment in Local Authorities increased most rapidly at 4·0 per cent per annum, compared with a growth rate of 1·86% for the whole Group. Employment in Government Departments increased by 2·4 per cent per annum, amounting to an increase of 3,946 jobs (Table 2.18).

TABLE 2.18:
Employment Trends in Public Administration and Defence Group, 1961–1971

	Numbers Employed		Change		Percentage Share	
Category	1961	1971	Numbers	Percentage	1961	1971
			1961-71	1961–71		
	-			%	%	%
Garda Siochána	6,663 9,924	6,415 10,073	-248 149	-3·7 1·5	16·4 24·5	13·1 20·6
Other Government Departments	14,695 9,298	18,641 13,740	3,946 4,442	26·9 47·8	36·2 22·9	38 · 2 28 · 1
Total Group	40,580	48,869	8,289	20 - 4	100.0	100 -0

Source: Census of Population, Industrial Vols., 1961-71.

While the Defence category appears to remain reasonably static over the decade, there was in fact a decline in Army employment to 9,089 in 1966 and a subsequent expansion to just over the 1961 levels by 1971. Numbers employed in the Garda Síochána declined by 2·6 per cent between 1961 and 1966, but only by 1·2 per cent from 1966 to 1971.

An examination of occupational trends reveals that Public Administration and Defence constitute two quite distinct sub-groups in terms of employment skills and employment trends. Within the Defence sub-group, there was little change in employment from 1961 to 1971 and it represents one of the few areas of economic activity where there was an actual decline in the white-collar component of the labour-force, Table 2.19. While it must be recognised that the presence of part of the Army stationed in a town can have considerable benefits for the local economy (e.g. the historical case of Templemore), the location of Army units is subject to certain constraints, which means that this area has limited relevance to this study. There has been a substantial growth of the white-collar Civil Service, at both Central and

TABLE 2.19

White-Collar Employment Change within the Public Administration and Defence Group, 1961–71

	Numbers	Employed	Change		
Categories	1961	4074	Numbers	Percentage (%)	
		1971	196171	1961–71	
				%	
Garda Síochána	217	246	+29	+13.4	
Defence	341	252	-89	-16·1	
Other Government Departments	11,958	15,672	+3,714	+31.3	
Local Authority (n.e.s.)	5,665	7,143	+1,478	+26.1	
Total White-Collar	18,181	23,313	+5,132	+28.2	
White-Collar as percentage of Total (%)	44.8	47.7			

Source: Census of Population, Industrial Vols., 1966-71, Tables 7a and 7b.

Local Government level, Table 2.19. In the case of Other Government Departments, white-collar employment accounted for 84·1 per cent of the total employment in 1971 as compared to 81·4 per cent in 1961.

These occupational changes reflect both the direct growth of the white-collar Public Service and the contraction of unskilled occupations. Between 1961 and 1971 white-collar jobs accounted for 61-9 per cent of the total employment increase in this group and this was largely confined to the Other Government Departments (72-4 per cent), with 1,478 additional white-collar jobs in Local Authorities. Thus, most of the growth in employment in Public Administration has taken place within other Government Departments. Because of its importance and current relevance, employment change in the public service is examined further in Section 2.16.

2.16 Comparative Trends in Public Sector Employment

A considerable amount of concern has been expressed that Public Service expenditure and also employment has grown too rapidly relative to other sectors of the economy and that this growth has occurred at the expense of investment in the goods-producing sectors. This argument has recently been developed in respect of the United Kingdom¹ and Ireland². In view of the evident growth of the whitecollar Public Service in Ireland outlined above, it is essential to examine the Irish Public Service in the broader EEC context. There are many difficulties in both defining what is included within the Public Service and also in making international comparisons. These difficulties arise from the nature of the data, the different dates of data collection and from variations in administrative structures between countries. The employment in the Public Service relates closely to the total number of persons paid out of public funds and includes the employees of Local Authorities, Defence and workers in Education as well as the Civil Service. In Denmark, Public Service employment figures include clergymen, while in France, dustmen are included in the total figure.

Table 2.20 provides data on Public Service employment in Ireland in 1975 and 1976. This employment grew by over 7,000 persons in the year.

TABLE 2.20

Public Service Employment in Republic of Ireland

Category	Year <i>(a)</i> 1975	Year <i>(a)</i> 1976
Non-industrial Civil Service (b) State industrial employees (c) Gardai Defence Forces Teachers University Staff Other educational sector staff (d) V.E.C. (administrative staff) Health Boards Other Health sector staff (e) Local Authorities County Committees of Agriculture State Sponsored Bodies	47,000 6.050 8,200 13,350 31,500 5,200 (est.) 450 (est.) 350 29,150 17,550 31,700 (est.) 800 67,250	48,250 6,000 8,500 15,400 33,650 5,300 500 400 29,500 18,250 32,250 (est.) 800 67,000 (est.)
Total	258,550	265,800

Notes:

(a) Census date in all cases is as close as possible to January of each year. All figures rounded to nearest 50. Each part-timer is counted as 1 head of staff.

(b) There are in addition non-industrial scale paid staff (1975: 3,150; 1976: 3,050) who contract their services to the state, e.g. Sub-Postmasters and Branch Managers of Employment Exchanges.

(c) Exclusive of industrial staff attached to Defence Forces (1975: 1,750; 1976: 1,750), who are included in Defence Forces.

(d) e.g. Agricultural and Teacher Training Colleges, Limerick Colleges of Higher Education.

(e) e.g. Voluntary Hospital, Corporate Body Hospitals and Homes for the Mentally Handicapped.

Source: Date supplied by the Department of the Public Service, November 1976.

Employment in the Public Service in Ireland accounts for roughly one job in four in 1976 while the State Sponsored Bodies account for over 6 per cent of total employment. Table 2.21 seeks to compare the number of Irish Public Service Workers with those in other EEC countries on the basis of very crude statistics.

¹R. Bacon and W. Eltis, *Britain's Economic Problem: Too Few Producers*, The MacMillan Press, Ltd., London, 1976, 194 pages.

²J. Wiseman and B. Stafford, *The Future of Public Expenditures in Ireland*, NESC Report No. 20, Dublin, 1976.

TABLE 2.21 Public Service Employment in EEC Member States

Country	Number of persons Total ('000) (a)	Total Employ- ment ('000) <i>(b)</i>	Total Employ- ment in General Govern- ment ('000)	Number of Employees per 1,000 population	% of Total Employ- ment in General Govern- ment (%)
Belgium Denmark France Germany, F.R. Ireland Italy Luxembourg Netherlands United Kingdom	9,742 5,022 52,133 61,973 3,051 54,901 353 13,439 56,021	3,783 2,355 20,663 26,126 1,037 18,140 151 4,563(d) 24,010	510 563 3,528(c) 3,430 180 2,336 14 617 4,338	52·35 112·23 67·67 55·35 59·00 43·10 39·09 45·91 77·44	13 23 17 13 17 12 9 13

(a) Figures from Eurostats, Statistical Office of EEC, 1973/74, Table 1.

(b) Figures from Eurostats, 1973/74, Table 8.

(c) France includes 600,000 "Auxiliaries" on five-year Government contracts.

(d) Figures in "man-years".

Source: Estimates of Public Service employment supplied by the EEC Information Office for seven countries. Data on France were supplied by the French Embassy, while Irish data on Public Service were supplied by the Department of the Public Service for 1975 as in Table 2.20 above. The Irish data exclude personnel employed in Universities, the Post Office and State-sponsored Bodies.

Allowing for the difficulty of finding comparable data, Ireland appears to hold an intermediate position in terms of the number of Public Service employees per 1,000 population, or as percentage of total employment.

Apart from the State Sponsored Bodies, the Non-Industrial Civil Service is the next largest single group of Public Service employment in Ireland 1. By 1976 the Non-Industrial Civil Service accounted for 48,250 jobs or almost 5 per cent of the employed population. Table 2.22 compares the number of Civil Servants in Ireland to that of twelve other countries including five EEC countries.

TABLE 2.22 Civil Service¹ Employment in Selected Countries²

Country	1965	1975	% increase 1965–75	Civil Servants as % of total Population 1975 ¹²	Civil Servants as % of Working Population 1975 ¹²
Australia Belgium Britain³ Canada Finland⁴ France⁵ Italy⁰ Ireland³ Japan³ Netherlands⁵ New Zealand Norway¹⁰ Sweden¹¹	183,000 102,000 1,067,000 1,067,000 66,000 763,000 511,000 41,000 899,000 165,000 84,000 68,000 175,000	277,000 129,000 1,159,000 273,000 107,000 1,039,000 630,000 53,000 887,000 203,000 105,000 76,000 215,000	51 26 9 95 62 36 23 29 -1 23 25 12	2·0 1·3 2·1 1·2 2·3 2·0 1·1 1·7 0·8 1·5 3·5 1·9 2·6	4·6 3·2 5·0 2·8 4·9 5·2 3·2 4·8 1·5 4·5 8·8 5·0 5·4

Notes:

¹Figures relate to serving personnel at either January or June and do not include vacancies. They include personnel in Posts and Telegraphs.

*Figures include Industrial Employees and part-time staff; in some cases the fulltime equivalent of part-time staff is included.

*The 1970 figure for P & T employees is not available; the figure included is 437,000 (numbers employed at March 1971). Industrial employees reduced after 1970.

The figure in the 1975 column relates to 1974.

⁶The figure in the 1965 column relates to 1962, the appropriate figures for 1965 are not available.

The figures in the 1965 column relates to 1967; the appropriate figures for 1965 are not available. Employees of the regional governments are not included.

⁷Comprises non-industrial Civil Service and state industrial Employees outside Defence.

*The figure in the 1965 column relates to 1967.

The figure for 1965 is an estimate.

¹⁰The figure for 1965 is an estimate. There have been considerable changes over the past five years in the grouping of data for civil service statistics and because of this it has not been possible to get precise figures for comparison purposes.

¹¹Figures include personnel employed on transmission of radio and TV.

¹²Working population for Britain is in 1974.

Source: Data supplied by Department of the Public Service, November 1976.

¹For definitions of terms see: S. Dooney, The Irish Civil Service, I.P.A., Dublin, 1976, page 5.

From Table 2.22 it can be seen that only Japan experienced a decline in the number of Civil Servants while Ireland had an intermediate rate of growth from 1965 to 1975. Canada, Australia and Finland had a rapid expansion of the number of Civil Servants while Britain and Norway experienced only a small percentage growth. In terms of the number of Civil Servants as a percentage of total population (1975) or employment, Ireland can also be seen to hold an intermediate position behind the percentages for Britain, Finland, France, New Zealand, Norway and Sweden.

Since 1972 the total employment in the Civil Service has expanded from 45,800 in 1972 to 53,050 in 1975 but much of this net increase was absorbed by the expansion of the Defence forces (see Section 2.21). It is estimated that, between 1972 and 1975, employment in State Sponsored Bodies declined by 1,300 or 1.9 per cent.

2.17 Employment Trends in Transport, Communications and Storage Group, 1961–71

This is the last of the major employment growth areas in Services. Growth in this Group is usually considered by a function of industrialisation and urbanisation. Apart from Private Haulage, the bulk of activities fall to State or State-sponsored bodies and the distinction may be made between passenger and freight traffic. The Communications sub-group accounts for almost one-third of total employment in the Group (Table 2.23).

Of an overall group increase of 5,955 jobs, 57·5 per cent occurred in the Communications and 19·2 per cent in the Transport Categories. Declines in Employment in Sea, Harbour and Other Water Traffic, and particularly in Railway employment were offset by expansion in Air and Road employment. Over the decade, Transport's share of the Group employment fell from 66·7 to 62·1 per cent.

In addition to the employment shift towards the newer forms of Transport and Communications, the 1961–71 decade witnessed a rapid growth of white-collar jobs in this group. Of the total growth of 5,955 jobs, white-collar operations accounted for 2,406 or 40·4 per cent, exceeding even the growth of the Transport and Communication sub-group (Table 2.24).

2.18 The Personal Service Group, 1961-71

The decline in both private and commercial domestic service accounts for 96.0 per cent of the total job loss in this Group. The balance of

TABLE 2.23
Employment Trends within Transport, Communication and Storage

	Number	s Employed	Cha	nge	of Grou	ge Share p in each egory
Group Categories			Number	Percen- tage		
	1961	1971	1961–71	1961–71	1961	1971
Transport Sub-Group						
Air	2,554	4,570	2,016	78.9	4.7	7.6
Railway	11,624	8.680	-2,944	–25 ⋅3	21 • 4	14.4
Road Passenger	7,888	9,383	1,495	19.0	14 - 6	15.6
Road Freight	5,057	6,486	1,429	28 · 3	9⋅3	10.8
Sea	4,474	4,251	-223	–5 ⋅0	8.3	7 · 1
Harbours, docks and other water	4,569	3,940	629	–13 ⋅8	8 · 4	6.6
Sub-Group Total	36,166	37,310	1,144	3 · 1	66 · 7	62 · 1
Postal, Telegraph and Radio	16,340	19,765	3,425	21 .0	30 · 2	32 • 9
Others	1,661	3,047	1,386	83 · 4	3 ⋅ 1	5.0
Total Group	54,167	60,122	5 955	11 · 0	100 · 0	100 · 0

Source: Census of Population, Industrial Vols, 1961 and 1971.

TABLE 2.24
Occupational Changes in Transport, Communications, etc. Group

	Producers, Makers, Repairers	Transport and Com- munication Workers	Service Workers	White- Collar Workers	Total Employ- ment
1961 1971	9,672 10,647	31,175 32,997	1,441 2,193	11,879 14,285	54,167 60,122
Chan e 1961/71	+975	+1,822	+752	+2,406	+5,955

Source: Census of Population, Industrial Vols, Tables 7A, 7B, 1966 and 1971.

employment loss in this "Old Services" Group is attributable to losses in Laundries and Dry Cleaning. The total employment loss amounted to 18,227 jobs of which 16,375 and 1,108 were in the Private Domestic and Lodging/Boarding Houses categories respectively (Table 2.25).

In the principal Personal Service categories catering to the general public (hotels, restaurants and cafes), employment increased by 6,866 jobs. The overall loss of employment in the Personal Service Group was paralleled by an internal shift towards an absolute and relative growth of white-collar jobs within the group. White-collar jobs increased by 2,589 to 6,845 jobs in 1971, thus accounting for 12·6 per cent of Personal Service employment in 1971, compared to 6·7 per cent in 1961.

TABLE 2.25

Employment Trends within Personal Service Group, 1961–1971

	Employ	ment	Char	nge	Percentag of Group Catego	in each
Category			Numbers	Percen- tage (%)		
	1961	1971	1961-71	1961-71	1961	1971
Private Domestic Service Lodgings and Boarding Houses Laundries and Dry Cleaning	32,096 1,665 5,139	15,721 557 4,395	-16,375 - 1,108 - 744	-51 · 0 -66 · 5 -14 · 5	50·7 2·6 8·1	28·9 1·0 8·1
Declining Categories	38,900	20,673	_18,227	-46·9	61 · 4	38.0
Hotels Restaurants and Cafes Welfare and Charitable Services Hairdressers Other Personal Service	9,904 6,093 1,131 4,875 2,411	15,065 7,800 1,931 5,359 3,613	5,161 1,707 800 484 1,202	52·1 28·0 70·7 9·9 49·9	15·6 9·6 1·8 7·7 3·9	27 · 7 14 · 3 3 · 6 9 · 8 6 · 6
Total Growth Categories	24,414	33,768	9,354	38 · 3	38 · 6	62 · (
Total Growth Categories	63.314	54,441	-8.873	-14 · 0	100 · 0	100 -0

Source: Census of Population, Industrial Vols. 1961 and 1971.

2.19 Recreational Services

Although total employment in the Recreational Service Group remains small, accounting for only 2.6 per cent of Service sector employment by 1971, 58 per cent of those employed were white-collar workers. Declines in employment in the Cinema and Film Studio category were offset by the expension of employment in Broadcasting. There was also moderate growth in "other recreational services" including horse racing, leading to slight overall loss of jobs over the decade (Table 2.26).

