The Patterns of Public Expenditure in Northern Ireland and the Republic: 1954-65

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INTRODUCTION

Although public expenditure has been much discussed, the literature of economics, and more especially the literature of public finance, has had little to say of an economic nature concerning the public expenditures. The predominant concern has been with political and moral questions. However, in more recent times the public expenditures have received some attention from economists. Unfortunatley, little has yet been achieved in the way of a theory or theories of the public expenditures analagous to the various theories of taxation. Just as economists have attempted to achieve criteria for judging the level and distribution of taxation or of the various individual taxes, so too it might be expected that they may have concerned themselves with criteria for judging the public expenditures. Unfortunately apart from specific project analysis, such as cost benefit studies, little has been achieved and public servants find a sacrcity of advice from economists when considering the problems of the level and the distribution of public expenditures.

Although there is no formal theory of the public expenditures, some studies have attempted to evolve rough and ready means of judging expenditures.[1] One such method is that of comparison between countries of reasonably similar structure and development. Such comparisons cannot establish economic criteria for the level and pattern of expenditures but may indicate areas of similarity and difference, in such a way as to yield a basis for further and more detailed study.

This paper attempts to compare the patterns of public expenditure in Northern Ireland and the Republic, emphasising especially development expenditures. Although all public expenditures contribute to economic development, at least in the long-run, the paper concentrates on the investment spending of the public authorities in the two areas. It is hoped that the comparison will prove both interesting and useful and will provide some basis for discussing the patterns of expenditure in each area from the development point of view.

Both areas are reasonably similar in their general structure and level of development, having broadly the same pattern of culture, a similar economic structure with the same economic problems and with the same general policies and approach to these problems. Thus both areas are

[1]See for example: A. Martin and W. A. Lewis, "Patterns of Public Revenue and Expenditure", Manchester School, Vol. 29, Jan. 1961.

characterised by a relatively high proportion of persons engaged in agriculture, by unemployment and emigration, and by policies designed to attract new industrial development. A comparison, therefore, of the action taken by the public authorities, in the form of expenditures, may help to highlight some of the similarities and differences in policy and may enable some judgements to be made on the patterns of public expenditure.

There are, however, a number of differences between Northern Ireland and the Republic which are especially important in the realm of public finance. The major difference consists in the fact that the Northern Ireland economy is more closely integrated into the British economy; in fact Northern Ireland can be considered as a region within the U.K. economy. Further, the Northern Ireland exchequer is not independent but is closely related to the British exchequer. However, it may be pointed out that the economy of the Republic, although nor formally linked to the British economy, is in fact almost as equally dependent on the British economy as is Northern Ireland. Thus the bulk of exports, a substantial proportion of imports and much of the external financial flows of the Republic arise in Britain. Further the operation of the Anglo-Irish Free Trade Agreement can be expected to lead to the development of the relations between the two economies. Thus, although there are formal differences in the relations between Britain and Northern Ireland and the Republic, from an economic point of view both Irish economies are substantialy dependent on the British economy and the differences in the degree of integration with the British economy will by no means invalidate the comparison. Of greater importance however, are the financial relations between Britain and the two areas. While the exchequer of the Republic is formally independent of the Bristish exchequer, and taxation and expenditure decisions are not directly related to British conditions, this is not the case in Northern Ireland. The Northern Ireland exchequer is very closely linked to the British exchequer. This raises the question as to the autonomy of public expenditure decisoins in Northern Ireland and consequently of the validity of a comparison of the patterns of public expenditure between Northern Ireland and the Republic.

Without going into the details of the relations of the Northern Ireland exchequer to the British exchequer, a number of points can be made. Firstly, most of the formal or legal relations concern taxation or the revenue side of the budget. On the expenditure side the Northern Ireland decisions are, theoretically at least, independent. The examination by the British Treasury of the Northern Ireland estimates arises out of the need to determine the imperial contribution and because of the guiding principle of parity which has long been accepted by the Northern Ireland authorities as a primary policy objective. Theoretically, this policy could be abandoned although it is most unlikely. This policy does not involve absolute similarity in expenditure patterns and there are indeed differences in expenditure patterns in Northern Ireland and Britain. The need for the British Treasury to examine Northern Ireland estimates does not necessarily destroy the autonomy of the Northern Ireland authorities. As a recent writer has said of Northern Ireland: "She has distinct Estimates; the iniative in compiling them rests with her; and this gives her the first word, if not the last, in determining the magnitude and pattern of expenditure. Then, too, the post-war financial agreements were obviously drafted so as to give her some latitude. Parity is no more than a guiding principle, and it is explicitly provided that the Minister of Finance may propose to diverge from parity if local conditions make that necessary . . . Finally the Joint Exchequer, Board, on which Northern Ireland is represented . . . is an independent arbiter. The Board receives the Estimates, fixes the imperial contribution, determines Ulster's revenue, and over the whole field of financial relations is the judge in any dispute that may arise between the Treasury and the Minister of Finance".[2]

The ability, therefore, of the Northern Ireland Government to determine her own expenditure patterns, although perhaps not completely independent, is sufficient to enable a pattern of expenditure which reflects local needs and conditions to be undertaken. Further, the more recent regional policies of the U.K. government involve specific expenditure patterns for underdeveloped regions which are, to some extent, isolated and differentiated from the general policies of the U.K. government. This may further reinforce Northern Ireland's ability to pursue policies conducive to local needs and conditions. Hence it may not be unreasonable to maintain that the patterns of public expenditure in Northern Ireland are her own.

There are a number of difficulties in comparing the patterns of public expenditure in Northern Ireland and the Republic. Table A1 outlines the levels of public expenditure in both areas for the years 1954 to 1965. The table refers to the combined expenditures of the central governments, including certain funds, and the local authorities, according to national accounting definitions – what is known in national accounts terms as the combined public authority account. For the Republic of Ireland the definiton of public authorities is reasonably clear cut, i.e. the central government which includes all the ministerial departments and certain bodies which are financed directly by the exchequer, e.g. Coras Tractala Teoranta, the Industrial Development Authority etc., and the extra budgetary funds (which are about 30 in number); the local authorities, including harbour committees and vocational education committees. All other semi-state bodies, including the producing enterprises E.S.B., C.I.E. etc., are excluded: the exchequer financing of these bodies is, however, included. Similarly, in the case of Northern Ireland, the combined public authority account includes the exchequer issues and the expenditure of certain funds which lie outside the exchequer (e.g. the National Insurance Funds), the local authorities and the exchequer financing of the public corporations.

However, in the case of Northern Ireland the adequacy of this definition must be questioned for owing to the interrelations between the Northern Ireland exchequer and the British exchequer, total public expenditure in Northern Ireland is not equivalent to the expenditure of the public authorities in Northern Ireland. Thus the British government undertakes certain

[2]R. J. Lawrence, *The Government of Northern Ireland*, Clarendon Press, Oxford, 1965.

services in Northern Ireland, some of which are a charge on the income of the public authorities in Northern Ireland, but are not included as part of their expenditure and others which are a direct charge on the Birtish authorities and are entered neither in the income nor the expenditure account of the Northern Ireland authorities.

The following table gives a rough estimate of total public expenditure in Northern Ireland.

TABLE 1

TOTAL PUBLIC EXPENDITURE IN NORTHERN IRELAND 1960-65

	Northern Ireland (a)	British			
Years	Total (b)	Reserved (c)	Agriculture	Other	Total
1960/1	154.5	9.8	28.2	n.a.	—
1961/2	186.2	2.2	39.3	2.2	229.9
1962/3	192.8	2.3	38.8	2.2	236.1
1963/4	212.4	1.8	33.3	2.4	249.9
1964/5	236.3	1.9	29.6	2.4	270.2
1965/6	276.3	n.a.	27.9	2.7	—

SOURCE: Northern Ireland; see table A1.
Reserved: Finance A/cs. Northern Ireland.
Agriculture: Northern Ireland Economic Report 1964-6.
Other: Digest of Statistics Sept. 1967. Table 35, and earlier years.

NOTES: (a) Statutory deductions from reserved Taxes not included.
(b) Social Services and National Insurance fund transfers from U.K. government included in Northern Ireland expenditure.
(c) Expenditure by the G.P.O. and the B.B.C. is excluded from 1961/2.

As can be seen there are two major components of U.K. expenditure in Northern Ireland, i.e. reserve services and agricultural subsidies and grants. Reserved services up to 1961, included spending by the G.P.O. and the B.B.C., the costs of finance and tax collection and certain pensions and other miscellaneous items. From 1961 and G.P.O. and the B.B.C. are treated in the same manner as public corporations whose financing is not directly included in the exchequer accounts, leaving only land purchase, tax collection and other services as part of reserved expenditure. With regard to agricultural expenditure, Northern Ireland agriculture is treated as part of British agriculture and consequently Northern Ireland farmers receive grant and subsidies on the same basis as British farmers directly from the British exchequer.

For the purpose of comparison in this paper, it has been decided to exclude expenditure by the U.K. government and to concentrate solely on the expenditures of the Northern Ireland authorities. This will not alter the balance of the analysis to any great extent, with the exception of the agricultural sector where U.K. expenditure predominates. The paper concentrates on those areas of expenditure which are legally under the control of the Northern Ireland authorities.

Finally, the size of the population and the level of prices will influence the level of the public expenditures. It would be better, theoretically, to eliminate these influences by attempting to deflate by appropriate price indices and by stating expenditure on a per capita basis. However, comparative price indices are difficult to construct and with parity between the British and Irish pound there is no obvious exchange rate adjustment that can be made. To use the price indices of each individual area respectively, would not be of much help as it would only indicate price changes and not absolute price levels apart from the fact that the indices themselves may not be comparable. With regard to the influence of population levels, it has been decided not to convert the figures to a per capita basis, partly because the influence of population levels and trends is not always clear-cut, there being many other factors which influence spending, and partly because by concentrating on broad absolute amounts the pattern of expenditures can more easily be seen and from which one can delve more deeply into particular items. One of the purposes of this paper is to put the patterns of expenditure into a framework on which more detailed study can be undertaken and, by comparison, to draw attention to those areas where further study may be warranted.

The overall level and pattern of expenditures

Prior to analysing the capital spending let us take a brief look at the overall level and patterns of expenditure of both governments. It can be seen in Table A1 that the level of expenditure is somewhat higher in the Republic than in Northern Ireland. On a per capita basis, however, Northern Ireland expenditure is substantially higher. The level of expenditure is partially determined by the ability to raise revenue by taxation[3] which, in the case of Northern Ireland, is almost completely determined by the British chancellor of the exchequer and it is probable that the comparatively higher level of expenditure in Northern Ireland is explained by this factor. The rates of taxation applicable in Northern Ireland are set by the conditions obtaining in Great Britain as a whole, and not by the local circumstances and conditions of Northern Ireland. It is possible that if Northern Ireland had completely independent powers of taxation, neither the level nor the time pattern of expenditures would be the same. Given the relatively lower level of national income (than that of the U.K.) and the political element that is normally influential in tax decisions, an independently determined tax system in Northern Ireland might yield a much lower level of revenue and hence of expenditure. As it is however, the level of revenue in Northern Ireland is determined independently and hence the level of expenditure is influenced thereby. As can be seen from col. 6 (Table A1) the level of expenditure is extraordinarily high reaching a level of nearly 50 per cent of Gross Domestic Product in 1965 as compared to

[3]See A. T. Peacock and J. Wiseman, *The Growth of Public Expenditures in the United Kingdom*, Oxford University Press, London, 1961.

less than 40 per cent for the Republic. This difference would be emphasised if allowance were made for British expenditure in Northern Ireland and for the expenditure of the Post Office which is included in the figures for the Republic, but is excluded from the Northern Ireland figures. An offsetting factor may be the fact that the Republic has a much more extensive public corporation sector whose full financing is not included in the Republic's figures.

Table A2 outlines the patterns of expenditure according to the usual national accounts classifications. Exhaustive expenditure consists of resources absorbed by the public sector in the form of goods and services. It is made up of two basic components; factor inputs into the government sector namely wages and salaries, and government consumption of goods and services. It measures the direct allocation of resources by the government including the cost of government services and administration. Transfer expenditures consist of resources transferred from one section or part of an economy to another, through the government sector. Both types of expenditure play a part in governments' influence on the economy; the former in so far as it directly absorbs or contributes resources to the economy and the latter in so far as it redistributes the resources in the economy. As can be seen in Table A2, in the Republic expenditure tends to be evenly distributed between these two forms; in Northern Ireland, however, expenditure on goods and services tends to be somewhat greater than expenditure on transfers. An analysis of transfer expenditure is given in Table A3. The relatively greater extent of transfers in the Republic are explained by National Debt interest and agricultural transfers, offset, to some extent, by higher social transfers in Northern Ireland. This is not unexpected as the burden of agricultural spending falls on the British exchequer and the National Debt burden for Northern Ireland is partially lower, in effect, by the fiscal relations between Great Britain and Northern Ireland; the imperial contribution, which is deducted from revenue, not being an accurate reflection, in the post-war period, of the relative shares of the cost of imperial services. The relatively higher expenditure on housing and the relatively lower expenditure on industry and transport in the Republic are explained by the form in which expenditures take place, i.e. much of the housing expenditure in Northern Ireland and much of the expenditure on industry and transport in the Republic are included in the respective public corporation columns.

Transfer expenditure is normally the medium of redistribution of income and its size is usually a reflection of the extent of governments' social policy. The following table indicates the social-economic balance of spending in Northern Ireland and the Republic.

Social expenditure forms a substantially higher proportion of the Northern Ireland budget and absolutely espenditures are about 20 per cent greater than in the Republic. It is in the social services that the principle of parity predominates in Northern Ireland and indeed some part of their social spending is financed by the British National Insurance funds and by the British exchequer under the Social Services Agreement, (About £20 m. in 1965/6). The effect of the parity principle is to make social expenditure

TABLE 2

SOCIAL EXPENDITURE AS A PERCENTAGE OF TOTAL PUBLIC AUTHORITY EXPENDITURE IN NORTHERN IRELAND AND THE REPUBLIC 1955-65

Year	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
N.I.	64.5	62.3	63.2	62.8	65.7	66.7	66.2	66.6	67.2	61.5	66.6
Republic	44.8	42.5	42.9	43.5	42.3	40.2	39.7	40.4	41.3	41.3	n.a

SOURCE: Northern Ireland, *Digest of Statistics*, Section D, September 1967, and corresponding sections in earlier years.
Republic, *Statistical Abstract* 1966, Tables 177, 178, 181, 184 and 198 and corresponding tables in earlier years, *National Income and Expenditure* 1965, Tables A13, A16, A17 and A18 and corresponding tables in earlier years and appropriation accounts 1955-56 to 1965-66, Vote 9

NOTES: Social Expenditure includes housing, health, social welfare and education, both current and capital.

in Northern Ireland approximate to U.K. standards. The level of per capita expenditures ih 1964/65 are £107. per head in Northern Ireland and £47.7 per head in the Republic as compared to £109.1 per head in Britain.