TABLE 2.26:
Employment Trends in Recreational Services, 1961–71

	Emplo	yment	Cha	nge	Percei Share	
Category	1961	1971	Numbers 1961–71	Percen- tage (%) 1961-71	1961	1971
Cinemas and Film Studios Sweepstakes and Lotteries Bookmaking	2,587 2,551 1,778	1,660 1,658 1,552	- 927 - 893 - 226	-35·8 -35·0 -12·7	23 · 6 23 · 2 16 · 2	15·3 15·3 14·3
Declining Categories	6,916	4,870	-2,046	-29 · 6	63 · 0	44 • 9
Theatres and Broadcasting Others	1,469 2,601	2,884 3,097	1,415 496	96·3 19·1	13·4 23·6	26 · 6 28 · 8
Total Growth Categories	4,070	5,981	1,911	47 • 0	37 · 0	55 - 1
Total Group	10,986	10,851	- 135	- 1 · 2	100 - 0	100 -0

Source: Census of Population, Industrial Vols. 1961 and 1971.

2.20 Resume of Trends in Employment, 1961-71

While total employment increased by only 2,300 between 1961 and 1971 there was a loss of 106,412 jobs in the Agricultural sector¹ and an increase of 108.712 in the non-Agricultural sectors, of which 60·3 per cent was attributable to the Industrial Sector. Outside Agriculture, the principal areas of employment growth were in the Manufacturing subgroups of Chemicals, Glass, Pottery and Cement, the Metals industry and Building and Construction. Within the Service sector the principal growth areas were in Insurance, Finance and Business Services, Public Administration, Professional Services and in Transport and Communication Services. With the exception of Building and Construction. all these groups had a high white-collar content. While there is not always a very clear picture of growth in employment from an interindustrial group analysis, an examination of occupational changes presents some very definite trends. Within all sectors and within all industrial groups, there was an expansion of white-collar employment between 1961 and 1971. This phenomenon was evident not only in growth groups and categories, but also within declining groups, such as Retail Distribution and Personal Service.

¹There was also a growth of 336 jobs in "non-production" occupations within the Agricultural Sector between 1961 and 1971.

^{*}Excluding the Recreation Group and the Defence sub-group.

Within the employed population, white-collar employment increased by 55,326 to 327,598 jobs or 31·1 per cent of total employment in 1971 as compared to 25.9 per cent in 1961 (21.5 and 16.3 per cent respectively if Commerce occupations are excluded). Of the 55,326 additional white-collar jobs created between 1961 and 1971, 28 4 per cent occurred in the Industrial sector, 36-2 per cent in the Professional Services group, 9.6 in Public Administration and Defence and 13.0 per cent in Insurance, Finance and Business Services. As can be seen from Tables 2.27 and A.5, white-collar workers account for a small, but increasing proportion of Agricultural sector workers. Within Industry, the proportion is 15-8 per cent and within the Service sector 60-0 per cent of all jobs are white-collar. Service sector groups account for a declining proportion of total white-collar work (84·1 per cent in 1971) while the Industrial sector share of white-collar employment increased from 13-0 per cent in 1961 to 15-6 per cent in 1971.

There was a 20·3 per cent growth of white-collar occupations in the decade 1961-71. By contrast, non-white collar occupations declined by 6.8 per cent. Of the total expansion of 108,712 jobs outside Agriculture¹, 52-3 per cent was in service-type occupations ('non-producers"), and 50-6 per cent was in white-collar occupations.

In terms of occupational composition, growth of Professional and Technical occupations accounted for 42.6 per cent of the total whitecollar growth, while growth of Directors, Managers, Company Secretaries, etc, accounted for a further 11.1 per cent of the total whitecollar increase (Table 2.27 and Appendix Table A.5). This suggests that meaningful analysis of employment requires that the data be examined both in terms of branch of economic activity and occupation. From the point of view of regional development and locational considerations, changes in the labour structure within branches of economic activity have to be taken into account.

Employment Changes, 1971-75 2.21

The Economic Review and Outlook-July, 1976 provides the most recent and best available estimates of employment trends after 1971. As can be seen from Table 2.28 the number of persons at work fell from 1,055,000 in 1971 to 1,042,000 in 1975. The major areas of employment decline were in Agriculture, forestry and fishing (-21,000), Building and Construction (-12,000) and Manufacturing industries

In addition to the growth of 108,712 jobs outside the Agricultural Sector, jobs in "non-production" occupations within Agriculture increased by 336 between 1961 and 1971.

Occupation	White-Collar Employment	Collar /ment	Non-White-Collar Employment	e-Collar ment	Change 1961–71	961–71	Percentage Cl 1961-71	Percentage Change 1961-71
Sector and Sub-sector	1961	1971	1961	1971	White- Collar	Non- White- Collar	White- Collar (%)	Non- White- Collar (%)
Agricultural	765	1,046	378,726	272,033	281	106,693	36.7	-28.2
Industry	35,351	51,049	221,827	271,700	15,698	49,873	44.4	22.5
Transport and Communication	11,879	14,285	42,288	45,837	2,406	3,549	20.3	8.3
Commerce	108,732	109,722	33,963	38,564	066	4,601	6.0	13.5
Finance, Insurance, Business Services	15,250	22,464	1,146	1,528	7,214	382	47.3	33·3
Public Administration/Defence	17,437	22,738	23,143	26,131	5,301	2,988	30.4	12.9
Professional Services	71,079	91,109	14,114	17,969	20,030	3,855	28.2	27.3
Personal Services	4,256	6,845	59,058	47,596	2,589	-11,462	8·09	-19.4
Recreational Services	6,459	6,333	4,527	4,518	-126	6	-2.0	-0.5
Other Services	1,064	2,007	1,475	1,365	943	-110	98.€	-7.5
Total	272,272	327,598	780,267	727,241	55,326	53,026	20.3	8.9

Note: An elaboration of this Table by Industrial Group is given in Table A.5.

Source: Census of Population, Industries Vol. 1966 and 1971, Tables 7A and 7B.

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(-4,000). These estimates suggest that since 1971 there have been employment increases throughout the Service Sector: Commerce, Insurance and finance by 1,000, Transport, etc. by 3,000, Public Administration and Defence by 11,000 and Other Services by 9,000. However, the broad level of aggregation used makes it difficult to say what employment change have occurred in each group since 1971. Thus, the increase of 9,000 jobs in Other Non-agricultural Activity represents an estimate of the combined changes in Professional, Personal and Recreation Services, all of which might be expected to display differing trends in employment. Commerce and Insurance and finance have been grouped together in a similar fashion. Within Public Administration and Defence, most of the growth of 11,000 jobs can be attributed to increases in Defence.1 No estimates of Occupational change are available after 1971 and pending the availability of the 1975 Labour Force Survey, it is not possible to say what employment changes have taken place either by Group or Occupation.

TABLE 2.28

Estimated Total Labour Force and Number of Persons at work in the main branches of Economic Activity, at mid-April, 1971 to 1975

Branch of Economic Activity	ty	1971	1972	1973	1974	1975
				Thousands		
Mining, quarrying and turf production Manufacturing industries Building and construction Electricity, gas and water Commerce, insurance and finance Transport, communication and stor Public administration and defence Other non-agricultural economic activity Agriculture, forestry and fishing	age	10 214 85 14 172 60 49 178	10 212 78 14 173 61 52 180 780 267	10 217 79 14 174 61 55 183 793 260	10 222 80 14 175 62 58 186	10 210 73 14 173 63 60 187 790 252
Total at work Out of work	••	1,055 65	1.047 71	1,053 66	1,061 64	1,042 90
Agriculture	••	273 323 459	267 324 466	260 320 473	254 326 481	252 307 483

Source: Economic Review and Outlook-July 1976, page 38.

¹Since 1971 there has been an increase of approximately 2,000 in the strength of the Gardai and 5,300 in the strength of the Army.

PRESENT AND FUTURE PATTERN OF WHITE-COLLAR EMPLOYMENT 1961–1986

3.1 Introduction

As outlined in Chapter 1, there is widespread international evidence of the geographic concentration of white-collar employment, particularly at the higher levels, in a limited number of large urban centres. The rapid growth of large urban agglomerations and capital cities has occurred at the same time as the rapid growth of white-collar activities. This chapter seeks to examine, within the Irish context, the regional pattern of white-collar jobs, the way that pattern has changed since 1961 and is likely to contine to change over the next decade. The chapter also examines the constraints upon the mobility of certain white-collar work and the locational flexibility of other sections thereof.

3.2 Regional Distribution of White-Collar Employment¹

While white-collar employment increased by 21·7% or 59,664 jobs in the State between 1961 and 1971, there were wide variations in both the regional share of this employment and of its growth over the period. Of the total 334,157 white-collar jobs in 1971, 49% were in the East region. The South-West contained 13·8% of the national total, while the North-East, Donegal and North West regions combined only accounted for 8·9% of the total (Table 3.1). Of the 59,664 additional white-collar jobs created between 1961 and 1971, 59·6% were located in the East region while the South-West and Mid-West Regions had the next highest percentage shares of the total growth. Between 1961 and 1971, the percentage share of total white-collar work increased in only two of the nine regions, the East and Mid-West. Outside these two regions the percentage share of the total white-collar work fell from 45·8% in 1961 to 43·4% in 1971. Only one region experienced both an actual and relative decline in white-collar employment, the North-West.

¹Figures on white-collar employment used in this chapter have been extracted from the Occupational Volumes of the *Census of Population* and include all workers in Commercial, Professional, Administrative and Managerial and Clerical occupations as well as some employees in Transportation work. The total figure of 334,157 is slightly larger than that used in Chapter 2 which was derived from Tables VII a and b of Vol. III of the *Census of Population*.

TABLE 3.1 Regional Distribution of White-Collar Work, 1961-71

	Numb Emplo		Cha	nge			Percentage Distribution	
Region	1961	1971	Number	Percent- tage (%)	% Share of Total	1961	1971	Change in % Points 1961
			1961-71	1961–71	Change			1971
East	128,075	163,617	35,542 6,714	27·8 17·1	59·6 11·3	46·7 14·3	49·0 13·8	+2 3
South-West	39,324 25,509	46,038 29,771	4,262	16.7	7 1	9.3	8.9	-0 4
South-East Mid-West	20,461	25,349	4,888	23·9 16·9	8·2 5·0	7·5 6·4	7·6 6·2	+0.1
West	17,682	20,670 18,547	2,988 2,555	16.0	4.3	5.8	5.6	-0
Midlands North-East	15,992 14,111	16,154	2,043	14.5	3.4	5.1	4·8 2·3	-0:
Donegal North-West	7,161 6,178	7,841 6,170	680 —8	9·5 -0·1	1.1	2·6 2·3	1.8	-0
Total State	274,493	334,157	59,664	21 · 7	100 · 0	100.0	100.0	-

Source: Census of Population, Occupation Vols, 1961 and 1971.

Thus, the continued growth of white-collar employment has been accompanied by an increased concentration within the East region, with a growth of 27.8% during the decade.

Regional Distribution of White-Collar Employment by 3.3 Category

While there has been an overall concentration of white-collar employment, largely in the East region, the regional pattern of clerical occupations showed a lesser degree of concentration with the East Region's share falling from 62.1% of the total clerical occupations in 1961 to 59-9% in 1971. On the other hand, Commerce, Professional and Administrative occupations continued to concentrate within the East

In the case of Professional and Technical workers, there has been a Region. continued increase in the number and proportion in the East Region with Professional and related occupations accounting for a growing proportion of the total white-collar work in the Region (Table 3.2). While all regions experienced a growth in the number of workers in Professional and Technical occupations, only the Mid-West and the East Regions increased their share of the national total. In most regions the increase in importance of Professional and Technical occupations in local white and in local white-collar employment was paralleled by a declining national share (Table 3.2).

		a a	ne lancisses	Dontareional and Tachnical	_			Administra	Administrative, Executive and Managerial	rive end M	enegene	
	196	1961	1971	1,	% Total Regional	e egional Collar	1961		1971	-	% Total Regional White-Coller	% otal Regional White-Coller
Region	Number	% Distribu- tion	Number	% Distribu- tion	1961	1971	Number	% Distribu- tion	Number	% Distribu- tion	1961	1971
	000	100	45 190	43.7	24.7	27.6	7,698	57.5	10,996	61.4	0.9	6.7
East	31,603	- C	14 849	14.4	30.1	32.2	1,935	14.5	2,188	12.2	6.4	4.8
South Fast	8 130	10.3	9,805	ြင်	31.9	32.9	948	7.1	1,150	6.4	3.7	3.9
Mid-West	6.401	8.1	8,468	8.2	31.3	33.4	873	6 75	1,193	6.7	4 6	4.7
Weet West	6.710	8.5	8,280	8.0	37 -9	40.1	497	3.7	615	3.4	2.8	ه ن
Midlands	5.430	6.9	6,473	6.3	33.9	34.9	433	3.2	555	3:1	2.7	٠ ٠
North-East	4,279	5.4	5,266	5.1	30.3	32.6	551	4 -1	717	4 0	დ ტ.	 4 4
Donedal	2,342	3.0	2,592	2.5	32.7	33.1	226	1.7	267	 č	3.1 L	ю 4
North-West	2,096	2.7	2,393	2.3	33.9	38.8	220	1.7	235	1.3	3.6	е 8
Total:	78,834	100.0	103,316	100 · 0	28.7	30.9	13,380	100 · 0	17,916	100.0	4 .9	5 . 4

TA BLE 3.3 Regional Distribution of Office Employment 1961 and 197

Region Percentage Employment Percentage East Percentage Employment Percentage Employment Peast Percentage Employment Peast Percentage P			-						
East 60-1 59-0 82 95 1-86 1 South West 60-1 59-0 82 95 1-86 1 South West 12-6 12-3 35 45 0-79 0 Mid-West 5-8 6-6 28 42 0-69 0 West 4-0 4-2 18 28 0-41 0 Midlands 3-7 3-8 19 29 0-43 North East 1-6 1-6 1-6 0-41 North West 1-6 1-6 0-41 North West 1-6 1-6 0-60 Total: All Regions 10-0 10-0 44 57 1-00		Region		Percentage National Office Employment	Percentage National Office Employment	Number of office workers per 1,000	Number of office workers per 1,000	Location Quotient	Location* Quotient
East 60-1 59-0 82 95 1-86		1		(%) 1961	(%) 1971	population 1961	population 1971	1961	1971
South West 12.6 12.3 35 45 0.79 0.79 South East 6.8 7.0 26 36 0.59 0.59 Mid-West 4.0 4.2 18 28 0.41 0.41 West 3.7 3.8 19 29 0.43 0.43 North East 1.6 1.6 18 25 0.41 0.63 North West 1.6 1.6 22 33 0.60 0.50 Total: All Regions 100·0 100·0 44 57 1.00 0	•		:	60·1	59.0	83	92	1.86	1.66
South East 6·8 7·0 26 36 0·59 Mid-West 5·8 6·6 28 42 0·63 West 4·0 4·2 18 28 0·41 Midlands 3·7 3·8 19 29 0·43 North East 1·6 1·6 1·6 0·63 North West 1·6 1·6 0·63 North West 1·6 1·6 0·63 Total: All Regions 1·0·0 1·0·0 44 57 1·00		South West	:	12.6	12:3	32	45	67.0	0.79
Mid-West 5-8 6-6 28 42 0-63 West 4-0 4-2 18 28 0-41 Midlands 3-7 3-8 19 29 0-43 North East 1-6 1-6 18 25 0-63 North West 1-6 1-6 1-6 0-61 0-50 Total: All Regions 100-0 100-0 44 57 1-00		South East	:	8.9	7.0	56	36	0.59	0.63
West 4·0 4·2 18 28 0·41 Midlands 3·7 3·8 19 29 0·43 North East 3·8 3·9 28 38 0·63 Donegal 1·6 1·6 1/8 25 0·41 North West 1·6 1·6 22 33 0·50 Total: All Regions 100·0 100·0 44 57 1·00	82	Mid-West	:	2.8	9.9	78	42	0.63	0.73
3.7 3.8 19 29 0.43 3.8 3.9 28 0.63 1.6 1.6 18 25 0.41 t 1.6 1.6 22 33 0.50 Aegions 100.0 100.0 44 57 1.00			:	4	4.2	18	28	0.41	0.49
3.8 3.9 28 38 0.63 1.6 1.6 18 25 0.41 1.6 1.6 22 33 0.50 loo.0 100.0 44 57 1.00		Midlands	:	3.7	3.8	19	53	0.43	0.50
1.6 1.6 18 25 0.41 1.6 1.6 22 33 0.50 100.0 100.0 44 57 1.00		North East	:	3.8	3.9	28	38	0.63	99.0
1.6 1.6 22 33 0.50 100.0 100.0 44 57 1.00		Donegal	:	1.6	1.6	18	25	0.41	0.43
100.0 100.0 44 57 1.00		North West	:	1.6	1.6	22	33	0.50	0.59
		Total: All Regid	ons	100.0	100.0	44	57	1-00	1.00

*See Section 3.4. Source: *Census of Population*, Occupation Vols. 1961 and 1971 Table 3.2 also demonstrates the regional trends within Administrative, Executive and Managerial occupations between 1961 and 1971. All of the nine regions, including the North West, experienced some growth of Administrative, Executive and Managerial occupations, and in all except the South-West, Administration and related occupations increased as a proportion of total white-collar employment. While 72·7% of the total increases in Administrative jobs took place in the East Region the next highest (7%) occurred in the Mid-West again highlighting the existing centralisation of the decision-making functions. Only the East and Mid-West regions increased their national share of employment in Administration.