A further classification of government expenditure lies in the distinction between current and capital expenditures, the importance of which is emphasised when considering growth or development. The distinction is based on the time period over which the benefits of the expenditures accrue. If the benefits are consumed in a short period of time, expenditure is treated as current; where a longer period of time is involved, the items are classified as capital. The distinction is analogous and closely parallel to that between consumption and investment, but there is no exactitude in either set of definitions: what constitutes investment is, to some extent at least, arbitrary. The distinction, however, is useful in a number of respects. Firstly in so far as an increase in productive capacity is the basis for an expansion of future output, i.e. in so far as expenditure creates an asset whose effects are carried into the future, it is useful to distinguish if from assets which are consumed immediately; secondly, as far as the public authorities are concerned, the creation of productive capacity may have implications for future recurring expenditure (e.g. a hospital or school) or revenue (new investment in industry assisted by state grants).

Current expenditure in both areas predominates, being about 70-80 per cent of total expenditure. The level of current expenditure is often associated with the degree of development or affluence in a community; a high level of current expenditure reflecting the servicing of a well-developed and existing infrastructure and of a reasonably high level of social expenditures which are largely current in nature. By these standards both areas would appear to be reasonably in line with the more developed countries.

Finally, a brief look at the level of authority at which spending takes place. Some economists have referred to what they call the "concentration process" whereby there is an increasing tendency to centralisation of government expenditure.[4] Table A4 outlines the position for the two areas. There are two aspects to increasing centralisation; (a) either the direct undertaking by the central government of functions which were formerly the province of the local authorities; or (b) an increasing dependence of the local authorities on the central government as a source of finance. It can be seen from Table A4 that in the Republic, local authority expenditure as a proportion of total public authority expenditure has decreased (col. 3) while the dependence on central government grants has tended to increase (col. 5). In Northern Ireland, on the other hand, the position is not quite so clear, there being some fluctuation in the relative share of local authority expenditure (col. 8) while net government grants as a proportion of local authority expenditure show only a slight tendency to increase (col. 10). Local authority expenditure in the North, however, is relatively larger than in the Republic as also is the degree of central government financing.

Capital Expenditures

Let us now turn to the capital spending of the public authorities. I have already mentioned the fact that from a long-run development point of view too much must not be made of the distinction between current and capital spending. Both types of expenditure contribute to the development process and, is some part, one is a necessary concomitant of the other. However, it is not unreasonable to concentrate on capital or investment spending as the major element in the development process. Indeed, the large body of knowledge and experience that has been accumulated on this topic has highlighted the importance of investment. Consequently, in discussing the development aspects of the pattern of public authority expenditure, emphasis on capital expenditure, whicle recognising the importance of other non capital spending, will not be unjustified.

Table A5 outlines the capital expenditure of the public authorities in Northern Ireland and the Republic. It can be seen that the levels of expenditure are similar in more recent years, although the pattern of development over time has differed. In Northern Ireland expenditure has more than trebled in the twelve year period, most of the increase taking place in the present decade. In the Republic, starting at a level almost twice that of Northern Ireland, expenditure fluctuated at first, declined in the late 50s and increased in the early 60s to reach a level similar to that of Northern Ireland. The level of expenditure in the Republic represents a somewhat lower proportion of both total gross fixed capital formation and of total public authority expenditure partly due, no doubt, to the exclusion of the semi-state sector.

The major difference in the pattern of capital expenditure between the two areas is in the division between direct gross fixed capital formation by the public authorities and capital transfers, these being consistently higher in the Republic and representing about 50 per cent of total capital

[4] *Op. cit.*, Chapter 6.

expenditure as compared to about 30–35 per cent in Northern Ireland. Gross fixed capital formation is the investment undertaken directly by the public authorities and normally consists of basic infrastructure type of investment. This type of investment fulfils a number of functions. Firstly by creating and maintaining a basic set of infractructure services, governments help to maintain and develop the profitability and productivity of existing enterprises and to create the necessary environment for their future expansion. Secondly, such investment may perform an inducing function by creating the conditions necessary for attracting new industry to the economy or to particular areas of the economy. So also with capital transfers which represent the use of the public sector as a medium for channelling funds to the private sectors in order to induce private sector activity of various kinds. In a development context capital transfer expenditure by the public authorities is associated with countries which already have a reasonably well developed infrastructure and whose problems are those of making full use of existing resources. The extent of capital transfers, however, is also dependent as we shall see, on the form in which expenditure takes place.

Gross Fixed Capital Formation

Table A6 indicates the pattern of direct investment by the public authorities in Northern Ireland and the Republic, on a sectoral basis. The public authorities invest directly in all the major sectors with the exception of the industrial sector in the case of the Republic. The degree of direct investment varies somewhat, the major differences, apart from industry, being in the transport and the education and health sectors. In agriculture, the level of direct investment in both areas is rather low but this is not unexpected as the scope for direct public investment is limited and is normally confined to arterial drainage and forestry development.[5] In Northern Ireland, a public corporation there are two municipal underpart of British agriculture and most government spending falls on the British exchequer. Again in both cases agricultural support is largely current in nature and most investment is left to be undertaken by the agricultural sector itself with some help. perhaps, in the form of capital grants and loans which we discuss below.

Column 3 (Table A6) refers to direct investment in Power, Transport and Communications. The figures, however, are not strictly comparable owing to the exclusion of G.P.O. investment in Northern Ireland. Since Post Office investment in the Republic is fairly large and is responsible for much of the increase in this sector in the later years, it may be better to exclude it. Table 3 indicates the position.

The effect of this adjustment is to reduce the Republic's expenditure in this sector by up to 40 per cent. On the other hand, the Northern Ireland figures include expenditure on certain electricity and gas undertakings none

[5]The figures for public authority gross fixed investment in agriculture in Northern Ireland are an understatement of the true position as the arterial drainage schemes are included in Column 8. The degree of understatement, however, is not very large; the correct figures for 1964 and 1965 being £0.3 m. and £0.6 m.

TABLE 3

DIRECT INVESTMENT IN TRANSPORT BY THE PUBLIC AUTHORITIES IN THE REPUBLIC: 1954-65

Years	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
£'s m.	6.3	7.0	6.0	5.2	5.3	5.8	6.4	8.2	8.1	8.1	8.8	n.a.

SOURCE: National Income and Expenditure 1965, Table A18 and corresponding tables in earlier years.

of which is to be found in the Republic's expenditure under this heading, as electricity and gas supply is the responsibility of a semi-state body and certain private companies. In Northern Ireland, on the other hand, although most electricity supply is the responsibility of the Electricity Board for Northern Ireland, a public corporation there are two municipal undertakings in Londonderry and Belfast along with a number of municipal gas works. Consequently their investment is included in direct public authority investment. In 1965/6 investment in these items amounted to £2.2 m.

The remaining major item in this column consists of capital expenditure on roads. In fact, most of the increased expenditure in this sector in Northern Ireland is explained by the road programme with its increasing emphasis on motorways as part of the development plan. Table 4 indicates total investment in roads in both areas over the period.

TABLE 4

PUBLIC AUTHORITY INVESTMENT IN ROADS IN NORTHERN IRELAND AND THE REPUBLIC: 1945-65. £'s m.

Years	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
N. I.	1.3	1.0	1.7	2.5	2.8	3.5	5.1	5.9	5.6	6.9	10.3	11.1
Rep.	5.0	5.0	4.5	4.1	4.4	4.5	5.0	6.6	6.7	6.9	7.3	n.a.

SOURCES: Republic, as in Table 3.
Northern Ireland, Digest of Statistics, Sept. 1967, Table 125 and corresponding tables in earlier years, and appropriation accounts 1954-1965.

The Republic, partly because of its larger geographical area and partly because of the use of road works as an employment device had a higher level of expenditure in the earlier years amounting to as much as five times that in Northern Ireland. In more recent years, however, the level of expenditure in Northern Ireland has increased rapidly, having doubled between 1960 and 1964, owing mainly to the motorway programme to which there is no corresponding expenditure in the Republic.