Much of the growth of white-collar occupations can be attributed to office-based occupations which include virtually all clerical operations, many branches of Professional work as well as the vast majority of Administration and Management occupations. Office occupations account for a growing proportion of the total employment of most countries; in Ireland the proportion of office occupations has increased from 6% in 1946 to 11·2% of the 1961 gainfully occupied population, and 15·2% by 1971. However, in regional terms there has been a very high degree of concentration within the East Region, especially in higher level professional and administrative office jobs. The proportion of office jobs in the East Region has fallen slightly from 60·1% in 1961 to 59% in 1970. Both nationally and regionally, office employment expanded more rapidly from 1966 to 1971 (18%) than in the 1961–66 period (16·4%). Table 3.3 shows the changes in the regional pattern.

3.4 Ratio of Office Workers to Population

Table 3.3 shows that, despite the growth of office workers per thousand population, there has been little change in the proportion in each region; only the East Region continues to have more than the national ratio of 57 office workers per 1,000 population, with the South West and Mid-West Regions falling far short of the national average.

The West, North-West, Donegal and Midlands Regions have very few career opportunities for office workers whether judged in terms of the total number of jobs or the number per 1,000 population. To a large degree the proportions could be deemed a function of the urban pattern in Ireland. Location Quotient analysis, which measures divergence from the national average does, however, indicate a slight degree of convergence in the regional pattern after 1961 for all regions except the South-West (Table 3.3).

While office work in general is highly concentrated in the East Region, this concentration varies between occupations. The proportion of Salaried and Other non-Manual office workers in this Region is relatively low and declined slowly between 1961 and 1971 in favour of the other regions as did Intermediate Non-Manual grades of office work. However, within the Professional and Technical and the Administrative, Executive and Managerial groups, many occupational categories have both an above average and an increasing proportion of their employment in the East Region.

3.5 The Concentration of Power

While there is evidence of a concentration of white-collar work in the East Region, the degree of concentration tends to be higher amongst senior grades. This concentration of control occupations is matched by the locational pattern of institutions within the State as set out in

TABLE 3.4

Miscellaneous Measures of Concentration in the East Region

Organisations etc.			Total Number in State	Percentage in East Region (%)
Headquarters Offices of: Central Government Departments Embassies Accredited to Ireland State-Sponsored Bodies Commercial State Bodies Trade, Professional and Other Orga Trade Unions Largest Public Quoted Companies Banking Institutions	 inisations 		17 22 87 20 503 65 50 41	100 100 86 90 93 93 90 95
Hire Purchase Firms Insurance Companies Publishing Companies Advertising Agencies			41 31 47 36	71 100 89 97
Full-time University Students 1974, General Service Grades in Civil Se cipal officer level or above 1976 Office Employees 1971	rvice of P	 rin- 	19,709 341 170,000	64 100 59

Source: Administration Yearbook and Diary 1976, and information supplied by the Department of the Public Service.

Table 3.4. This indicates an extremely high degree of concentration of Government Departments and other institutions including Professional Associations, Trade Unions and Financial bodies within the capital city region, mostly in the inner area of Dublin.

The "headquarters effect", that is the concentration of decision-making power within large cities, is not simply a matter of numbers, but more a question of the quality of labour. Available statistics (Table 3.5) suggest a variation in the occupational structure of the Manufacturing industry group which may be the consequence of a headquarters effect in Ireland. The Table shows that manufacturing activity in the East Region contained a lower than national average proportion of routine work, including Producers and Clerical occupations, but also contained a much higher than average proportion of both Professional and Managerial occupations. There is evidence that the controlling jobs within manufacturing industry tend to concentrate in the East Region, especially in the case of larger firms.²

TABLE 3.5

Occupational Structure of Manufacturing Employment In State and East Region, 1971

Industrial Sector	% Pro- ducers etc.	% Trans- port etc.	% Clerical	% Com- merce	% Service	% Pro- fessional, Technical		Total all occupa- tions (%)
State	69·8	9·8	9·3	2·2	1 · 4	2·9	4·6	100·0
East Region	67·8	10·4	5·4	3·4		4·2	7·4	100·0

Source: Census of Population, Vol. III, Tables 7A and 7B, 1971, and unpublished Census data to East Region.

3.6 The 1961-1971 Trend-Resume

One of the features of the change in employment was the rapid growth of white-collar jobs; in turn, white-collar growth was largely due to the growth and expansion of office jobs. While over five out of every ten additional jobs created between 1961 and 1971 were white-collar jobs, eight out of every ten new white-collar jobs were office jobs. Between 1961 and 1971, one in every three new jobs in

¹A. W. Evans, "The Location of the Headquarters of Industrial Companies", Urban Studies, Vol. 10 1973, pages 387–395; J. Westway, "The Spatial Hierarchy of Business Organisations and its Implications for the British Urban System", Regional Studies, Vol. 8, 1974, pages 145–155.

²Small firms or branches controlled from abroad have different locational and organisational characteristics. See Chapter Five.

Manufacturing industry was an office job, while in the Service sector eight out of every ten additional jobs were office jobs.

3.7 Projection of White-Collar Employment, 1971-1986

The estimation of the numbers engaged in white-collar, or office work, at some future date requires the projection of occupational data which has been seriously neglected to date.2 Partly as a result of the lack of research into occupational forecasting and also due to the effects of short run fluctuations, there are particular problems associated with this type of exercise. Thus, the effect of a recession could be to depress proportions employed in goods production, such as unskilled or semi-skilled workers, and to increase the proportion of workers in New services. The extrapolation method of projection adopted here reflects both the lack of research and the paucity of data. This projection is based on the simplistic, and what appears in present economic circumstances an heroic, assumption that what has happened in the recent past, 1961 to 1971, will continue in the future. Despite these drawbacks it is considered that the figures derived from the exercise will provide a useful starting point for discussion as well as drawing attention to the possible implications of a continuation of present trends whether at a faster or slower rate.

Examination of future trends in white-collar employment is undertaken below with a full awareness of the problems inherent in the approach. The analysis is related where possible to the sectoral targets estimated by Walsh for full employment in 1986.¹ Table 3.6 presents a regional extrapolation of the 1961–71 trend to 1986. In total, white-collar employment might be expected to increase by 34% from 334,157 in 1971 to 449,100 in 1986. The projection indicates that all regions might expect an absolute increase in the number of white-collar workers, but only two regions, the East and the Mid-West, would experience an increase in their national share. While the relative increase in the Mid-West would be small, the East Region's share of white-collar work would grow from 49% in 1971 to 52% in 1986.

¹The proportionate growth of office jobs in larger firms was even greater, see: M. J. Bannon, "Office Location and Regional Development", Office Location and Regional Development, An Foras Forbartha, Dublin, 1973, page 10.

^aRecently R. J. Tarling, et al., have developed a set of industrial and related occupational projections for Great Britain for 1981 which represents a first attempt at occupational projections. See: Department of Employment Gazette, May, 1975 pages 400–405 and July, 1975, pages 619–622.

1B. Walsh, Population and Employment Projections: 1971-86, in NESC Report No. 5. Dublin, 1975.

TABLE 3.6 and in Growth of White-Coller. Professional and Administrative Occupations

			Total W	Total White-Collar 1986	r 1986	Profession	nal & Tech	Professional & Technical 1986	Admir	Administration, etc., 1986	etc., 1986
Region		,	Number 1986	Percent- age 1986 (%)	Change in Percent- age Points 1971	Number 1986	Percent- age 1986 (%)	Percentage of Region's Total White-Collar Workers	Number 1986	Percent- age 1986 (%)	Percentage of Region's Total White-Collar Workers (%)
East	:	:	237,000	52.3	+3.3	77,260	49.2	32 ⋅6	18,700	86 · 5	7.9
South-West	:	:	58,400	12.9	6.0-	20,850	13.3	35.7	2,620	و. ق	4.5
South-East	:	:	37,600	8 0	9.0-	12,980	8.3	34 ·3	1,550	ō ō	4.1
Mid-West	:	:	35,100	7 ·8	+0.2	12,890	8.2	36.7	1,900	89	5.4
West	:	:	26,100	æ æ	4.0-	11,370	7.2	43.6	860	3.0	ဗ
Midlands	:	:	23,200	5.1	9.0-	8,420	5.4	36.3	800	2.9	3.4
North-East	:	:	19,800	4 · 4	4.0-	7,190	4.6	36.3	1,070	မ စ	5.4
Donegal	:	:	000'6	2.0	-0.3	3,010	4.9	33.4	360	د .	6· E
North-West	:	:	6,200	<u>+</u>	4.0-	2,920	ę. 6	47.0	260	6.0	4.2
Total All Regions	:	:	452,600	100.0		156,890	100 · 0	34.7	28,100	100 · 0	6.2

Source: Trend projection based on information compiled from Census

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Continuation of past trends suggests that 73,400, (62%) of the projected 118,440 growth in white-collar employment would be located in the East Region.

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Related to the projection in the NESC report, Population and Employment Projections: 1971-86, it appears that white-collar work. which accounted for 37.9% of the non-family farm labour-force in 1971, would represent 38-9% (Projection 1) and 37-6% (Projection 2) by 1986. A projection of total white-collar workers expressed as a percentage of the non-agricultural gainfully occupied suggests that the ratio would rise from 41.9% in 1971 to 44% in 1986. This compares with 1971 ratios of over 47% in Canada, U.S.A. and Sweden.¹ Based on international trends, the growth of employment in informationrelated work may be even more rapid, see Figure 3. Thus, over the next decade, it is very likely that white-collar employment will increase its overall share of the labour market and consequently have even greater influence upon where people reside and work. In addition to the planning and development implications, the growth of white-collar employment will have a serious bearing on the type of manpower and education policies needed in the years ahead.

3.8 Projection of Professional and Administrative Occupations

A comparison of Tables 3.2 and 3.6 shows that between 1971 and 1986 a 52% growth in Professional and Technical occupations and a 57% increase in Administrative, Executive and Managerial workers is projected. Thus, the white-collar occupations would be increasingly dominated by the rapid growth of the more highly paid and prestigious type of work. In all regions the Professional group would account for a greater share of white-collar work, but the East Region alone is likely to increase its national share, gaining 5.5 percentage points between 1971 and 1986.

Trends suggest that, in the South-West Region, Administration etc. would account for a smaller share of white-collar employment in 1986 than in 1971, whereas a faster growth is expected in the North-East Region. In the North-West Region the Administrative work-force would grow by 0.7% per annum while there would be no growth of total white-collar employment if past trends are continued.

¹Based on figures for the members employed in the Professional, Administration, Managerial, Executive, Clerical and Sales Occupations, ILO *Yearbooks*, 1974 and 1975, Table B. In these cases the percentages are taken of all non-Agricultural occupations.

While white-collar employment increased by 59,664 jobs from 1961 up to 1971, the office component of that group accounted for 77-7% of the total increase, i.e. 46,348 jobs. The rapid growth in office employment in Ireland has been part of an almost universal growth arising from an explosion in the demand for information by business, finance, Government, industry, the arts and the public in general. There is little indication that the underlying forces generating the demand for information are declining. We may then expect a continued growth both in demand for information and for office workers, to handle this material. Recent forecasts in Great Britain suggest that office occupations will increase by 25% in number from 1971 to 1981 and from 25% of all occupations in 1971 to 30% in 1981. The principal areas of growth will be in non-clerical jobs. ²

Table 3.7 presents past and projected future regional trends in office employment based upon an extrapolation of both 1961-1971 and 1966-1971 trends. This table shows that the national and regional expansion of office occupations can be expected to continue. Between 1961 and 1971 office occupations grew by 37.4% and if this trend continues they can be expected to increase by a further 61.5% between 1971 and 1986. While office occupations accounted for only 11.2% of the gainfully occupied population in 1961 and 15.2% in 1971, the projected 1986 figure would represent 21.1% of the NESC's projected total labour-force of 1,303,000. At the national level, office jobs have accounted for and seem likely to continue to account for a growing proportion of all white-collar work, 45.2% in 1961 and a projected 60.8% in 1986. While white-collar employment is projected to increase by 118,400, office occupations are projected to expand by 104,800 jobs, accounting for 88.5% of all projected growth in white-collar employment.

3.10 Projected Regional Growth of Office Employment, 1971–1986

Table 3.7 shows that all regions can be expected to experience a growth in office occupations between 1971 and 1986 and that in all regions office occupations are expected to account for a continually growing proportion of white-collar work.

¹G. Anderia, "The Future of Information: A Challenge for Governments and Society", OECD Observer, No. 63, 1973, pages 27–31.

¹The Office Location Review. op. cit.

TABLE 3.7

% Growth 1971–86	a	60.4	8 · 8	66.3		70.7	78.6	85 ·5	6. 77	63 · 9	64.7
% 	(8)	58.5	99 99	67.9	93.5	73.7	74.4	68 · 2	85 ·8	67 ·8	61.5
S.	1986 (b)	0.89	299	53.3	6. 99	46 · 8	51 -3	61 ·8	53 ·8	82 · 3	62.0
pations tage of White	1986 (a)	66.3	9- 99	63.2	8. 8.	47.7	50.1	56.4	47.2	6.99	80.8
Office Occupations as a percentage of Region's White Collar Employment	1971	61.4	46.3	40.2	44 · 2	34 · 7	36.9	41 · 1	34.7	42.6	0. 13
# *-8	1961	58.2	39.6	32.2	35.8	28 · 1	28 · 8	33.3	28 · 3	æ 4.	45.2
(b) 1966- Trend	% Distribu- tion by Region	67.5	11 .8	7.2	7.0	4.4	4.2	4.4	1.7	<u>+</u>	180.0
1966 (b) Based on 1966 1971 Trend	Number	161,070	33,135	20,160	19,615	12,240	11,895	12,320	4,845	6,100	280,380
(a) 1961 rend	% Distribu- tion by Region	67.1	11 ·8	7.3	6.7	4 .5	4.2	4.1	9.	- -	100.0
1986 (a) Based on 1961 1971 Trend	Number	157,180	32,445	20,110	21,700	12,455	11,615	11,175	4,245	4,150	275,075
	% Distribu- tion by Region	0.69	12.3	7.0	9.9	4.2	3.	3.9	ا .6	9.	100.0
1971	Number	100,391	20,869	11,978	11,212	7,170	6,660	6,642	2,724	2,630	170,276
	% Distribu- tion by Region	59.4	12.4	7.0	6.4	4.2	80	3.7	6	6	100.0
1966	Number	85.755	17.889	10,070	9,305	9 000	5.489	5.406	2,248	2,109	144,271
	% Distribu- tion by Region	1.09	12.6	. eo	, w	, ¢	t 6	, «	, ,	9	100.0
1961	Number	74.458	4 F F F C	8 479	7 219	200,	4,302	4694	2,030	1,941	123,928
	Region		East	South Fact	Mid West	SERA-DIM	West	Midlands	North-East	North-West	Total: All Regions 123,928

Section 3.9. Source: Census of Population, Occupation Vols. :1961, 1966 and

By 1986 office occupations would account for two-thirds of all white-collar work in the East and North-West Regions and over half in all but the West and Donegal Regions. In terms of absolute numbers, 57.000 or 54.2% of the total increase in employment in office occupations would be in the East Region. Despite this the Region's national share is expected to fall slightly, while the shares of five other Regions are expected to increase. The South East, Mid-West, West, Midlands and North East Regions are all projected to increase office occupations by over 66.6% while the South West would appear to have the smallest percentage growth up to 1986. At both national and regional levels, the projected growth of employment in office occupations appears to account for virtually all the expected employment growth in the "nonproduction" occupations as directly defined in Section 1.1. The Green Paper Economic and Social Development, 1976-1980 projects a growth of 76,000 in non-Agricultural employment¹; on the basis of past trends over 36,000 of these new jobs would be office jobs. Since this study is concerned with isolating the growing and mobile blocks of Service-type employment, the remaining sections will be concerned with the locational characterictics of white-collar and office occupations.