Social investment by the public authorities is outlined in columns 5, 6 and 7. The part that social investment plays in development is not always easy to ascertain but in the long-run it is probably a contributory factor and not just a result of economic development; certainly this is true in education as is increasingly being recognised.

Overall, Northern Ireland has a more developed social programme than the Republic, due mainly to the parity principle, and the level of investment is higher. The figures in columns 5, 6 and 7 refer only to the direct investment of the public authorities as defined for national accounts purposes. Thus the investment in housing refers only to houses built by the local authorities and excludes houses built by other bodies such as the Northern Ireland Housing Trust which has played a major part in housing development in Northern Ireland. Further, in all areas of social spending the level and type of expenditure is very much influenced by social policy and the consequent relations between private and public institutions. Thus in education and health the significance of the level of public expenditure is not easy to interpret without a thorough review of private expenditure as well. For example, the higher level of public investment on health and welfare in Northern Ireland may be partially explained by the fact that the health services are nationalised and there are very few hospitals outside the state system; whereas in the Republic there is a large voluntary or private sector whose investment is financed by non public sources. So also in education the relations between private and public institutions differ although in a very general sense there is some similarity ,with a mixture of state owned and private or voluntary schools which are in part financed by the public authorities.

From the public authority figures alone, therefore, it is difficult to make judgements as to the extent and differences in the levels of social investment. All that these figures can reflect is the extent of direct public responsibility for investment in these areas and the part that such investment plays in the overall programme of public investment.

Finally, column 4 refers to direct investment in industry, an item which is confined to the Northern Ireland public authorities. In the Republic the public authorities do not undertake direct investment in private indusrty, their industrial development policy being confined to the use of capital grants and loans to the private sector combined with the development of public industry.[6] Northern Ireland, however, attempts to attract new industry both by means of grants and by the advance factory building programme whose expenditure is represented here. The programme represents one of the major differences in the approach to industrial expansion in both areas and now constitutes a substantial element in the capital expenditure of the Northern Ireland public authorities, expenditure having doubled between 1961 and 1965. In so far as expenditure is the result of

[6]The Shannon Free Airport Development Co., a public corporation, builds factories for renting or buying along the lines of the advanced factory building programme in Northern Ireland. However, as its name implies, its activities are confined to the area on the periphery of Shannon airport.

demand for advanced factories, the programme appears to have achieved a reasonable degree of success.

Capital transfers

The second element in government capital expenditure concerns capital transfers whereby governments act as a medium for channelling investment funds to the private sector. By these expenditures governments can attempt to influence the level and pattern of investment in the economy and to direct it to those areas where it can best help in achieving national policy objectives. In a development framework capital transfers can be used to induce new investment or the improvement of existing assets as well as for the financing of necessary but unprofitable (i.e. in a monetary sense) projects, such as transport concerns. In many cases, however, these type of concerns are nationalised and are run by state appointed boards, some of which are considered the direct responsibility of governments and others of which are more indirectly responsible to government; the actual form and institutional arrangements varying widely. Depending on the institutional arrangements some of these concerns are considered as part of the government sector while others are treated analogously to private concerns. The advantages of this latter arrangement consists in the fact that these concerns may find it easier to operate on a commercial basis than if they are integrated with the government sector and may, therefore be able to finance themselves through ordinary market procedures combined, perhaps with some government help. From an accounting viewpoint the national accounts treat this type of concern which is not wholly dependent on government finance as part of or analogously to the private sector, the result being that government funds are treated as capital transfers. Thus within the framework of the national accounts not all capital transfers are directed to the private sector.

Capital transfers may be fixed or open-ended. Fixed transfers would take the form of, say, lump-sum grants which are not dependent on any other variable such as output or investment, the level of the grant or transfer being simply a decision of the government. Open-ended transfers, on the other hand, are usually dependent on the demand for them. Thus, for example, in the case of investment grants the level of expenditure will result from a combination of the rates of grant and of the demand for grants. Because of this the level of expenditure on open-ended transfers can more easily be related to the degree of success or failure of policy. Assuming no substantial differences in the structure of grants, a higher level of expenditure will indicate greater success.

Table A7 presents a sectional breakdown of capital transfer expenditure in Northern Ireland and the Republic. On the whole capital transfers tend to be a larger element in the capital expenditure of the public authorities in the Republic. Much of this is due to the extensive semi-state or public corporation sector. The Republic has a far greater number and range of such bodies and appears to favour this type of institution in extending its range of services and activities. Indeed, the attempt to reorganise public capital expenditure in the late fifties and the influence of the programmes

TABLE 5

AN ANALYSIS OF PUBLIC AUTHORITY LOANS TO PUBLIC CORPORATIONS IN NORTHERN IRELAND 1954-65

Years	Housing Trust	Ulster Transport Authority	Electricity Board for Northern Ireland	Craigavon Development Commission	Total
1954/5	2.9	—	—	—	2.9
1955/6	3.3	—	—	—	3.3
1956/7	2.6	2.3	—	—	4.9
1957/8	2.2	0.9	—	—	3.1
1958/9	1.8	1.0	—	—	2.8
1959/60	2.0	—	—	—	2.0
1960/1	2.0	0.5	—	—	2.5
1961/2	2.5	1.0	—	—	3.5
1962/3	2.6	—	—	—	2.6
1963/4	4.1	—	—	—	4.1
1964/5	6.2	—	3.0	—	9.2
1965/6	7.9	0.1	3.0	0.2	11.2

SOURCES: Consolidated Fund Account and Government Loan Account 1964/65.

TABLE 6

AN ANALYSIS OF PUBLIC AUTHORITY LOANS TO PUBLIC CORPORATIONS IN THE REPUBLIC 1958-65

Years	Total	Agriculture Forestry and Fishing	Fuel and Power	Transport	Housing	Industry		Other
						Public	Private	
1958/9	4.5	0.2	2.5	0.6	—	0.2	0.8	0.2
1959/60	8.7	0.2	2.5	1.6	—	—	1.9	2.5
1960/1	14.7	0.1	2.8	5.9	—	1.1	2.9	1.8
1961/2	13.2	0.8	2.6	1.5	—	1.6	4.0	2.7
1962/3	14.7	0.2	2.3	1.6	0.2	2.8	3.7	3.9
1963/4	12.4	1.2	2.5	0.9	0.4	4.1	1.7	1.5
1964/5	18.8	4.1	1.3	5.3	0.7	3.0	2.7	1.7
1965/6	14.3	3.7	2.0	2.6	0.8	0.9	3.4	0.9

SOURCE: The Budget, Stationery Office, Dublin, 1959-66.

for economic expansion appears to have led to a greater emphasis, in terms of expenditures, on this sector.

The existence of these bodies over a wide range of activities tends to distort the analysis of transfer expenditure. In order to get a more comprehensive sectional breakdown an attempt has been made to distribute capital transfers to the public corporations over the appropriate sectors.

For the Republic, the breakdown is based on the Public Capital Programme which differs substantially from the national accounts analysis of expenditures and therefore the figures must be taken as approximations.

In Northern Ireland there are three major public corporations, the most important being the Housing Trust to which there is continuing and increasing financing by the public authorities with the transport concern and the Electricity Board receiving intermittant loans. The Craigavon Development Commission was only just starting in the last year of our analysis but is likely to become of greater importance. In the Republic the public corportations extend over every major sector of the economy and are obviously an important element in the structure of government activity. The full impact of these bodies is not measured in Table 6 as there is in some cases a substantial degree of self-financing. The degree of public financing is quite variable as is illustrated in the following table.