3.11 Location of White-Collar Work

The projection of future white-collar employment through the extrapolation of past trends, does not take into account any possible or desirable changes in location policy or technology. It does, however, offer some idea of the future regional distribution of white-collar work and in the absence of new policies, the increasing trend towards its concentration in the East Region.

The notion of office-based and non-office white-collar work used in earlier parts of this Chapter is useful in explaining the locational constraints on white-collar opportunities in the future. Figure 6 illustrates that there were 164,000 non-office white-collar jobs in 1971 and that this figure would only change marginally up to 1986. These non-office white-collar jobs include the Teaching and Religious professions, Nursing and Proprietors and Sales staff in Commerce. Employment within this type of work, because its services are part of final demand, is generally distributed in relation to existing population patterns, although certain activities such as the sale of high quality goods may be highly concentrated in large urban centres. Generally

¹Economic and Social Development, 1976–1980, Stationery Office, Dublin, 1976, Page 33.

speaking, any redistribution of "non-office" white-collar work will be dependent upon and follow from a prior redistribution of population. Nevertheless, Government decisions in respect of the location of higher education or hospital investment could have some marginal effect on the overall pattern of non-office white-collar work. However, the scope for relocation in advance of population changes is fairly limited.

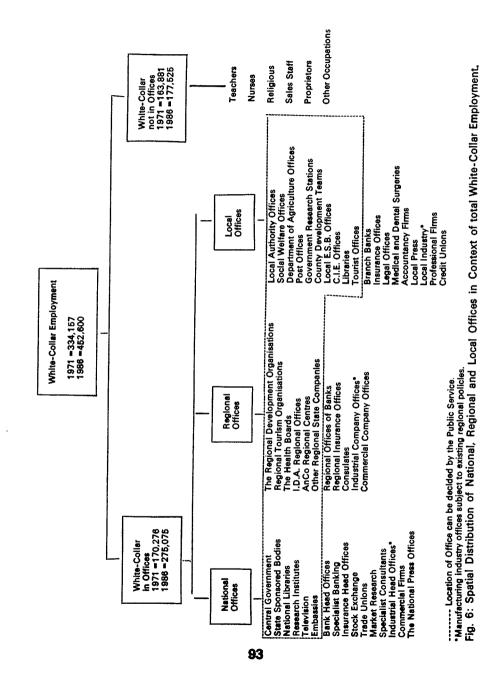
3.12 The Location of Office Employment

Figure 6 provides an overview of the structure and hierarchical nature of office activities within the State, including those whose location is decided by the Public Service, having regard to the needs of the function in question. It can be seen that many offices are already distributed largely on the basis of population distribution and the urban hierarchy; these include the offices of Local Authorities, branch banking, offices attached to commercial operations, the offices of local manufacturing and small professional firms.

At the regional level, the need to delegate executive functions to unitary regional authorities has led to the establishment of regional offices such as the Tourist Boards. In other cases, local operations have been grouped and co-ordinated at regional level as in the case of the Health Boards, regional insurance offices and the regional administrative centres of some commercial and industrial firms. But it is probably true to say that in Ireland the regional level is poorly developed and co-ordinated whether measured in terms of numbers employed, powers bestowed upon regional agencies or even the effectiveness regionally of such offices to date (see Chapter 4, Section 4.2) An examination of the regional offices shown in Fig. 6 shows them to be mostly small employers or organisations with limited functions, the Health and Tourist Boards being possible exceptions. The existing and projected concentrations of office employment derive from the perceived operational, economic and social advantages of the location. The major advantage of a location such as Dublin lies in its accessibility, that is, in the facilitating of links between a very diverse group of office firms including public and private sector head offices, small professional consultancies, research facilities the media and all other forms of communications.

3.13 Relocation of Office Opportunities

Experience both from within and from outside Ireland suggests that, while it is possible to relocate some office work or even to decentralise decision-making, such relocations need to be handled carefully and



treated comprehensively.¹ Great care has to be taken in the selection of work for relocation, the identification of reception centres, the creation of complementary facilities and institutions and the provision of services after relocation to detect and help avoid some of the subsequent problems. In the process of relocation, regional development objectives require that the move be handled in a manner which minimises the leakage of its economic, social or organisational benefits back to the centre of origin.

It is also necessary to provide a suitable working and living environment to induce office staff to relocate with the work or to accept posts in the relocation area. Advanced telecommunication facilities enable a wide choice in the location of the more routine office jobs. But the regional development objectives of a balanced distribution of job-opportunities and self-sustained growth require a strategy which will counter the growth of Dublin as the only significant office centre in the State and minimise the leakage of benefits back to the centre. This could lay the basis for the development of self-sustaining office centres in the regions which will provide for the needs of higher level office work and for the social-economic needs of office employees.

Planning for office relocation may be examined in the context of both Public and Private sector relocations. The relocation of public sector work may be seen to create an environment attractive to private sector office work.

3.14 Public Sector Office Relocation

Figure 6 demonstrates the predominance of National level offices and that there is little articulation of office functions at regional level. This pattern is reflected in the large number of head-office employees in Dublin, especially those of Central Government and State Sponsored Bodies. On the basis of communications studies in several European countries (see Chapters 4 and 5) it has been possible to relocate large blocks of Public sector office work. In many of these countries, the relocation of Public sector office work represents the foundation of new urban policies in which it is hoped that private opportunities will follow the Public sector initiative and that these policies will generate the development of links between organisations within the regions, thus laying the basis for the self-sustained growth of the whole regional economy.

¹Proceedings of Conference on *Office Location and Regional Development* (ed. M. Bannon), An Foras Forbartha, 1973, 71 pages.

In the absence of a body of experience on this aspect of relocation in Ireland, it may be useful to examine the characteristics of private sector relocation in Britain where there has been continuity of effort, a well documented research programme and a set of area-wide regional policies broadly similar to those operating in Ireland.

Between 1963 and 1975 the Location of Offices Bureau has been associated with the relocation of 1.715 office establishments involving the movement of 122,000 iobs. 1 Over half of the establishments employed less than 25 persons, though establishments employing between 50 and 499 persons accounted for most of the jobs moved. Of the 1,715 establishments relocated, the largest numbers came from offices of Engineering and Electrical firms (207 moves), Distributive Trades (220 moves), and Insurance firms (194 moves). In terms of the number of jobs relocated, Insurance office relocations accounted for 21,000, while Transport and Communications offices were of next importance accounting for 13,000 jobs moved. Small establishments accounted for half of the establishment relocations and 7.4% of the iob relocations. Of the 122,000 iobs moved, complete moves of establishment accounted for 29 5% of all jobs moved; partial relocations for 768 or 44.8% of the establishments relocating and for 65.5% of all jobs moved. The predominant reasons for relocation were: expansion of the office (27.2%); cost savings (30.2%); and expiry of lease, demolition, etc. (15.9%). Only 12.9% of the firms and 17.7% of the jobs moved more than 80 miles and the majority avoided the Development Areas or the Assisted Areas. In areas offering regional incentives, most of the Private sector office relocations have been to centres such as Teeside, Merseydise, Manchester, York and Sheffield or to the new and expanding towns. Almost all of the moves have been from London where high rents and legal restrictions encourage relocation, particularily of routine office firms or the routine work of larger firms. While it is dangerous to draw conclusions from the experience of another country, the figures, backed up by data from France and other European countries, show that there is considerable potential mobility within offices of the Private sector, whether they be Industrial or Service sector firms. The statistics show that larger firms moving part of their establishment have accounted for most of the jobs moved. Likewise there is now growing evidence, that many office firms wish

¹All data in this section have been extracted from *Office Re-Location Facts and Figures*, LOB Statistical Handbook, London, 1975, 60 pages.

to relocate to fashionable Dublin suburbs which may foreshadow a greater locational mobility for the future 1.

In the Irish context, it is highly desirable to initiate a series of communication studies within the larger office establishments to identify what blocks of work or total establishments could relocate without serious loss of efficiency, what communications damage would have to be encountered and to identify the type, size and diversity of urban centre within which this type of work could be re-established with a minimum of disruption or loss of efficiency in the short or long term. In as much as relocation can also be expected to involve reorganisation, substantial benefits for the whole firm could arise. Depending upon the nature of the communications requirements of the work and the socio-economic need of the office employees, it should be possible to introduce and implement policies leading to a redistribution of existing and future office employment more in favour of some urban centres outside Dublin. (See Chapter 5).

3.16 Conclusion

The growth of office employment during the 1960's accounted for almost all white-collar growth, for most of the growth in the Service sector and for one-third of all additional jobs in the Industrial sector. A projection of these trends suggests that office employment will become increasingly important within all sectors. Regionally, the continuation of past trends is likely to intensify the concentration of decision-making and higher level office jobs within the East Region. The experience of other countries suggests that there exists considerable scope for relocating some office work to regional centres. It also suggests that the identification of work suitable for relocation is just as crucial to development as the selection of centres or the provision of telecommunications and related facilities. Any identification of what blocks of office work either could or should be relocated needs to be conducted scientifically on the basis of a study of their communication linkages and contents. The next Chapter examines the evolution of relevant policies while Chapter 5 looks at the communications factor in relocation.

SERVICE FUNCTIONS AND REGIONAL POLICY IN IRELAND

4.1 Introduction

The previous chapter examined the pattern of white-collar employment in Ireland: the eastern region was highly represented in this type of employment and the degree of concentration was extremely high in the case of Professional and Managerial workers. In terms of decisionmaking and Executive Authority or power, Dublin is the focus of almost all major decision-making activities in both the public and private sectors, in industry, business, finance and even voluntary organisations. However, despite the high degree of concentration of power, regional policy has to date had little concern with the location of Service functions in general or of Administration activities, tourism excepted. In this regard, Irish policy is falling increasingly out of line with regional policies in other European countries, such as the UK, France, Netherlands and Sweden. The centralisation of executive power and its related white-collar work force needs to be examined in the context of both policies for decentralisation of power and also for the relocation of white-collar work to regional centres.² This chapter seeks to examine the existing sets of policy initiatives which have relevance to decentralisation and to relocation, in the context that jobs and power have traditionally had a similar location pattern with emphasis on Dublin.

¹Under Section 7 of the *Industry Act, 1972*, the Department of Industry in the UK by *devolution* to some forms of sub-national units or by *executive delegation* to local establishments wishing to set up in the assisted areas—see *Incentives for Industry in Areas of Expansion*, Department of Industry, HMSO, London, 1976, 44 pages. In France, a major attempt is being made to attract office establishments away from Paris to designated towns and areas—see *DATAR*, Quarterly Review, No. 1, Paris, 1975, pages 1–12. In Italy, Law No. 1016 of 1970 enables regional assistance to be given to commercial activities and to firms engaged in Research and Development.

*Decentralisation is defined as embracing the transfer of Administrative functions by devolution to some form of sub-national units or by executive delegation to local branches or units of central bodies.

Relocation of white-collar work may, but does not necessarily, imply a measure of decentralisation. Relocation may be concentrated in a limited number of centres or it may be in the form of dispersal.

¹ M. J. Bannon, Office Location in Ireland: The Role of Central Dublin, An Forss Forbartha, Dublin, 1973, pages 73–76.

4.2 Devolution of Policy-making and Implementation

By and large, the Department of Local Government continues to have a close relationship with the Local Authorities in regard to policy and its implementation. About a dozen other Government Departments and State Sponsored Bodies have delegated executive functions to regional authorities, often with much variation in both the degree of autonomy and the geographic extent of their regions. In 1969, the Government announced the establishment of the Regional Development Organisations, whose main function was envisaged as the co-ordination of the development efforts of each region. At the time of establishment, the RDOs were not seen as having any executive functions but they could co-ordinate the operations of Local Authority, Central Government and State Sponsored Bodies within the respective regions. The recent NESC report sets out the principal weaknesses in the operation of the RDOs to date and the type of function and powers which might be extended to them in the future ¹.

The whole question of sub-national structures is now being examined by an interdepartmental committee which will report to a Cabinet Committee under the chairmanship of the Minister for the Public Service. Having regard to increasing demands for balanced regional growth, the need for more responsive and participative administration, allied to the constant need for effectiveness, efficiency and economy in administration, the terms of reference of the inquiry are:

To examine and report on the appropriate organisation and structures for the planning, co-ordination and discharge of the functions of Government at sub-national levels.

4.3 Relocation of Government Work

Many European countries, some smaller than Ireland, have a less centralised form of administration than Ireland. Many of the more centralised European countries are currently engaged in major efforts to relocate government office work from the capital to designated centres. In the UK the Flemming Report in 1962 continued the momentum of wartime dispersal by recommending that 14,000 Civil Service jobs be relocated out of London. The Hardman Report (1973) on the *Dispersal of Government Work* suggested the relocation of 31,427 headquarters posts. The Dutch Government is relocating 22,500 senior Public Service

¹NESC, Institutional Arrangements for Regional Economic Development, NESC Report No. 22, Dublin, 1976, 54 pages.

jobs from The Hague to centres in the east, while in Sweden the relocation of 11,330 senior Public Service posts is the keystone of a new urban policy designed to slow the growth of the three existing metropolitan areas in favour of 23 designated "primary" centres which are planned to expand to metropolitan level; fifteen of these will receive some of the relocated posts. Other countries such as Norway and Finland are undertaking extensive communication surveys designed to isolate blocks of Government work which could or should be relocated.

In Ireland there has been little sustained attention paid to the relocation of Public Sector work, particularly to the costs and benefits of such relocation to the economies of both the area of origin and the reception area. Nevertheless, over the past decade a number of limited policy initiatives have been taken which are of importance in themselves and may lay the basis for wider policy measures.

- (a) Gaeltarra Éireann moved in December 1969 from Central Dublin to Na Forbacha, Co. Galway. The move involved a transfer of 40 staff.
- (b) In 1967, the Government announced that certain Sections of the Department of Lands were to be transferred to Castlebar. The Collection Branch of the Land Commission together with the Accounts Branch and part of the Work Study Section of the Forest and Wildlife Service have now been moved from Dublin to Castlebar. In all, 174 officers will be transferred, of whom 119 have now taken up duty in Castlebar.
- (c) Athlone: It is intended that the Post Primary Examination Branch and the Reproduction Unit of the Department of Education will be moved to Athlone, involving approximately 100 staff.
- (d) It is also proposed to relocate sections of the headquarters of Roinn na Gaeltacht to Na Forbacha. The move which is only at the planning stage would probably involve the relocation from Dublin of just over 20 staff.

¹For an outline of both the Dutch and Swedish policies, see: *Office Location and Regional Development*, An Foras Forbartha, Dublin 1973, pages 37–58. In the UK the Flemming proposals have been implemented and work on the Hardman recommendations is progressing.

(e) It has recently been announced that An Bord Gais will have its headquarters in Cork. This Board could prove a major source of employment and represent non-centralised decision-making provided that its current Dublin office is quickly phased out. Periodically, units of State agencies have been established throughout Ireland and have had considerable local benefits for the reception area, e.g. Research Stations of An Foras Taluntais and the Institute for Industrial Research and Standards.