TABLE 7

PUBLIC AUTHORITY CAPITAL TRANSFERS AS A PROPORTION OF TOTAL CAPITAL EXPENDITURE OF CERTAIN SEMI-STATE BODIES IN THE REPUBLIC, 1958-65.

Years	Agriculture, Forestry & Fishing	Fuel and Power	Transport	Industry	
				Public	Private
	%	%	%	%	%
1958/9	25.0	32.9	9.7	100.0	30.8
1959/60	20.0	33.8	33.3	—	76.0
1960/1	11.1	37.8	71.1	100.0	85.3
1961/2	66.7	33.8	37.5	100.0	80.0
1962/3	11.7	20.5	40.0	80.0	78.7
1963/4	44.4	16.3	14.3	97.6	40.5
1964/5	78.8	8.5	39.6	83.4	62.8
1965/6	59.6	14.7	24.8	40.9	50.8

SOURCES: The Budget, Stationery Office, Dublin 1959-66.

The difference between total expenditure and public financing is substantial in the Fuel and Power and Transport sectors, with a somewhat lower level of self-financing in Industry and Agriculture. In Table 6 and 7 the industry column is divided into two parts, public industry and private industry, the difference consisting in the fact that public industries are those establishments that are run by state companies, whereas the private industry section represents state companies that channel funds to the private sector (e.g. the Industrial Credit Co.).

Turning to Table A7 we can see that the distribution of the public sector column (7) outlined in Table 6 will alter the pattern of transfers, the differences in housing being more than eliminated while the disparity in industry and agriculture being reduced and emphasised respectively. In the latter case our previous discussion on direct investment in agriculture is relevant although it might be added that agriculture is a more substantial sector in the Republic's economy and may be more in need of structural change and modernisation than is the case in Northern Ireland. In industry, although the disparity is not as great as would appear in Table A7, if we confine our attention to the financing of private industry, Northern Ireland has, over the period as a whole, a more continuous and extensive degree of financing.

There are two major schemes of industrial development in Northern Ireland; the Industries Development Acts and the Capital Grants to Industries Acts. Under the former the government is enabled to give grants and loans to new industries or for the expansion of existing industries and whereby the government has extensive powers to assist industrial development (including the advance factory building programme which we discussed above). The normal rates of grant which are given in respect of plant, machinery and buildings or on the cost of transferring machinery to Northern Ireland, are at present 33⅓ per cent having been raised from 25 per cent in 1959. Under the Capital Grants to Industries Acts the government pays a grant on a percentage basis on investment by industrial undertakings in Northern Ireland. This is a more extensive scheme than the former applying to most industrial investment and is designed to stimulate re-equipment, new undertakings and the expansion of existing industries. The rate of grant is again 33⅓ per cent having been raised from 25 per cent in 1959.

In the Republic also, there are two major schemes of industrial promotion; the adaptation scheme which dates from 1961 and an industrial grant scheme whose scope has been subject to some variation. The adaptation scheme is designed to stimulate modernisation and expansion of existing industries; under this scheme the Grants Board (An Foras Tionscal) can make grants of up to 25 per cent of the cost of modernisation or of expansion of production and the Industrial Credit Co. will make additional loans at commercial rates of interest.[7] The scheme is less extensive than the Capital Grants scheme in Northern Ireland and is also more discretionary in the sense that applicants under the scheme must satisfy the Grants Board that their adaptation programme will enable them to be competitive in free trade conditions. The scheme is a temporrary one originally extending from December 1961 to March 1965 but later extended to March 1967.

Grants under the second scheme are confined to new industrial projects or *major* developments of existing concerns. The range of the scheme has varied somewhat being originally confined to certain underdeveloped areas, than in 1956 extended to all areas but with differential rates of grant between developed and underdeveloped areas and finally, in 1963, a single system covering all areas. The rates of grant have also varied ranging from 33⅓ per cent to 66⅔ per cent of the cost of buildings and plant and machinery.

[7]Alternatively the Industrial Credit Co. will make loans of up to 75% of the cost with waiver of interest payments and deferment of repayments for up to five years.

Generally, Northern Ireland appears to have a more extensive system of industrial grants although the rates of grant may not, on average, be as high as in the Republic. Without detailed analysis it is difficult to estimate the effects of the different systems other than to point out that the cost to the Northern Ireland Authorities is substantially greater.

In housing the patterns of investment expenditure are quite different. Whereas the Republic places heavy emphasis on the financing of private housing, the Northern Ireland public authorities both directly and through the Housing Trust are more involved in the direct building of dwellings for renting and letting; the degree of financing of private housing being very much less than in the Republic. The effect of this, as we shall see, is to raise the cost of the housing programme for the Northern Ireland authorities.

Total public authority investment

Finally in Table A8 we combine direct investment and capital transfers, including the sectional breakdown of capital transfers to the public corporations, to arrive at total investment by the public authorities, on a sectoral basis, according to national account definitions. The table reveals the cost to the public authorities of investment in the economy. The total cost in absolute terms is roughly the same although the form in which the expenditure takes place and its distribution over the various sectors differs somewhat, there being marked discrepancies in industry and agriculture and in the form in which housing expenditure takes place.

In order to get a clearer picture of the pattern of capital expenditures it may be useful to relate public authority investment to total investment as is done in Table A9. The table indicates the public authority share of the cost of total investment by sector.

We have seen that the Northern Ireland public authorities have a higher level of spending on the industrial sector, in absolute terms, than the Republic. This is reflected also in the public authority share of the cost of total investment in industry, although the differences between the North and the South are narrowed when viewed in relation to total investment. However, part of the reason for the large public authority share in Northern Ireland may be explained by the advance factory building programme. Under this programme the public authorities bear the full capital cost of factory buildings and site development, as compared to the predominantly grant system in the Republic in which the public authorities are involved in only a proportionate share of the cost of new buildings. The effect of this combined with the capital grants scheme whereby, in effect, nearly all manufacturing investment receives a grant, as compared to the more selective system in the Republic, may involve the Northern Ireland public authorities in a higher cost per unit of investment than is the case in the Republic, thus raising the public authority share for any given amount of investment.

So also in housing; the Northern Ireland public authorities plus the Northern Ireland Housing Trust, which between them account for the bulk of public investment, bear the full capital costs of their investments in dwellings. In the Republic, on the other hand, there is much greater emphasis on transfers to the private sector in the form of grants and loans, these representing only a proportion of the cost of total private investment. Thus the cost to the public sector per house built may be higher in Northern Ireland which in part may explain the large differences in the public authority share in both areas.

In the public utilities and in Transport and Communications there is a good deal of fluctuation in the degree of public authority financing. In the Gas Electricity and Water sector, it will be noticed that in the Republic there is a strong tendency for the degree of public authority financing to decline, the level being much lower than in Northern Ireland. In Transport and Communications the level of financing is fairly similar in both areas.

Unfortunately, no estimates of total investment in Education and Health and Welfare are available for the Republic and it is impossible, therefore, to judge the extent of public activity in these sectors. Given, however, the overall higher level of public social expenditure in Northern Ireland and the more extensive reliance on state services in the Health sector, it is likely that the Northern Ireland share of public investment is higher. Without the total figures for the Republic it is impossible to compare the relative levels of public expenditure and their implications.

CONCLUSION

Overall the Northern Ireland public authorities bear a somewhat higher share of the cost of total investment with a tendency to greater emphasis on direct investment and on industry and social services. However, Northern Ireland probably has a stronger base on which to start both because of its relatively higher level of development (per capita income) and because of its financial position *vis a vis* Great Britain. If it were more independent of Britain then there would probably be a need for a greater range of government services and a higher level of spending on agriculture and debt interest. As it is, however, the Northern Ireland Public Authorities can concentrate more of their resources on industry as the prime development sector combined with continued expansion of ancilliary infrastructure services and social development. In the Republic, owing to the existence of the large semi-state sector, it would, perhaps, have been fairer to include these as part of the public sector. However, there are certain difficulties in achieving a consistent set of accounts if the public corporations were to be included. Even if we accept the national accounts classification, which includes only the public financing of the public corporations, the pattern of expenditure still tends to be dominated by these bodies. They obviously play an important part in the public sector's development policy and constitute one of the main agencies of government activity in the economy. Apart from the semi-state sector, the public authorities in the Republic tend to place greater emphasis on transfers to the private sector as a means of achieving their policy objectives. Apart from these differences and the higher level of expenditure on Education and Health and Welfare in Northern Ireland, there is a reasonable similarity in the overall patterns of expenditure in both areas.

TABLE A1

TOTAL PUBLIC AUTHORITY EXPENDITURE IN NORTHERN IRELAND AND THE REPUBLIC: 1954-65

Year	Republic of Ireland			Northern Ireland		
	Total £'s m.	Per Capita £'s	Col 1 as a % of Gross Domestic Product	Total £'s m.	Per Capita £'s	Col 4 as a % of Gross Domestic Product
	1	2	3	4	5	6
1954/5	174.6	59.4	35.0	94.7	n.a.	n.a.
1955/6	175.4	60.0	33.5	108.0	77.5	n.a.
1956/7	193.5	66.8	36.5	120.8	86.5	n.a.
1957/8	184.5	64.0	33.6	126.9	90.8	n.a.
1958/9	182.8	64.0	32.1	139.1	99.2	n.a.
1959/60	195.1	68.6	32.2	145.1	103.1	n.a.
1960/1	214.7	75.8	33.5	154.5	108.8	40.1
1961/2	236.1	83.8	35.7	186.2	130.8	46.0
1962/3	255.0	90.3	34.4	192.8	134.3	44.9
1963/4	278.9	98.0	34.9	212.4	146.9	45.6
1964/5	331.3	116.3	35.9	236.3	162.1	46.4
1965/6	366.1	128.2	37.7	276.3	188.1	49.6

SOURCES: Republic: *National Income and Expenditure* 1965, Table A14 and corresponding tables in earlier years.
Northern Ireland: *Digest of Statistics*, Sept. 1967, Tables 121-125 and corresponding tables in earlier years.

NOTES: The 1965/6 figures for both the Republic and Northern Ireland are provisional. There are some slight differences in the contents of cols. 1 and 4; column 1 includes investment by the Post Office and Redemption of debt through sinking Funds etc. whereas col. 4 excludes G.P.O. investment and includes purchases of securities on a net basis, i.e. they are included in expenditure only when purchases exceed sales, the amount so included being the excess. Loans to Public Corporations in Northern Ireland are stated gross, i.e. repayments are not deducted as is also the case in column 1.

TABLE A2

PUBLIC EXPENDITURE BY ECONOMIC CATEGORY IN NORTHERN IRELAND AND THE REPUBLIC: 1954-1965

	Republic of Ireland		Northern Ireland	
	Exhaustive £'s m	Transfer £'s m	Exhaustive £'s m	Transfer £'s m
Years	1	2	3	4
1954/5	90.7	83.9	51.9	42.8
1955/6	93.4	82.0	57.1	50.8
1956/7	98.0	95.4	67.0	53.8
1957/8	91.9	92.6	73.7	53.2
1958/9	94.3	88.5	76.9	62.2
1959/60	98.5	96.6	83.9	61.2
1960/1	103.7	111.0	88.9	65.6
1961/2	113.8	122.3	99.2	87.0
1962/3	125.8	129.2	108.7	84.1
1963/4	139.1	139.8	118.6	93.6
1964/5	168.1	163.2	129.6	106.8
1965/6	185.4	180.7	150.5	125.8
	Current	Capital	Current	Capital
1954/5	125.8	48.8	67.7	27.1
1955/6	131.8	43.6	76.6	31.4
1956/7	140.4	53.1	82.7	38.2
1957/8	142.9	41.6	90.8	36.1
1958/9	145.6	37.2	102.6	36.5
1959/60	152.5	42.6	110.9	34.3
1960/1	164.8	49.9	117.2	37.3
1961/2	185.4	50.7	131.0	55.1
1962/3	196.5	58.5	140.8	52.1
1963/4	214.3	64.6	157.7	54.6
1964/5	252.2	79.1	171.5	64.8
1965/6	278.4	87.7	198.0	78.3

SOURCES: As in Table 1.
NOTES: do.

PUBLIC AUTHORITY TRANSFER EXPENDITURE BY SECTOR IN NORTHERN IRELAND AND THE REPUBLIC: 1954-65
(£ million)
Northern Ireland

Year	National Debt Interest	Agriculture, Forestry and Fishing	Industry and Transport	Public Corporations	Housing	Education	Health and Welfare	Other	Total
	1	3	3	4	5	6	7	8	9
1954/5	2.7	1.0	2.0	2.9	2.4	3.1	26.4	2.3	42.8
1955/6	3.1	2.5	2.4	3.3	4.3	3.2	29.9	2.1	50.8
1956/7	3.7	2.7	2.8	4.9	4.0	4.1	30.7	0.9	53.8
1957/8	4.5	1.9	3.4	3.1	2.3	4.7	33.0	0.3	53.2
1958/9	4.6	1.8	3.7	2.8	2.5	5.3	38.8	2.6	62.1
1959/60	4.9	2.1	3.9	2.0	2.8	5.4	39.9	0.2	61.2
1960/1	5.3	2.2	4.4	2.5	3.2	6.4	41.4	0.2	65.6
1961/2	6.0	2.0	15.7	3.5	3.4	7.1	47.0	2.3	87.0
1962/3	6.8	1.2	8.3	2.6	5.3	8.3	49.2	2.4	84.1
1963/4	8.0	2.0	8.6	4.1	3.8	10.1	56.7	0.3	93.6
1964/5	9.5	2.1	10.9	9.3	4.3	11.9	58.4	0.3	106.7
1965/6	11.5	1.1	14.0	11.2	4.7	13.4	69.3	0.5	125.7
					Republic of Ireland				
1954/5	11.4	13.6	—	7.6	10.5	2.9	26.5	11.4	83.9
1955/6	13.0	13.9	1.0	2.5	11.2	2.9	27.6	9.7	82.0
1956/7	14.1	14.0	3.5	12.0	10.1	3.1	29.4	9.0	95.4
1957/8	15.4	11.8	4.1	6.5	8.5	3.7	32.2	10.5	92.6
1958/9	15.8	12.9	2.9	4.5	8.1	3.8	32.1	8.3	88.5
1959/60	16.7	12.0	2.2	8.6	9.3	4.4	32.3	11.0	96.6
1960/1	18.3	15.6	2.1	14.6	10.9	4.8	33.7	11.0	111.0
1961/2	20.3	23.9	3.0	13.0	11.4	5.1	37.3	8.2	122.2
1962/3	21.7	22.2	3.1	14.5	12.4	6.4	39.5	9.3	129.2
1963/4	23.9	21.4	5.7	12.2	12.9	7.3	45.1	11.4	139.8
1964/5	27.1	25.9	6.7	18.4	13.4	9.9	51.1	10.6	163.2
1965/6	32.3	28.3	9.0	14.0	15.7	10.4	56.0	15.0	180.7

SOURCES: Republic: *National Income and Expenditure* 1965, Tables A12, A13, A14, A16, A17, and corresponding tables in earlier years.
Northern Ireland: as in Table 1.

NOTES: Figures may not add due to rounding.