4.4 Government Reorganisation

The degree of centralisation of both decision-making and employment of the central administration is closely related with both the form of Government and its executive machinery. Having regard to the growing responsibilities of Government, the Devlin Report¹ recommended that Central Government (i.e. Departments and State-sponsored Bodies) should be reorganised and functions separated into:

- (a) The Aireacht whose staff would be involved in the formulation of strategy and policy and in the preparation of legislation; and
- (b) The Executive which would be concerned with the execution and implementation of policy. The Report distinguished between the Executive Office in the case of Departments and Executive Agencies in the case of non-commercial State-sponsored Companies. Rationalisation of regional structures for implementation of the work of the executive was also recommended.

As conceived in the Report, the Aireacht would consist of a small group of senior departmental staff. In practice, the distinction between policy and implementation is difficult to make and even the policy-makers require a large support staff. Thus, in one Government Department, which has been reorganised on a trial basis, almost 80% of the total staff of 300 are regarded by the Department in question as being within the Aireacht¹.

Even though the concept is difficult to work out in practice, and while some job-functions contain both policy-making and executive work, the notion of work separation does simplify the task of organisation and leaves open the possibility that many of the executive functions

¹Report of the Public Service Organisation Review Group (Devlin Report), (Prl. 792), Stationery Office, Dublin, 1969, pages 155–6.

²Based on communications from the Dept. of Health. In addition to the Department of Health, the eight Health Boards are responsible for the operation of the Health Service at regional and local levels.

could be separated spatially, even if policy-formulation were to remain close to the Oireachtas in Dublin.

4.5 Attitude of Central Dublin Offices to Relocation

The previous chapter indicated that there was a high degree of concentration of commercial as well as Public Sector offices in the East Region. In the long term, the relocation of Public Sector offices can be justified only if it succeeds in attracting or stimulating linked private sector firms to follow. To date, private sector firms have shown little indication of a willingness to move to less favoured parts of Dublin, much less to consider moving to a location outside Dublin.

In 1973, a study of office establishments in Central Dublin was completed. The study involved interviews with a stratified sample of 203 office establishments. While 5% (11 establishments) had moved to Dublin from other locations, there appeared to be little evidence of any trend towards relocation out of Dublin (though a few office establishments have moved to provincial towns together with the production end of their firm).

The Dublin establishments, although favourably disposed towards suburban migration, showed an almost total lack of interest in considering long distance moves, even with a wider range of generous hypothetical inducements. Table 4.1 sets out the response to the

TABLE 4.1
Attitude of Office Establishments to Moving out of Dublin

	Yes	No	Possibly	Non Respon- dents
If space were available at right level				
of rent	2	194	1	6
If the firm obtained a fixed lease	3	194	1	5
If the accommodation was better than		1		
present	2	193	2	6
If the firm were given a rent subsidy	3	191	4	5
If the firm got a capital grant to con-	•		1	
struct office	5	184	9	5
Other reasons	5	178	I _	20

Source: M. Bannon, Office Location in Ireland: The Role of Central Dublin.

¹M. J. Bannon, *Office Location in Ireland: The Role of Central Dublin,* An Foras Forbartha, Dublin, 1973, 144 pages.

question: "Would you consider moving to a provincial town or city if. , .?"

The responses of the executives of these establishments were highly negative and were a reflection of the widespread perception of the "centrality" advantages to be derived from a Dublin location. Interestingly, all types of office establishment showed hostility towards the idea of moving, even though in many cases the *work* actually required little contact with other Dublin sources.

This latter view is upheld strongly by the findings of recent pilot studies of the communications links maintained by a number of Dublin Offices.1 The surveys involved over 600 respondents with about 6,000 business communications; upwards of one quarter of respondents had little or no recorded face-to-face contacts, while at the other end of the scale a small group of senior executives were almost continuously engaged in wide-ranging discussion, negotiation and decisionmaking. Most of the staff required few external links in the operation of their work, and for this reason the work could move to a wide variety of locations, though personnel to do the work might be less willing to move on socio-economic grounds. These Studies, which demonstrated the nature of communications within establishments, clearly show that there is potential for partial relocations involving the routine iob functions if communications technology is used to full advantage for information flows within the establishments. In the case of these organisations, the number requiring frequent contact in the course of their work was much smaller than the number engaged in policy-making.

4.6 The Attraction of Service-Type Employment to Ireland

As part of the development effort, existing policies have contributed to the expansion of Service-type employment, particularly Industrial Service employment, including the creation of Clerical, Professional and Managerial jobs. More recent policies are aimed directly to attract Service sector firms to Ireland. The following sections will examine the various strands of policy of relevance to this study.

4.7 Industrial Incentives Policies

Under the various industrial development enactments the Industrial Development Authority is commissioned to expand manufacturing activity in Ireland and also to ensure that as much as possible of this

¹M. Bannon, "Office Concentration in Dublin and its Consequences for Regional Development in Ireland" in *Spatial Patterns of Office Growth and Location* (ed. P. Daniels), John Wiley, London, forthcoming.

new development is attracted to the Designated Areas. These policies may be described as a collection of regional-type policy measures operating at both national and sub-national levels. Preferential capital grants are paid to firms establishing in the Designated Areas, subject to a maximum per capita level of grant. There are also grants for training as well as a scheme of tax relief on export profits. The capital grants, which vary according to location, relate to the total capital costs, including the provision of office space and facilities for the firm's salaried employees. Since manufacturing firms are normally small employers (the median firm size is 55 employees1) the office component is also small and has been shown in a number of isolated studies to account for about 15% of the labour-force. Since most of the foreign manufacturing firms are part of wider international companies and since the Export Profits Tax Relief scheme encourages direct exports,2 there has been relatively little need to expand either management or marketing functions within Ireland. A study of the locational advantages and disadvantages perceived by grant-aided manufacturing firms revealed a high level of locational dissatisfaction from the office end of the operation, e.g. poor telecommunications and problems in the recruitment of management or other suitable office staff.3

4.8 Research and Development Programmes

Until quite recently expenditure on Research and Development in Ireland was quite low and a high proportion was directed towards the Agricultural sector. While most industrial firms imported much of their R & D and other service work , more recently there has been a growing recognition of the importance of Research and Development leading to inventions and ultimately to innovations which are the basis for qualitative change in the economy.

¹P. N. O'Farrell, Regional Industrial Development Trends in Ireland, 1960–73, IDA, Dublin, 1975, page 4.

^aFor a recent discussion of the possible impact of the Export Tax Relief scheme on the development of the external linkages of Irish Manufacturing firm, see: J. C. Stewart, "Linkage and Foreign Direct Investment", *Regional Studies*, Vol. 10, 1976, pages 245–258.

- ^aP. O hUiginn, Regional Development and Industrial Location in Ireland, An Foras Forbartha, Dublin, 1972, pages 45–59.
- ⁴C. Cooper and N. Whelan, *Science, Technology and Industry in Ireland,* The Stationery Office, Dublin, 1973, pages 20–25. These findings have been supported in recent studies by the Cork Scientific Council into employment opportunities for Dairy Science graduates in Ireland.

Since April, 1970, the IDA has operated a grants scheme to encourage research and development by manufacturing industry—in the period of operation the IDA has approved payment of £2·12 million to 164 companies to undertake R & D projects involving £4·6 million¹. In 1974 and 1975 there has been a rapid expansion of R & D investment by manufacturing firms, mostly domestic companies, and 37 of the companies have now established a separate R & D function within their operation or have extended their existing one. Job creation is not the primary function of the scheme, although these companies employ 371 persons in R & D of whom 170 are university graduates. The benefit of the scheme is reflected in the successful operation of many of the firms and in an increase in sales estimated at £12 million as a result of the R & D investment. Approximately half of the grants approved have been to firms in the East Region with the locations being closely related to existing goods-producing units.

4.9 The IDA Service Industries Programme

A year after the introduction of a pilot scheme in 1973, the IDA established a Service Industries Division to operate a Service Industries Programme. To assist in the attraction of overseas Service sector firms to Ireland:

- The IDA offers non-repayable capital grants for the purchase of buildings and equipment. Rent reduction grants for periods ranging from 5 years (Dublin) to 10 years are also available together with leasing subsidies. Grants are also paid towards the cost of approved training programmes.
- 2. The IDA Service Industries Programme was launched on a pilot basis in July 1973. The purpose of the programme was:
 - to encourage Irish companies providing services which have export potential to expand their business into overseas markets.
 - (b) to attract companies from abroad to set up industries here which would sell their services outside of Ireland.

The benefits to be obtained from the programme included the following:

- (a) the provision of high quality employment.
- (b) the contribution to the country's invisible earnings.

"Major Increase in Industrial Research Work Indicated by Doubling of R. & D. Grants Approved by IDA", IDA News, Vol. 2, No. 9, May 1976, pp. 1-2.

- (c) the development of a higher level of technological knowledge in this country.
- (d) the pulling power of sophisticated service industries on overseas manufacturing firms.

Capital grants vary with location, the maximum payable in Dublin being about 25% of total fixed assets. Section 34 of the *Finance Act*, 1968 extended the Export Profits Tax Relief Scheme to "engineering services" defined as "design and planning services, the work on the rendering of which is carried out in the State in connection with chemical, civil, electrical or mechanical works executed outside the State". Such export services are regarded under the Act as the manufacture of goods, as are activities in the general area of computer software development. By the end of April 1976, the programme had assited in the creation of 28 service firms of which 8 were Irish firms, 8 were from the UK and 8 from other EEC countries. Sixteen of the projects were in the design fields and the others were concerned with computer software, reinsurance and petroleum exploration. The expected full employment of these firms by region is set out in Table 4.2.

TABLE 4.2
Employment Potential of I.D.A. Assisted Service Industries by Region

East Region	North West	South East	Mid-West	West Region
1,809	8	25	314*	20

Note: "This insurance firm has been attracted to Ireland by the joint efforts of the IDA and Shannon Development who provided the required office space.

Source: Information supplied by Service Industries Division, I.D.A.

Of the 28 projects, 78.6% have located in the East Region and account for 83.1% of the expected total employment. Of the 1,862 projected jobs, 90.9% are for males and 9.1% for females, excluding a firm in the Mid-West Region which is ultimately expected to offer employment to 300 persons. However, only 268 jobs have actually come into operation to date, of which 87.3% are in the East Region. Table 4.3 provides an indication of the expenditure upon this programme up to the end of August 1976.

TABLE 4.3:

Summary of Jobs and Grants approved under the IDA's Service industries Programme (to end-August, 1976)

Grants Approved (£000's)

Period	No. of Project Appro- vals	Job Appro- vals	Training Grants	Capital Grants	Rent Subsidies	Leasing Subsidies	Total
1973–74	6	371	1,209 · 8	107 · 7	171 -4		1,488 · 9
1975	14	1,601	3,598 · 0	152 · 4	206 · 5	-	3,956 · 9
1976 (end-August)	14	806	2,025 · 2	287 · 0	203 · 1	53 - 0	2,568 · 3
Totals	34	2,778	6,833 · 0	547·1	561 · O	53 · 0	8,014 · 1

Average grant cost per job £2,884.

Source: IDA News, Vol. 3, No. 1., 1976, page 1.

4.10 The Work of the Shannon Free Airport Development Company Ltd.

As part of its continuing development effort, Shannon Development has initiated a programme to attract internationally mobile office activities to Shannon. A principal aim of the programme is to expand office employment opportunities in the Mid-West Region.

SFAD Co. moved its offices out of the Airport zone to Shannon Town Centre and has subsequently rented approximately 17,000 sq. ft. of the office space within the zone to interested firms. A total of fourteen firms with a projected employment of 433 persons (210 male) have taken space at Shannon including the Insurance firm referred to in Section 4.9. Four of the firms, including the large insurance firm, are based in the United States and the remainder of the non-Irish firms have European connections. The relative increase in white-collar employment in the Mid-West Region between 1961 and 1971 can be attributed, at least in part, to the activities of Shannon Development.

4.11 Gaeltarra Éireann and Service Functions

Gaeltarra Éireann is associated with and involved in a wide ranging programme including a number of service functions. Gaeltarra Éireann has been instrumental in establishing Ostáin na hÉireann Teo., Aer

Arann and various smaller service ventures, including a publishing firm. Of major relevance to this study has been the establishment of Riomhaire Teoranta, a computer bureau, at Na Forbacha which now employs 28 persons and has plans to expand in the near future. Gaeltarra Éireann has also been associated with the operations of Neodata in Dingle.

4.12 Other Development Programmes

In 1969, Neodata Services Ltd, commenced routine clerical operations in a small way in Limerick City. Since the operation was seen to have considerable potential for white-collar employment opportunities. Neodata was encouraged by the County Development Team to establish an office in Abbeyfeale. With a grant from the Special Regional Development Fund of the Department of Finance, 279 m² of office space was erected in 1970 on a site provided by the Limerick County Council which also assisted in the design and construction, providing space for 60 workers. Neodata quickly expanded and located in Newcastle West, (office building 357 m²); a further 388 m² was built in Kilmallock in 1971. Further expansion occurred in Abbeyfeale and Newcastle West in 1972/73, Meanwhile, with the help of Kerry County Development Team and Kerry County Council, 388 m² of office space was erected in Listowel which has also been rented to Neodata Services. In 1972 Gaeltarra Éireann provided further office and computer facilities for Neodata in Dingle. The employment in Neodata offices as of May 1976 was as set out in Table 4.4.

TABLE 4.4
Employment Provided by Neodata, May 1976

	Male	Female	Total
 	20	135	155
 	1	67	68
 	2	91	93
	1	81	82
ļ	1	65	66
1	18	1 1	74
 	43	495	538
		20 1 2 1 1	20 135 1 67 2 91 1 81 1 65 18 56

Source: Information compiled by T. Hayes, Secretary, West Limerick Development Team.

In July 1976 the Company ran a series of advertisements to recruit additional staff. The jobs provided by Neodata, through the assistance of local development initiative, have had considerable local socioeconomic benefits, through the provision of a mix of employment opportunities and income benefits to the region.

4.13 Conclusion

Unlike some European countries (e.g. Federal Germany, Switzerland, Italy), Ireland has a highly centralised form of administration which results in the concentration of public and private sector decision-making in the capital city; there is also a high level of concentration of the more powerful and prestigious white-collar jobs with consequent disadvantage to the labour-market and socio-economic structure of the other regions.

Within a European context the degree of concentration in the Irish capital is relatively high and the existing regional policy measures are comparatively weak. While some countries have a long history of Federalism, others, like Denmark and Belgium, are developing a system of strong regional authorities. Others, like Sweden and The Netherlands. are engaging in a major relocation of the Civil Service complex as part of a wider regional policy and as a first step in creating more whitecollar opportunities in the regions. The French have also widened regional policies to include service functions, where incentives are scaled against the Paris region in favour of a wide range of towns and areas where Service developments may be eligible for assistance. In Britain, there has been a long and continuing history of regional policy and also the movement of government workout of London. Since its establishment in 1963, the Location of Offices Bureau has assisted in the relocation of 122,000 jobs mostly from London, while the 1972 Industry Act greatly extended the assistance to Service firms relocating to the Assisted areas. Coupled with this wide range of approaches, the Kilbrandon Report on the Constitution and its implementation to date pays some attention to regional development advantages of a devolved system of Government with greater power vested in regional parliaments.

The growing awareness in Ireland of the regional disadvantages caused by the high degree of concentration has led to the initiation of new though limited policies designed to re-organise Government, relocate some Government work, and also to attract service functions to the regions both from Dublin and from overseas. These new initiatives have been operating for a limited period of time and their success may

encourage more widespread policy initiatives.

Measures, so far taken in Ireland represent an emerging realisation of the importance of Service-type employment and the problems for regional development inherent in the spatial concentration of Professional decision-making and executive activities. Welcome as the new measures are, they are slight compared to the policy initiatives taken by many other European countries.



Chapter 5

OFFICE COMMUNICATION AND LOCATION

5.1 Introduction

Achievement of national objectives regarding the distribution of population and employment is dependent upon a decisive and comprehensive public policy integrating spatial, economic and social planning. The bias towards manufacturing industry in Irish public policy to date is understandable given the need to foster the rapid growth in the volume of production. In terms of job-creation, the labourintensive Service-type employment, especially white-collar employment, would appear to offer more scope for initiatives. The connotation of passivity in the indentification of "service" with "induced" employment may have a part in the failure to recognise the causative role of service functions in development; this lack of recognition of the role of services was further compounded by the analysis of employment trends on the basis of "branch of economic activity" without regard to occupational changes. Apart from the continued growth of white-collar jobs, especially office occupations, within all sectors, recent research has shown that one of the principal causes of regional inequality within countries derives from a lack of decision-making jobs in the less developed regions. The low level of decision-making is reflected in the poverty of the regional decision-networks and this intimately affects the degree of access to sources of innovation which are largely the stimulants of regional development. The existing pattern of white-collar work and its generative role in regional development can only be understood within the context of information communication and its impact upon its immediate business environment.

5.2 Reasons for Job Concentration

The general reasons underlying the concentration of white-collar work, especially office employment, in a few large urban agglomerations, was dealt with in section 1.10. Information exchange involves decision-makers and other high-level staff in an almost constant process of communication, much of it requiring close proximity to colleagues, clients and competitors. Numerous communication studies reveal both the high level of face-to-face contact maintained by senior office staff and also that most of the contact sources are within half an hour's

travelling time of one another.¹ To have ready access to sources of information exchange, office firms are prepared to meet the high costs of central-city accommodation. Ancillary office staff engaged in information *handling* also find a city-centre location attractive because of its range of job opportunities and social and recreational facilities.²

In a city-centre location an office organisation benefits from external economies. These economies derive from a ready access to a diversified and skilled labour-pool and from the availability of advisory and other service firms which supply what the literature describes as *controlled* sources of information. In addition one of the most important external economies provided by such a location is the ready access it provides to *uncontrolled* or random external sources of information which provide the basis of innovative capacity for the office organisation itself and the firm in general.³

5.3 Communication Processes

In order to fully understand the role of the office as a source of external economies for a firm, it is necessary to have regard to the way in which an organisation relates to its immediate business environment and to the recognised types of communication processes. It is becoming increasingly obvious from research work that access to information is a major determinant in the stimulation of regional economic growth.

The Swedish economist, Thorngnen, identifies three types of communication processes on the basis of the function they serve and their overall characteristics. Lengthy, wide-ranging discussions involving many people and characterised by a high degree of feedback are termed *orientation* processes. These meetings often involve the most senior personnel in several organisations and, even with the use of the most modern technology, could not take place without the

¹J. B. Goddard, "Office Communication and Office Location: A Review of Current Research", *Regional Studies*, Vol. 5, 1971, pages 263–280.

^aR. Vernon and E. Hoover, *Anatomy of a Metropolis*, Harvard University Press, Cambridge, 1959, 345 pages.

⁸B. Thorngren, "Regional Economic Interaction and Flows of Information", *Proceedings of Second Poland-Norden Regional Seminar* Warsaw, (1967), PWM, 1970, pages 175–186.

⁴B. Thorngren, "How do Contact Systems Affect Regional Development?", *Environment & Planning*, Vol. 2, 1970, pages 409–427. Thorngren's three time horizons were developed from Janstch who introduced the concept of knowledge and values environments: see E. Janstch, *Technological Forecasting in Perspective*, OECD, Paris, 1967, 401 pages.

people meeting together. The term *planning processes* is used to describe more simplified communications involving fewer people in shorter, less wide-ranging or random discussions. These types of communication are less likely to be pre-arranged and may sometimes take place using existing modes of telecommunication; certainly, much of this type of communication could take place without the need for participants to meet if they had access to new communication facilities such as Confravision or other new technical developments. Research and Development work has a communication structure typical of planning processes.

Much of the internal communication within an organisation and even a considerable amount of external contact by staff in lower grades does not necessitate any discussion or feedback; rather they are concerned with the transmission of orders, the obtaining of specific information or the transaction of routine tasks. Such communication normally involves only two persons in brief, one way exchanges which are described as *programming processes*. Programming processes are concerned with the day-to-day running of an organisation in accordance with policies laid down as a result of high-level discussions. The characteristics of each type of process are set out in Fig. 7A, while the relationship to their environment is set out in Fig. 7B.

The important point for regional development is that while all types of processes may be found at all levels in the urban hierarchy, the lower levels of the urban hierarchy are dominated by rountine communications or simply information handling while complex negotiations and wide-ranging discussions involving senior personnel are largely confined to the upper levels of the urban hierarchy, especially to the national capital. This is illustrated in Fig. 8.

5.4 Information Exchange and Location of Organisations

Recent research increasingly supports the belief that there exists a close correspondence between an individual's business communication patterns, his status within the organisation and the location of his place of work within the urban hierarchy¹. As decision-makers and other senior staff engaged in information exchange find it imperative to have easy access to a rich variety of information sources, organistation control in Public, Private, Industrial, Social and other agencies

¹See A Pred, "The Inter-urban Transmission of Growth in Advanced Economies: Empirical Findings versus Regional Planning Assumptions", *Regional Studies*, Vol. 10, 1976, pages 151–172.

congregates in functionally inter-related complexes within city centres.

These networks continually intensify as the volume of information and the number of organisations expand.

The advantage of a central location encourages the development of a spatial hierarchy of both public and private sector organisations

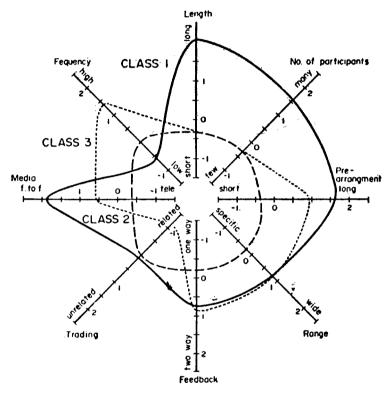


Fig. 7A. Classification of Communications.

Class I Orientation

II Programming

III Planning

Source reproduced from: J. B. Goddard, "Office Communications and Office Location: A Review of Current Research", Regional Studies, Vol. 5, 1971, p. 273.

¹J. B. Goddard, *Office Linkages and Location*, Progress in Planning (1), Pergamon Press, Oxford, 1973, pages 126, also M. J. Bannon, *Office Location in Ireland: The Role of Central Dublin*, An Foras Forbartha, 1973, pages 109–126.

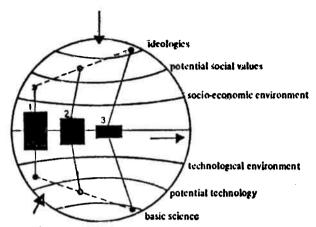


Fig. 7B. Source of information in the Development Space. The development space (a concept introduced by Janstch (1967) in connection with long run technological development] is divided into a values environment and a knowledge environment, with activities located in the central section. Most activities [programmed processes (1)] operate within contemporary socioeconomic and technological environments. The next largest group [planning processes (2)] link potential social values and technologies and are therefore concerned with likely changes in the most immediate environments within which programmed activities currently operate. Finally, a very small proportion of total activity forientation processes (3) is concerned with long-term scanning of the environment, reaching out to ideology and basic science.

Source reproduced from: B. Thorngren, Environment and Planning, 1970, p. 412

with administrative functions in the capital city and production units throughout the country.1

Wärneryd has shown that it is possible to relate the hierarchical structure of organisational functions (Fig. 2) to different positions in the urban hierarchy at national, regional or local level.² Generally, the highest level decision-making is confined to units at the top of the organisation located in the largest cities. In this way urban units at the

¹M. J. Bannon, "The Changing Role of the Office in the Industrial Firm", *Management*, Vol. XXI, pages 39–44.

³O. Wärneryd, "An Operational Model for Regional Planning and Development Control", in *Information Systems for Regional Development* (eds. Hagerstand and Kuklinski), Lund Series B. No. 37, 1971, pages 230–245.

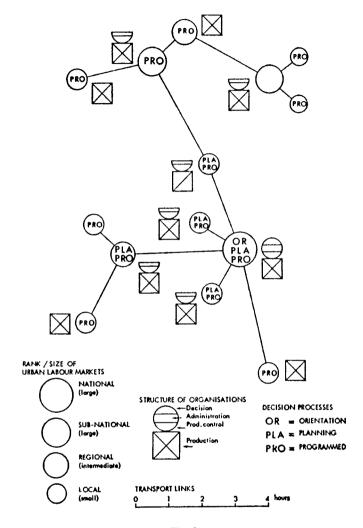


Fig. 8

A theoretical classification of urban contact environments for a hypothetical system of cities.

Each urban unit is characterised by the parts of a multi-unit organisation and the type of decision processes that are most suited to the contact environment of the local area and its pattern of accessibility to all other units in the city system.

Source: reproduced from: EFTA, National Settlement Strategies: A framework for Regional Development, Geneva, 1973, p. 106.

national level become the control centres of the whole urban system; decisions made at the top are passed down and the whole process is the reverse of decentralisation where "each level of management clearly specifies the powers which the echelon below it may freely exercise."1 Freedom at local level is severely restricted and almost all serious proposals require to be approved at the top of the organisation which is usually located within the largest urban centre. In addition, innovations are diffused downwards from the top of the organisation. The benefits deriving from the expansion of local plants are often leaked back to the head office location to the detriment of small local firms which have difficulty in obtaining service linkages.2 This adverse effect of the concentration of power in a major city has been demonstrated in a study of industrial service linkages in Ontario where it was shown that higher-order services to branch plants are generally provided by service firms located near the head office, while lower-order services only are supplied by firms in the locality of the branch plants, outside the immediate vicinity of Toronto. * The greater the distance from the head office, the greater the degree of local substitution of service linkages, even to a point where lower-order firms may be called upon to provide higher-order services, for example, the local bank manager being asked to advise on long range financial planning. As a consequence of the concentration of decision-making in major cities, most other areas not only lacked decision-making jobs, but were also deprived of much of the spin-off in terms of ancillary services.

5.5 Contact Potential

With the continued concentration of decision-making and because of the organisation of national transport and telecommunication systems, a major city becomes both the most accessible place in the country and also has a comparative advantage in terms of the concentration of information sources. Swedish researchers have developed the notion of "Contact Potential" to demonstrate the business impli-

¹N. S. Carey-Jones, et al., *Politics, Public Enterprise and the Industrial Development Agency*, Croom Helm, London, 1974, page 58.

²A. Pred, "The Growth and Development of Systems in Cities" in *Systems of Cities and Information Flows* (Pred and G. Torngvist), Lund, Series B, No. 38, page 82.

cations of these communication and information variations between urban centres. A "Contact Potential" index has been developed based upon the spatial concentration of decision-makers and information sources related to travel-time between centres. On the European scale Dublin has a "Contact Potential" of approximately half that of Paris or Brussels while, within Ireland, the Contact Potential of Cork or Limerick is under half that of Dublin; centres like Sligo or Letterkenny have an extremely limited potential as an information environment due to their remoteness and the limited number of administrative or professional people working in either centre. The relatively high Contact Potential of a city like Dublin is both a cause and a consequence of the continued concentration of decision-making and information exchange.

5.6 Routine Work and Location

The preceding sections have dealt with the key role of senior personnel in shaping corporate organisational structure and the relationship of the organisation to its environment and the urban system. However, it must be borne in mind that the vast volume of communication is of a routine standardised variety (programmed) and the vast majority of staff in an organisation are engaged in programme-type communications or else have little or no external contact. Evidence suggests that with the increased sophistication of telecommunications it is possible to relocate large blocks of routine work.⁴

Given existing technology, the relocation of routine white-collar work with its low communications content is a relatively simple task. Because of its routine nature and its lack of need for contacts or external linkages with the business environment, there is little likelihood that relocation of routine white-collar work will have a major impact, apart from the increase in job numbers, upon the problems of the less developed regions.

¹The concept of Contact Potential was developed by G. Tornqvist in *Contact Systems and Regional Development*, Lund Studies, Series B., No. 35, 1970, 148 pages.

^aJ. N. Britton, "Environmental Adaptation of Industrial Plants: Service Linkages, Locational Environment and Organisation" in *Spatial Perspectives on Industrial Organisation and Decision-Making* (ed. F. Hamilton), J. Wiley, New York, 1974, pages 363–390.

²B. Sahlberg and M. Engstrom, *Travel Demand, Transport Systems and Regional Development*, Lund Studies, Series B, No. 39, 1973, 133 pages.

⁸M. Bannon, "Studies of Linkages and Location in Ireland", unpublished paper to *International Inst. of Management*, Berlin, 1974, 21 pages.

^{*}See the success of the Location of Offices Bureau, *Digest of Data*, LOB, London, 1975, 60 pages.

5.7 The Communication Factor in Regional Development

In the 1961–71 decade there has been a considerable volume of research into the pattern of office communication in both the Private and Public sectors. These studies attest to the importance of the communications factor in regional development. Increasingly, communications research is central to both policy and execution of office relocation proposals. This research has indicated more clearly the locational needs and linkages of office activities which, in turn, are central to attempts to evolve new location policies and new patterns of settlements.

In 1965 the headquarters of the Swedish National Defence Industries was relocated from Stockholm to Eskiltuna, 120 kms. away. A study of the communication structure of this organisation both before and after relocation revealed that, while the volume of communication remained unchanged, the pattern of contacts and linkages changed greatly. In the case of routine contacts, the move to Eskiltuna necessitated the substitution of local contact sources while higher-order contacts continued with Stockholm and were maintained despite the difficulty of travelling 120 kms. to meetings.¹

A study of 100 office establishments located in four urban regions of Sweden has shown that 76% of all contact with other organisations involved travel to places less than 30 minutes journey away. Outside Stockholm more complex communications (orientation or planning) decreased sharply.2 More recently the Swedish Government commissioned detailed studies of the communication structure of the whole Public Service, excluding routine work. Based upon the findings of this study it was decided to relocate 11,330 senior Public Service jobs to fifteen urban centres. Care was taken to relocate linked organsiations to the same centre and to ensure that the facilities in the reception centre matched the needs of the organisations moving to that city3. This major relocation forms the basis of Sweden's current urban strategy to promote seventeen designated "primary" centres to metropolitan level. The relocation of higher-level government work is seen as generating a complex set of linkages with other organisations in these cities as well as encouraging private sector relocations to follow. This programme is now being implemented.

¹B. Thorngren, "Communication Studies for Government Office Dispersal in Sweden" in *Office Location and Regional Development* (ed. M. Bannon), An Foras Forbartha, Dublin, 1973, pages 47–57.

³/bid.

³/bid.

In Norway and Finland, studies are at an advanced stage to determine types of Public Service work suitable for relocation from Oslo to Helsinki respectively. In the Netherlands, plans are proceeding to relocate 22,500 higher-level Public Servants to the East of the country in an effort to reduce pressure on Randstad Holland and to revitalise the East and South. Their principal reception areas are Groningen and Heerleen where the move is being preceded by the rapid expansion of the universities of Groningen and South Limburg.¹

In an effort to attract multi-national head offices and yet provide a better balance of office jobs between urban centres, the French Government has evolved a complex set of office-related policies. These policies are designed to improve facilities for firms which continue to require a location in Paris and whose relocation out of Paris would adversely affect the viability of the firm and the efficient operation of the national economy. Parallel to this, substantial grants are provided to office firms wishing to relocate activities and jobs to a large number of designated towns and areas away from Paris. A large scale programme of university expansion, office development and airport improvements is taking place in cities throughout France as part of the effort to counter the dominance of Paris.

In the UK there has been a long history of dispersing public sector white-collar work out of London. This began during World War II and was given further impetus by the Flemming Report of 1962.

Arising from the rapid growth of London a number of new initiatives were taken in the mid-1960's designed to induce private sector offices to move out of London and the South-East. Since its inception in 1963 the Location of Offices Bureau has provided advice to firms wishing to leave London and has assisted in the relocation of about 120,000 office jobs. More recently the *Industry Act*, 1972 has extended financial incentives to service firms wishing to relocate to the Assisted or Development Areas. These inducements have been extended again in 1976.

As seen in section 3.15, few of the relocated jobs in the UK went to the development areas, and for the most part relocations have involved the dispersal of routine standardised functions such as records and

¹J. Toby, "Regional Development and Government Office Relocation in the Netherlands", Office Location and Regional Development, op cit., 1973, pp. 37–45.

²DATAR, Newsletter from Paris, Quarterly Review, No. 1, 1975, 12 pages.