TABLE A4

NET CENTRAL AND LOCAL AUTHORITY EXPENDITURE AND NET INTRA AUTHORITY FINANCING IN NORTHERN IRELAND AND THE REPUBLIC: 1954-65

Year	Republic of Ireland					Northern Ireland				
	Total Central Govern-ment Ex-penditure £'s m	Total Local Govern-ment Ex-penditure £'s m	Col. 2 as a % of Total Public Authority Expenditure	Net Central Gov. trans-fers to Local Authorities £'s m	Col. 4 as a % of Col. 2	Total Central ment Ex-penditure penditure £'s m	Total Local Govern-ment Ex-penditure £'s m	Col. 7 as a %of Total Public Authority Expenditure	Net Central Gov. trans-fers to Local Authorities £'s m	Col. 9 as a % of Col. 7
	1	2	3	4	5	6	7	8	9	10
1954/5	114.4	60.3	34.5	25.9	43.0	63.8	31.0	32.7	18.3	58.7
1955/6	111.6	63.7	36.3	25.7	40.3	74.6	33.4	30.9	21.9	65.6
1956/7	128.1	65.4	33.8	28.0	42.8	81.1	39.7	28.6	21.4	53.9
1957/8	125.4	63.5	34.5	30.5	48.0	84.7	42.1	31.8	23.2	55.1
1958/9	123.2	59.0	32.3	23.3	39.5	95.1	44.0	31.6	21.5	48.9
1959/60	134.6	60.5	31.0	24.1	39.8	96.7	48.4	33.6	27.3	56.4
1960/1	151.5	63.2	29.4	25.8	40.8	105.1	49.5	32.0	27.5	55.6
1961/2	166.8	69.3	29.4	28.2	40.7	131.1	55.0	29.5	31.7	57.6
1962/3	180.0	75.0	29.4	33.6	44.8	129.4	63.4	28.8	34.5	54.4
1963/4	198.0	81.0	29.0	36.8	45.4	140.9	71.4	33.6	40.7	57.0
1964/5	235.2	96.1	29.0	45.6	47.4	162.8	73.5	32.1	45.4	61.8
1965/6	257.2	108.9	29.7	55.0	50.5	193.8	82.5	36.8	50.8	61.6

SOURCES AND NOTES: as in Table A3

Table A5

CAPITAL EXPENDITURE BY THE PUBLIC AUTHORITIES IN NORTHERN IRELAND AND IN THE REPUBLIC: 1954-1965

	Northern Ireland					Republic of Ireland				
	Gross Fixed Capital Formation £'s m	Capital Transfers £'s m	Total Capital Spending £'s m	Col. 3 as a % of Total Gross Fixed Capital Formation	Col. 3 as a % of Total Public Authority Expenditure	Gross Fixed Capital Formation £'s m	Capital Transfers £'s m	Total Capital Spending £'s m	Col. 8 as a % of Total Gross Fixed Capital Formation	Col. 8 as a % of Total Public Authority Expenditure
Year	1	2	3	4	5	6	7	8	9	10
1954/5	18.0	6.8	24.8	48.4	26.2	22.6	19.4	42.0	48.6	24.1
1955/6	19.9	9.5	29.4	54.5	27.2	23.1	14.6	37.7	41.0	21.5
1956/7	25.6	11.8	37.4	62.5	31.0	23.2	24.2	47.4	51.7	24.5
1957/8	27.1	8.7	35.8	55.2	28.2	17.5	16.5	34.0	42.4	18.4
1958/9	24.9	9.1	34.0	44.4	24.4	16.9	14.2	31.1	38.9	17.0
1959/60	26.0	8.2	34.2	41.3	23.6	17.4	16.5	33.9	41.0	17.4
1960/1	27.6	9.6	37.2	43.8	24.1	17.9	23.3	41.2	45.8	19.2
1961/2	31.4	21.7	53.1	56.0	28.5	21.9	23.2	45.1	41.4	19.1
1962/3	35.0	14.9	49.9	45.4	25.9	25.6	26.5	52.1	40.5	20.4
1963/4	38.9	15.7	54.6	42.0	25.7	30.2	26.6	56.8	38.2	20.4
1964/5	41.9	22.7	64.6	46.3	30.4	37.6	35.0	72.6	42.2	21.8
1965/6	51.0	27.0	78.0	47.2	28.3	44.0	33.5	77.5	40.2	21.2

Sources: as in Table A1.
Notes: Public capital expenditure excludes purchases of securities and payments abroad.

TABLE A6

PUBLIC AUTHORITY GROSS FIXED CAPITAL FORMATION BY SECTOR IN NORTHERN IRELAND AND THE REPUBLIC 1954-1965

(£ million)

Year	Total	Agriculture Forestry and Fishing	Power, Communication and Transport	Industry	Housing	Education	Health and Welfare	Other
	1	2	3	4	5	6	7	8
Northern Ireland								
1954/5	18.0	0.2	5.5	1.1	3.9	1.9	3.9	1.5
1955/6	20.0	0.3	5.1	2.1	4.0	2.2	4.7	1.6
1956/7	25.6	0.3	7.4	3.0	4.2	3.4	5.5	1.8
1957/8	27.0	0.3	8.0	3.7	2.6	3.9	6.0	2.5
1958/9	25.0	0.4	7.0	3.4	2.2	3.3	6.5	2.2
1959/60	26.0	0.3	6.1	2.8	4.3	2.8	7.1	2.6
1960/1	27.5	0.2	6.8	3.6	5.0	2.7	5.8	3.4
1961/2	31.4	0.1	8.4	3.9	5.5	2.9	6.2	4.4
1962/3	35.0	0.1	8.6	4.5	7.6	3.0	7.2	4.0
1963/4	38.9	0.2	10.9	3.7	9.1	3.4	7.8	3.8
1964/5	41.9	0.2	12.3	5.1	8.8	3.9	7.5	4.1
1965/6	51.0	0.2	14.8	8.1	9.5	4.5	8.0	5.9
Republic of Ireland								
1954/5	22.6	1.0	8.2	—	7.6	1.3	3.5	1.0
1955/6	23.1	1.2	8.8	—	7.0	1.4	3.8	1.0
1956/7	23.2	1.3	7.9	—	7.0	2.0	4.0	0.9
1957/8	17.5	1.4	6.7	—	4.4	1.5	2.8	0.7
1958/9	16.9	1.4	7.0	—	3.5	1.8	2.4	0.8
1959/60	17.4	1.7	7.6	—	3.0	1.9	2.0	1.2
1960/1	17.9	1.8	8.9	—	2.5	1.7	2.0	1.1
1961/2	21.9	2.1	11.0	—	3.0	2.1	2.5	1.2
1962/3	25.6	2.3	12.4	—	3.6	2.5	2.7	2.0
1963/4	30.2	2.9	13.3	—	4.7	3.3	3.6	2.6
1964/5	37.6	2.8	15.5	—	7.0	3.8	4.6	3.9
1965/6	44.0	2.4	n.a.	—	n.a.	n.a.	n.a.	n.a.

SOURCES: Northern Ireland, *Digest of Statistics* Sept. 1967, tables 121-125 and corresponding tables in earlier years.
Republic: *National Income and Expenditure* 1965, Table A18 and corresponding tables in earlier years.

NOTES: Figures may not add due to rounding.