^aB. Ward, The Home of Man, Andre Deutsch, London, 1976, Chapter 10.

clerical operations. Studies of British offices 1 reveal that contact and decision networks are geographically concentrated close to the organisation; also there has been only limited success in relocating complex interlinked office work, especially decision-making which tends to remain behind in London.2 In 1973 the Hardman Committee recommended that 30,000 high grade Civil Servant jobs be relocated out of London.³ These recommendations are being implemented and more of the jobs are going to centres in the Development Areas. Communication considerations, such as the frequency and complexity of meetings, were central in deciding the work to be relocated and in assessing the suitable reception centres. Sufficient time has not yet elapsed to evaluate the success of these new policies.

5.8 Irish Communication Studies

Until recently little attention has been focused upon the role of office functions in regional development; more significantly the importance of the communication factor was almost disregarded. Thus, informal proposals to relocate Public Sector agencies were often put forward simply because the agency was seen to lack any evidence of business linkages with the outside business environment.

Recent communication studies support the international findings in that office communication patterns and needs appear similar in different countries and in different sized cities. As indicated in Section 5.5, Dublin provides a much better environment than other Irish cities for information users. 4 A survey of a sample of 203 office establishments within central Dublin revealed an intensive, interactive, contact system almost exclusively dependent upon Dublin firms and organisations for all its requirements.⁵ Although these firms controlled the social and economic life of the country, few of their regular information contacts extended beyond Dublin. The converse is shown to be true in Limerick. Here a number of organisations are controlled from outside the region

1S. Connell. The 1973 Office Communications Survey, Communications Studies Group, London, 1973 (p/74067/cn), pages 90.

²J. Goddard and D. Morris, The Communications Factor in Office Decentralisation, LSE, London, 1975, 165 pages mimeo.

*Hardman Report on The Dispersal of Government Work from London, HMSO. 1973 (Commd. 5322), 229 pages.

4M. J. Bannon, "Office Location and Regional Development", in Office Location and Regional Development, op. cit., pages 9-18.

⁶M. J. Bannon, Office Location in Ireland: The Role of Central Dublin, An Foras Forbartha, Dublin, 1973, 144 pages.

and tend to maintain regular communication with organisations in Dublin. 1 More detailed studies of Dublin offices revealed that communication structure corresponded closely to the patterns observed in other countries. Complex and wide-ranging discussions involved only senior staff and the contact network maintained by the organisations was confined almost exclusively to central Dublin. Most of the staff in lower grades had little or no external business communications.2

5.9 Constraints on Relocation

The idea has been advanced that communication technology will lead to a widespread dispersion of information exchange and processing, leading to the "Non-City". This view is based upon the premise of equal cost technology, that is, technology will render all areas equally accessible at a similar cost.4 There are a number serious impediments to such radical changes.

Technological change and innovation tends to diffuse outwards from the larger cities, giving them a distinct advantage and intensifying their dominance within the urban system. The introduction of telex and direct dialling facilities first takes place in the larger cities, with a considerable time lag in their provision elsewhere. The growth of Professional, Technical, Administrative and Managerial occupations increasingly accounts for much of the growth and the increased concentration of office employment; much of their communication remains too complex to allow technological substitution for many meetings.

Relocation based on technology could have the effect of intensifying perceived regional disparities; if only routine work is relocated, receiving areas then become identified as routine work centres, while the capital

¹J. Connell, Office Location and Communication in Limerick, studies for M.Sc. thesis, Univ. of Edinburgh, unpublished.

²M. Bannon. "Office Communication in Dublin and its Consequences for Regional Development in Ireland." Spatial Patterns of Office Growth and Location, ed. P. Daniels, John Wiley, London, forthcoming.

^aThis view of the future society derives from R. L. Meier, A Communication Theory of Urban Growth, MIT Press, Cambridge, 1962, 184 pages. Also M. Webber, "The Urban Place and Non Place Urban Realm" in Explorations into Urban Structure (ed. M. Webber), Univ. of Penn. Press, 1964, pages 79-153 and A. Custerton, "Telecommunications: The Key to the Non-City?", Built Environment, July 1973, pages 403-406.

The importance of telecommunications technology dealt with in F. Hetman. Society and the Assessment of Technology, OECD. Paris, 1973, Chapter III, pages 115-262.

is increasingly seen as the centre of power and decision-making. Clerical and routine tasks, the most suitable for technological substitution, are of declining relative importance, the least concentrated and the most susceptible to long term automation. This type of work also has little long term benefits for the reception area, apart from employment benefits.

The quality of information sources in the reception areas must be considered in any relocation. Failure of the local environment to match the information and other needs of an incoming organisation may force that organisation to maintain linkages with the capital, thus defeating the objective of relocation. Alternatively, the organisation may simply atrophy as it is starved of information and the stimuli of innovation.

Relocation of office work also requires that the social, economic and leisure needs of staff be catered for. A wide range of employment opportunities and prospects for promotion must be seen to exist in the area. The possibility of a loss in the quality of the labour force tends to remain as long as promotion or change of job requires migration out of the region. The quality of the local labour force available may continue to be reduced by the centralisation of desirable promotional opportunities in the capital or larger cities. For this reason European office relocation strategies have favoured centres of at least 100,000 population, offering a diversity of employment and social opportunities. In addition, the introduction of technology may be resisted by the reluctance of people to avail of its existence or their psychological difficulty in making the fullest possible use of it.1

5.10 Relocation and Development

It is recognised that the communications factor will be of paramount importance in the successful relocation of office work to the region. Studies show that careful selection of the activities to be relocated is required as is a rigorous specification and enforcement of locational priorities in development. Such control can be achieved through a system of grants and permits for office development backed up by a co-ordinated long term policy on office location based upon an understanding of the communications factor in development.

Throughout Europe, regional development policies aim to counteract the increasing tendency towards the centralisation of decision-making

¹See experimental studies by Communication Studies Group: B. Champness, in *The Communications Factor in Dispersal: An Overview*, CSG, London, 1972, pages 70–109.

Relocation to a limited number of centres accompanied by decentralisation of power is essential if the selected centres are to function as reservoirs of information and locations for innovations, rather than "staging posts" for the capital. It is to this end, the improvement of the contact and information environment, that higher-order Civil Service work is being relocated in many countries. These efforts to upgrade cities in the urban hierarchy serve to counter to some degree the attractiveness of the capital and provide an inducement or example for private sector relocation.

5.11 Costs of Relocation

The results of communications studies demonstrate that costs of relocation are high when dispersal is random. The costs are lower when relocation is confined to a limited number of centres.¹ If land, construction, rental and labour costs are lower in the reception areas, relocation costs will be further reduced if not altogether offset. Reorganisation offers another source of cost savings. Relocation may offer a firm or department the opportunity to increase efficiency by organisational restructuring². The operation of management techniques such as the Planning, Programming and Budgeting procedure, which focus on identifying agency objectives and specifying priorities within the context of a rolling budget, facilitate both restructuring and relocation by improving organisational communications.

Emphasis on the efficiency benefits of relocation stresses the administrative and management aspect of organisations, but in the case of central Government and State-sponsored companies, the larger issue arises as to whether they have a wider role in the stimulation of national and regional development. In an addendum to the Devlin Report, Barrington recognised the wider development role of decentralisation:

¹See EFTA, National Settlement Strategies, op. cit.

²P. Cowan, et al., The Office: A Facet of Urban Growth, Heinemann Books, London, 1969, pages 46–88.

"What is required is the integrated decentralisation of developmental and executive decision. The great mass of public servants are employed in the executive area. Jobs follow decisions. The decentralisation of decisions, therefore, involves the decentralisation of jobs. In this way the growth of the capital can be moderated in a way consonant with the overall purpose of decentralisation.

For development to be facilitated it is not enough for the decision-making to be decentralised. This must be done in such a way that the bulk of the executive decisions about a particular area can be related together in that area, and there be some degree of priority setting in that area. This involves the deconcentration of the appropriate executive units, their linking together in homogenous geographical areas, and the devolution to the linked organisations of responsibility for co-ordination of decision, for overall plans and for review of the deconcentrated functions. This calls for skilled and sophisticated administration at the centre to reconcile local discretion with national needs and resources. It is the price of a genuine decentralisation for regional and local development, and underlines once more the crucial importance of the quality of those who staff the aireachts."

While Barrington went considerably farther than the recommendations of the main report, he still saw the policy making Aireachts as being geographically concentrated. This is the most likely outcome since corrective measures for dealing with national imbalances must be decided supra-regionally and planned inter-regionally. What is needed, as Ross sees it:

"is a means of central co-ordination which recognises the potential conflict of interest but which nevertheless permits the local planners to continue to take initiatives in a manner which ensures that the local planners take into account the external economies and diseconomies associated with their actions. In this way the ill effects of centralisation are mitigated and the desire for participation in economic development at local level is not thwarted." **

Even the widest-ranging approach to reorganisation of the Public Service is most unlikely to eliminate entirely the advantages of the capital over other regional centres. If the relocation of decision-making private sector, it is essential that a narrowly compartmented approach to decision-making gives way to a recognition of the importance of co-ordinated decision-making at regional level.

functions in the Public Service is to succeed as an example to the

5.12 Summary

One of the factors behind the existing social and economic inequality of regions is the differential in contact potential between the capital and the other major centres. While relocation of routine work to the regions confers many benefits, these are essentially short term; they do little to overcome the structural problems arising from lack of entrepreneurial, administrative and innovatory skills in the regions. The relocation of senior personnel in the Public Service to selected centres is now part of policies aimed at redressing this deficiency in many countries outside Ireland. It is hoped that the increase in local autonomy portended by these moves will serve to attract the private sector decision-makers to these selected centres. In both Public and Private sector relocations the communications factor is increasingly recognised as being crucial.

¹Report of Public Services Organisation Review Group, Stationery Office, Dublin, 1969, Addendum by T. J. Barrington, page 488.

^aM. Ross, "Procedures for Integrated Regional Planning", *The Economic and Social Review*, Vol. 4, 1973, page 528.

Chapter 6

Recommendations

6.1 Introduction

An increase of office activities can be significant for both the immediate and long term development of the regions away from Dublin. The relocation of office activities can be expected to create immediate opportunities in the regions, having considerable social and economic benefits. If the relocation of office employment incorporates or is even confined to the relocation of decision-making and high-status jobs, then such relocation is likely to lead to the long term social, economic and organisational benefit of the regions. Apart from the benefits of higher incomes or the prospects of career advancement, the expansion of managerial and professional activities within a region will add to the innovatory resources of the region and help to bring about conditions favourable to self-sustaining expansion. Office employment offers an environmentally clean, energy-conserving and socially desirable means of tackling many of the problems of less developed regions.¹

Since policy-making is a function of Government, policy prescriptions, if they are to prove acceptable, must be guided by statements of national goals and objectives. Given present policies, the advantages deriving from the rapid increase of office occupations would accrue mainly in the East Region. A greater spatial concentration of decision-making functions in the capital would tend to increase its centripetal attractions and this would increase the economic and decision-making disparities which exist between the East and the less advantaged regions. Regard must be had to the balanced development of all regions in the country². In the context of the present study, balance is understood as the diminution of the dominance of the East region in the location of white-collar activities and, more especially, in decision-making.

¹Throughout this report it is emphasised that many white-collar workers are employed in the goods producing sectors. In addition, the notion of productive work cannot sensibly be confined to the production of tangible commodities alone.

*Regardless of size of national population or extent of the territory, countries have had to introduce regional policies to counter internal differences in opportunity, e.g. Luxembourg, the Netherlands, the UK, France and Ireland.

Relocation of office work incorporating decentralisation could facilitate increased participation and co-ordination of the various agencies, public and private, involved in the regional development process.

6.2 Need for Policies

While the Government must aim for efficiency in all branches of economic and social activity, the degree of concentration of office employment in the East region in 1971 and that projected for 1986 is incompatible with stated Government objectives on balanced regional growth. The promotion of office activity within the regions must necessarily form an integrated element of the overall development strategy. As indicated in Chapter 5, relocation can be accompanied by reorganisation which in turn may lead to greater efficiency at both regional and national level.

The relocation of office work needs the introduction of a range of highly sophisticated policy instruments which derive from the complexity of office functions as set out in Figure 9. Certain office operations cannot presently be moved out of Dublin without moving the institutions on which their work is focused. Thus, for example, the legal profession needs ready access to the Courts, the financiers need to be close to the Stock Exchange and Senior Civil Servants to the houses of the Oireachtas. Some other office functions involved in information exchange derive considerable external economies from a Dublin location and might loose efficiency and competiveness unless they could move to an alternative centre which provided an adequate range of informationexchange opportunities. Alternatively, cost savings might be obtained by relocating routine information handling office work out of high cost city centre locations: the experience to be gleaned from this type of "partial move" in other countries suggests that firms are reluctant to move great distances from the national capital and that these partial moves have only limited impact on the long term problems of the less advantaged regions.

Given the continued growth of office employment and the potential of new forms of telecommunications, any combination of seven different strategies may be proposed. Their aim is to alter the pattern of office employment between regions in line with stated Government objectives.

Private Sector offices, or parts thereof, which may be induced out of Dublin. Fig. 9: Locational Flexibility of Office Operation: decentralisation. OFFICE ACTIVITIES Public Sector offices, or parts thereof, whose location can largely be decided by Public Service involves relocation also Araa whare office 128

The possible strategies are:

- (a) To attract to Ireland a greater share of the technical and managerial functions of foreign manufacturing concerns wishing to set up in Ireland. These include the planning, control, market research and Research and Development activities which are labour-intensive and which also stimulate the growth of external linkages with business services.
- (b) Encourage the expansion of the planning, control, market research, Research and Development and other technical functions of indigenous industrial concerns.
- (c) Attract to Ireland and to the regions outside Dublin, by way of financial and other incentives, blocks of internationally mobile office work including Research and Development and Clerical operations. In an era when "developing" countries are highly competitive in the area of goods production, future sources of employment expansion in Europe, including Ireland, may be increasingly confined to highly-skilled managerial, research and related work. Given Ireland's advantage of a well educated work-force, it should be possible to expand upon the experience gained from the Neodata, Shannon and IDA work in this area.
- (d) Policies which delegate executive authority to regional units of central agencies. These can be in the form of single purpose or multi-functional regional agencies. In this context, the current study of sub-national administrative units should place particular emphasis on regional development objectives.
- (e) The relocation of routine information-handling office activities in the Public Sector. The routine, standarised and regular nature of communication in this type of work can be often accommodated by use of computers, telex, telephone or other "narrow-band" telecommunications. As indicated in Figure 9, it is the massive volume rather than the complexity of these communications which may limit the choice and number of locations for this type of work.
- (f) To encourage similar relocations of Private Sector office work. In this case, the lead offered by the Public Sector together with inducements, such as the provision of advance accommodation, the abolition of all stamp duty on office development outside the East region, or the payment of grants on the basis of the total salary bill of the relocated organisation, could help to attract a greater share of work away from Dublin.

(g) The initiation of policies which aim to attract private sector decision-making operations out of Dublin to alternative, adequately equipped urban centres. As in the case of (d) above this would combine relocation with decentralisation with likely long-term structural benefits for the reception regions. (See Figure 9.)

6.3 Policy Implementation

Implementation of these strategies requires the establishment of an agency to deal with the location of office activities. Such an agency could take one of three principal forms:

- (a) a unit within the Department of the Public Service
- (b) an independent State Agency.
- (c) an extension of the Industrial Development Authority (the principal development agency in operation).

Since the agency would need to co-ordinate and promote policies in both the Private and Public Sectors, it may be considered desirable that this agency be outside the immediate jurisdiction of the Civil Service, as has been common practice with other development agencies to date. The authors are reluctant to propose another independent agency, and concur with the view recently favoured in the EFTA study which advocates the integration of policies on both goods production and office activities. It is therefore recommended that, within the context of existing development agencies, the Industrial Development Authority be enlarged into a comprehensive development agency which has regard for office employment creation and distribution as well as for goods production.

In line with the integration of policies, the Authority might be re-styled the *Development Authority*. Within the reconstituted Development Authority, an *Office Executive* should be established with its own Management Committee. The management committee should be drawn from Central Government, the Department of the Public Service, the Office of Public Works, AnCo and agencies such as the Irish Management Institute and the Institute of Public Administration and the Industrial and Financial sectors. This Committee could function under the direction of the Executive Board of the IDA in the same way

as existing committees. This Committee would assume responsibility for the implementation of all office activity policies and research.

In the case of Public Sector office relocations it is presumed that the statements mentioned in Chapter 4 represent a commitment which would form the basis of policy for the Office Executive. Assuming a commitment to Public Sector relocation by the Government, the Office Executive could advise upon the Public Sector functions which could or should be relocated. It would also assist in the selection of reception centres, having regard to regional development objectives.

The rapid growth of office functions in the past and their expected future expansion requires a comprehensive regional programme that incorporates both the public and private sectors. The relocation of Public Sector work may be seen as a catalyst for private sector relocations and the stimulation of regional development; it is necessary that the same agency be responsible for implementation of both public and private sector office relocation programmes as well as the attraction of office activities to Ireland from overseas. The Management Committee of the Office Executive should be representative of all relevant interests and, in turn, the Office Executive should operate within a broader framework for integrated regional policy. 1

6.4 Office Executive Functions

The Office Executive should have responsibility for:

- (a) Assisting and advising upon Public Sector office relocation out of Dublin to regional centres. The Office Executive should also be empowered to advise upon the location of any new Public Sector offices which may be created.
- (b) Assisting and advising upon Private Sector re-locations from the East region.
- (c) The attraction to selected centres within Ireland of part of the white-collar work of overseas organisations, including Research and Development, Systems work and, where possible, some of the service functions of internationally controlled firms which have already established plants in Ireland.
- (d) In consultation with national and regional agencies, the provision of the telecommunications, educational and other

¹See definition of terms on page 97.

²EFTA, National Settlement Strategies, op. cit. In advocating the establishment of an Industrial Development Corporation, the Green Paper on Economic and Social Development, 1976–1980, seems to favour co-ordination of development policies.

¹The NESC report on *Institutional Arrangements for Regional Economic Development* (Report No. 22), proposed the establishment of a Central Committee for Regional Economic Development which would articulate regionally the national economic policies.

information-related infrastructure within the selected office centres.

(e) Such other functions as may be essential to the implementation of its policies, including a wide programme of research and advice into office communications, labour supply and locational factors. In undertaking its tasks the Office Executive would require greatly improved sources of information, especially in regard to occupational change at the regional and national levels.

Because of the degree of interaction between the office functions of the Public and Private Sectors it is essential that location policies should be co-ordinated by a single agency. In addition, relocation of Public Sector work should be viewed partly as an inducement to Private Sector relocations rather than as an end in itself (See Chapter 5). The operation of the Office Executive in relation to the Public sector depends upon the relocation policy commitments of the Public Service and requires further investigation outside the scope of this study.

6.5 Local Agencies

It is the view of this report that there should be the greatest possible degree of decentralisation which is consistent with overall efficiency. Therefore, the operations of the Office Executive should be integrated with Regional Development agencies, perhaps on the model of Shannon Development Company. These agencies would co-ordinate development in the selected centres. They should prepare, in association with Department of Labour, and AnCo, regional manpower budgets in an attempt to match the expected need in the type and number of jobs with those which could be provided through the Office Executive.

6.6 Location of Office Centres

Much of the responsibility for a location policy including the choice of specific locations for office expansion would be that of the Office Executive, having taken account of current research. Nevertheless, there are severe constraints on the number of office centres which can be developed outside Dublin in the short term. While it is recognised that there exists strong social arguments for the widespread dispersal of office work, such a dispersal would be expensive and would not contribute to long term regional development. Widespread dispersal, though possible in the case of some routine office work, and of social benefit to the reception area, would prove extremely costly and would be unlikely to encourage the movement of higher-level work (See

Chapter 5). Overseas studies have shown that dispersal results in continued leakage back to the capital city, thus re-enforcing rather than diminishing regional disparities.

Since an office policy must be conceived with regard to occupations, rather than to branch of economic activity alone, it is inherently an urban policy: centres must be selected which are capable of supplying the diverse social, economic and higher-educational needs called for by white-collar workers and their families. Because of the high cost of equipping a designated office centre with higher-education institutions, libraries, research facilities, conference venues and the other essentials of information exchange, only a limited number of urban centres can be developed, at least initially. In addition, the interests of regional growth and development require the simultaneous relocation of inter-linked activities whose needs can be matched in only the larger centres.

Relocation of even routine work is hampered by the inadequacies of the existing telecommunications network. 1 The high cost of improving the telephone service and of connecting regional centres to one another, to Dublin and to cities abroad by means of advanced forms of telecommunications, necessarily limits the number of possible alternative office centres. Since new or additional telecommunications will have a cumulative effect on the total volume of communication, it is essential to select centres which can support and develop the growth of communication within the region. Within this context it is recommended that initially a limited number of alternative centres for office expansion be selected. The selected centres should be those which are likely to have both the greatest existing resources in the information field. and also the points of greatest potential as alternative urban magnets to Dublin. (This parallels the approach to office policy currently adopted in France.) Investment should be used to encourage and promote these centres overseas in the hope of attracting research and development activities, business services and other office work from abroad. These centres should be the focus of co-ordinated, inter-linked public sector relocation and with the use of a range of incentives they should provide an alternative to Dublin and become attractive to Private Sector organisations engaged in information exchange.

6.7 Private Sector Relocation Incentives

To stimulate the expansion of Private Sector office employment in selected centres, whether through relocation from Dublin or from

¹ Industrial Infrastructure Newsletter, C.I.I., Vol. 26. No. 11, 23.11.76, pages 1-3.

overseas, a range of incentives is required in addition to the infrastructural investment chanelled into these centres. Measures aimed at stimulating the growth of office functions in a centre can be both material and financial. Material incentives, which are also applicable to the Public Sector, include the range of activities aimed at creating a favourable ambience in selected centres. As indicated in Section 6.6 these include the provision or improvement of higher-education, air and telecommunication facilities as well as recreational and cultural opportunities. In addition it is essential to ensure that diversity of housing types are available in environmentally attractive areas.

In the case of the relocation within Ireland or the attraction from overseas of private sector office work it may be desirable to offer a range of financial incentives in favour of the selected regional centres. These incentives could include:

- (1) The extension of the Export Profits Tax Relief scheme to all feasible aspects of office work which attract earnings from exports.
- (2) A subsidy to relocating office firms based upon aggregate wage costs.
- (3) Assistance to meet the direct and indirect costs of relocating within Ireland or commencing operations within Ireland.
- (4) The provision of training programmes for office staff.
- (5) Provision of advance, pre-planned office accommodation at subsidised rates or with special leasing or purchasing agreements.
- (6) Grants towards provision of office equipment including telecommunications and computers.

For office workers, especially those relocating with the office work, consideration would have to be given to meeting costs of moving house and the provision of subsidised housing.

The costs of these material and financial incentives to the expansion of office functions in regional centres would be borne by grants from the Exchequer as is currently the case with incentives to manufacturing industry. The direct and indirect benefits of an office policy could prove considerable (see Chapter 5). Directly the office programme would be likely to lead to the creation of more employment and increase the export potential of the region. Indirectly, the expansion of office work may lead to the development of a network of interlinked activities within a region; interlinked decision-makers within a region are less likely to take independent decisions to cease operations within the area.

6.8 Conclusion

This report has shown that white-collar employment, particularly office work, has accounted for much of Ireland's employment growth in the recent past. From an examination of trends within Ireland, as well as by international comparisons, it is likely that office employment will account for a growing proportion of the future employed population. On the basis of past trends this growth, especially in the case of higher status jobs, will continue to concentrate in the East region. Allowing for economic, social and structural considerations, a strong case can be made for incorporating office functions into regional development policies. The establishment of an Office Executive within an overall Development Agency would serve to attract more office jobs to Ireland and help ensure that a greater share of these jobs located in selected centres. In addition the Office Executive would be in a position to coordinate Public and Private sector decisions on office location and also to relate office policies to goods production policies.

It may appear somewhat insensitive to propose that there should be relocation of work out of Dublin at a time when Dublin has a very high level of unemployment. The policies proposed in this report are addressed to the long term needs of society and the need to ensure that the regions make the maximum possible contribution to overall growth and development. In part the very high level of unemployment in Dublin at present has been due to a mismatch between past regional policies and local manpower resources. While Dublin expanded as an office centre since 1961, with people migrating from all parts of Ireland to get white-collar jobs in Finance, Industry, the Civil Service and the Professions, goods production was strongly promoted outside the East region. An expanding market for office workers is, for the most part, closed to many of the currently unemployed and the movement of office jobs to regional centres does not alter that position.

For the future, it is important to attempt to produce a better match between the range of job aspirations and opportunities within each region. The attraction of more office work to selected centres as part of a comprehensive regional policy offers an opportunity to extend the range of work available outside Dublin and to reduce regional disparities in both employment and development.

For the long term future, as developing countries compete successfully for work in goods production, the skilled and highly qualified work in information exchange may become a major hope for attainment of full employment at both national and regional levels.

Both the findings of this study and its recommendations for the future development of service functions are compatible with, and complementary to, the need to ensure even greater investment in productive enterprises. Much of the future white-collar and office growth will be in higher-order professional and managerial occupations, which for the most part, arise outside the Public Administration domain. Much of the growth of higher level office work will be an essential complement to the development of a modern industrial economy; it offers potential for highly paid, labour-intensive, secure and prestigious employment and derives substantial benefits for all aspects of the economy. In addition, both native and immigrant office functions are likely to be increasingly productive and contribute to Ireland's export base both directly and indirectly. In addition, the strategies recommend a logical extension of policies to cover the likely areas of future employment growth. The integration of development policies at national and regional level for both material and immaterial goods production represent a low-cost means of both co-ordinating and expanding the development effort to meet the requirements of greater output and full employment in the future. In addition, they show that for the future the question of regional policy is largely synonymous with urban policy in respect of employment location and distribution.

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Activity	Total Employment	Producers, Makers, etc.	ers,	Transport Communica- tion	Clerical Workers	Commerce Insurance Finance	Service Workers	Professional/ Technical	Other Occupations	Total – All Non-Producers, Makers, etc.	- All ducers, , etc.
A			8								8
Agriculture (including Forestry, Fishing)	273,079	271,776	3.66	232	395	١	26	672	79	1,303	9.0
Industry (including Building & Const., EGW)	322,749	242,449	75.1	25,242	25,550	4,761	4,009	975	10,981	80,300	24.9
Commerce	148,286	23,571	16.0	14,408	16,197	91,405	289	2,086	34	124,715	84 · 0
L Insurance, Finance, Business Services	23,992	305	1.3	821	14,189	6,379	402	872	2,024	23,687	98.7
Transport, Communication and Storage	60,122	10,647	17.71	32,997	10,897	1,547	2,193	757	1,084	49,475	82.3
Public Admin. & Defence	48,869	5,778	11.8	2,609	16,916	I	8,742	3,382	11,442	43,091	88 · 2
Professional Services	109,078	3,821	3.5	777	9,315	ý	13,371	81,199	589	105,257	96 -5
Personal Services	54,441	2,790	5.1	1,010	3,130	2,393	43,796	1,161	161	51,651	94.9
Recreational Services	10,851	1,785	16.5	175	3,581	304	2,558	2,265	183	990'6	83.5
Other Industries	3,372	940	27 -9	351	975	1	74	4	886	2 432	72.1
Total All Industries	1,054,839	563,862	53.5	78,622	101,145	105,795	75,755	102,095	27,565	490,977	46.5

TABLE A.2
Ratio of Industrial to Service Employment in Selected Countries

Country	,	Ratio of Industrial to Service Employment 1926	Ratio of Industrial to Service Employment 1966	Percentage change in ratio 1926–66 (%)	Ratio of Industrial to Service Employment 1970/71	Percentage change in ratio 1966- 1970/71 (%)
Austria						
Belgium		138 - 9	90.3	−35 ·0	81 · 7	- 9.5
Canada		54.7	56 - 2	+ 2.7	51 - 5	- 8.4
Denmark		71 - 7	75 - 9	+ 5.9	74 · 3	- 2.1
France		113.9	85 · 1	−25·3	80 · 1	- 5·9
Germany		141 - 2	120 · 6	–15 ⋅0	117 · 4	- 2.7
Ireland		38 · 4	67 · 2	+75.0	70 ⋅ 3	+ 4.6
Italy		132 - 1	118 · 2	-10.5	110.9	- 6.2
Netherlands		86 · 2	90 · 4	+ 4.5	_	
Norway		75 ⋅ 0	72.3	– 3 ⋅6	68 · 4	- 5.3
Portugal		58 · 4	76 ⋅ 0	+30.1	85 ⋅ 6	+12.6
Spain		94 - 0	112-2	+19.4	110.7	- 1.3
Sweden		103 - 6	95 · 6	 7⋅7	75 · 4	−21 · 1
UK		100 · 6	92.6	– 8 ⋅0	83 · 5	 9⋅8
USA		74 · 7	56⋅3	-24 ⋅ 6	54 - 1	- 3 ⋅9

Source: ILO Yearbooks and Y. Sabolo, et. al., The Service Industries, Chapter One.

TABLE A.3
White-Collar Occupations Within the Retail Sub-Group, 1961-71

Sub-Group Categories	1961*	1971	Change 1961-71	% Change 1961-71
Grocery and Provisions	23,017	16,272	-6,745	-29.3
Grocery and Public House	5,710	3,042	-2,668	-46.7
Public Houses	9,285	11,742	+2,457	+26.5
Milk and Milk Products	1,551	1,898	+347	+22.4
Meat, Fish, Poultry	4,932	5,447	+515	+10.4
Vegetables and Fruit	1,264	929	-335	-26.5
Bread, etc.	1,364	3,249	+1,885	+138-2
Clothing, Drapery and Footwear	13,529	12,844	-685	-5.1
Leasing of Televisions.	1	,	""	1 .
Hardware, etc	4,871	5,574	+703	+14.4
Books and Stationery	952	967	+15	+1.5
Chemists Wares	2,992	3,138	+146	+4.9
Furniture and Carpets	1,130	1,499	+369	+32.7
Jewellery, Watches and Clocks	612	858	+ 246	+40.2
Toys and Leather Goods	568	702	+134	+23.6
Tobacco, Sweets, etc.	4,445	3,119	-1,326	-29.8
General Shops	1,421	1,543	+122	+8.6
Department Stores	2,736	4,315	+1.579	+57.7
Motor Vehicles	851	6,633	+5.782	+679-4
Fuel		1,007	+1,007	
Other undefined Retail	1,432	3,272	+1,840	+128.5
Total Retail	82,662	88,050	+5.389	+6.5

Note: *Figures mey not be exactly comparable in some categories. Source: Census of Population, Industrial Vols. 1961–71.

TABLE A.4
Changing Employment in the industrial Sector by Occupation 1961–71

	Occupational	5		Changing Employment in the Industrial Sector by Occupation 1961-7		B Sector	oy Occupat	0-1961-7	F		
	Industriei Group	Year	Total	Producers	Transport	Clerical	Commerce	Service	Prof./Tech.	Other	Total Non- produc- tion
	Mining and Turf Production	1961	9,640	8,307	009	345	16	94	215	117	1,333
		1971	10,420	7,903	1,251	603	0	62	426	165	2,517
	Manufacturing	1961	977,771	717,721	18,337	15,164	3,899	2,650	3,490	6,522	50,062
		1971	213,633	149,025	20,983	19,877	4,650	3,030	6,226	9,842	64,608
141	Building and Construction	1961	59,587	64,884	1,446	1,506	4	243	1,141	363	4,703
		1971	84,533	76,273	2,141	2,786	23	428	2 022	860	8,260
	Electricity, Gas and Water	1961	10,172	6,693	604	1,768	09	306	649	92	3,479
		1971	14,163	9,248	867	2,284	78	489	1,083	114	4,915
	Total	1961	257,178	197,601	20,987	18,783	3,979	3,239	5,495	7,094	59,577
		1971	322,749	242,449	25,242	25,550	4,761	4,009	9,757	10,981	80,300
•	Percentage Change 1961-1971 (%)		+25.5%	+22.7%	+20.3%	+36.0%	+19.7	+23.8	+77.6	+54.8	+34.8
•						-		-			

Census of Population, Industrial Vols., Tables 7A and 7B, 1966 (adjusted) and 1971.