Table A7

PUBLIC AUTHORITY CAPITAL TRANSFERS BY SECTOR IN NORTHERN IRELAND AND THE REPUBLIC 1954-1965

(£ million)

Year	Total	Agriculture Forestry and Fishing	Industry	Transport	Housing	Education	Public corporation	Other
	1	2	3	4	5	6	7	8
Northern Ireland								
1954/5	6.7	0.4	1.1	—	1.3	0.9	2.9	0.1
1955/6	9.5	0.6	1.6	—	3.1	0.8	3.3	0.1
1956/7	11.8	0.7	2.1	—	2.6	1.4	4.9	0.1
1957/8	8.7	0.6	2.6	—	0.8	1.6	3.1	—
1958/9	9.0	0.5	2.9	—	0.9	1.8	2.8	0.1
1959/60	8.1	0.5	3.1	—	0.9	1.5	2.0	0.1
1960/1	9.7	0.5	3.6	—	1.0	2.0	2.5	0.1
1961/2	21.6	0.6	5.0	9.6	1.0	1.8	3.5	0.1
1962/3	14.9	—	7.5	—	2.5	2.2	2.6	0.1
1963/4	15.7	—	7.4	—	1.0	3.0	4.1	0.2
1964/5	22.8	0.1	8.3	—	1.1	3.9	9.3	0.1
1965/6	27.1	0.1	10.0	—	1.1	4.5	11.2	0.2
Republic of Ireland								
1954/5	19.4	2.7	n.a.	—	6.9	—	7.6	2.2
1955/6	14.5	3.2	n.a.	—	7.4	—	2.5	1.4
1956/7	24.3	3.2	n.a.	2.0	5.8	—	12.0	1.3
1957/8	16.6	2.9	n.a.	2.1	4.0	0.5	6.5	0.6
1958/9	14.2	4.5	0.4	1.2	2.9	—	4.5	0.6
1959/60	16.5	2.9	0.8	—	3.7	0.1	8.7	0.3
1960/1	23.3	2.7	0.6	—	4.9	0.1	14.7	0.3
1961/2	23.2	2.8	1.4	—	5.1	0.1	13.2	0.6
1962/3	26.5	3.1	1.6	—	5.8	0.5	14.7	0.8
1963/4	26.6	3.2	3.0	—	5.8	1.0	12.4	1.3
1964/5	34.8	3.9	3.2	—	5.7	1.3	18.8	1.9
1965/6	33.3	4.3	4.0	—	7.5	1.0	14.3	2.2

Sources: Northern Ireland: as in Table A6.
Republic: *National Income and expenditure* 1965, Tables A12-A17 and corresponding tables in earlier years.

Notes: as in Table A6.

TABLE A8

TOTAL PUBLIC AUTHORITY INVESTMENT BY SECTOR IN NORTHERN IRELAND AND THE REPUBLIC: 1954-1965

(£ million)

Year	Total	Agriculture Forestry and Fishing	Industry	Power, Communication and Transport	Housing	Education	Health and Welfare	Other
	1	2	3	4	5	6	7	8
Northern Ireland								
1954/5	24.7	0.6	2.2	5.5	8.1	2.8	3.9	1.6
1955/6	29.5	0.9	3.7	5.1	10.4	3.0	4.7	1.7
1956/7	37.4	1.0	5.1	9.7	9.4	4.8	5.5	1.9
1957/8	35.7	0.9	6.3	8.9	5.6	5.5	6.0	2.5
1958/9	34.0	0.9	6.3	8.0	4.9	5.1	6.5	2.3
1959/60	34.1	0.8	5.9	6.1	7.2	4.3	7.1	2.7
1960/1	37.2	0.7	7.2	7.3	8.0	4.7	5.8	3.5
1961/2	53.0	0.7	8.9	19.0	9.0	4.7	6.2	4.5
1962/3	49.9	0.1	12.0	8.6	12.7	5.2	7.2	4.1
1963/4	54.6	0.2	11.1	10.9	14.2	6.4	7.8	4.0
1964/5	64.6	0.3	13.4	15.3	16.1	7.8	7.5	4.2
1965/6	78.1	0.3	18.1	17.9	18.5	9.0	8.0	6.3
Republic of Ireland								
1954/5	42.0							
1955/6	37.7		NOT AVAILABLE					
1956/7	47.4							
1957/8	34.0							
1958/9	31.1	6.1	1.4	11.3	6.4	1.8	2.4	1.6
1959/60	33.9	4.8	2.7	11.7	6.7	2.0	2.0	4.0
1960/1	41.2	4.6	4.6	17.6	7.4	1.8	2.0	3.2
1961/2	45.0	5.7	7.0	15.1	8.1	2.2	2.5	4.4
1962/3	52.0	5.6	8.1	16.3	9.6	3.0	2.7	6.7
1963/4	56.8	7.0	8.8	16.7	10.7	4.6	3.6	5.4
1964/5	72.6	10.8	8.9	22.1	13.4	5.1	4.6	7.5
1965/6	77.5	10.4	8.3	n.a.	n.a.	n.a.	n.a.	n.a.

SOURCES: Northern Ireland: *Digest of Statistics*, Sept. 1967, Tables 121-125 and corresponding tables in earlier years, *Government Loan Account* 1954-1965 and *Consolidated Fund Account* 1954-1965.
Republic: *National Income and Expenditure* 1965, Tables A12-A18 and corresponding tables in earlier years, *The Budget*, 1959-1966.

NOTES: as in Table A6.

TABLE A9

SHARE OF PUBLIC AUTHORITY CAPITAL EXPENDITURE IN TOTAL GROSS FIXED CAPITAL FORMATION IN NORTHERN IRELAND AND THE REPUBLIC 1954-1965

(£ million)

	Agriculture Forestry and Fishing		Industry		Gas, Electricity and Water		Transport and Communication		Housing		Education		Health and Welfare		All Others		Total	
Year	Total	PA Share	Total	PA Share	Total	PA Share	Total	PA Share	Total	PA Share	Total	PA Share	Total	Total	Total	PA Share	Total	PA Share
Northern Ireland																		
1954/5	4.1	14.6	10.3	21.3	6.3	85.7	4.0	47.5	12.7	63.8	3.8	73.7	3.1	67.7	6.8	23.5	51.1	48.3
1955/6	4.1	22.0	12.8	28.9	6.7	76.1	4.3	48.8	12.5	83.2	4.1	76.0	3.4	76.5	6.1	27.9	54.1	54.5
1956/7	4.1	24.4	15.1	33.8	8.3	89.2	5.2	92.3	12.3	76.4	4.7	102.0	3.6	63.8	6.4	29.7	59.8	62.5
1957/8	4.9	18.4	15.7	40.1	8.8	77.3	7.1	63.4	10.8	51.9	5.5	100.0	4.1	87.8	7.8	32.1	64.9	55.0
1958/9	5.6	16.1	24.5	25.7	8.7	63.2	8.5	62.4	10.1	48.5	5.3	96.2	4.8	77.1	9.0	25.6	76.5	44.4
1959/60	7.6	10.5	27.7	21.3	8.9	51.7	8.4	51.2	10.6	67.9	4.6	93.5	4.9	87.8	10.2	26.5	82.9	41.1
1960/1	8.7	8.0	22.8	31.6	8.0	45.0	9.1	56.0	13.2	60.6	5.3	88.7	4.9	69.4	12.9	27.1	84.9	43.8
1961/2	9.1	7.7	24.3	36.6	7.1	46.5	11.8	79.7	16.6	54.2	5.6	83.9	4.6	89.1	15.7	28.7	94.9	45.7
1962/3	10.9	0.1	33.2	36.1	9.3	45.2	12.6	57.9	18.5	68.6	5.8	89.7	5.4	79.6	14.2	28.9	109.9	45.4
1963/4	11.5	1.7	39.2	28.3	10.8	48.1	13.3	61.7	22.1	64.3	6.8	94.1	6.0	88.3	16.2	24.7	126.0	43.3
1964/5	11.5	2.6	43.7	30.7	9.9	69.7	16.0	66.2	25.8	62.4	8.3	94.0	6.6	80.3	18.0	23.3	139.6	46.3
1965/66	12.8	2.3	59.0	30.7	11.8	65.3	18.6	68.3	27.4	67.5	10.5	85.7	6.6	83.3	18.7	36.9	165.4	47.2
Republic of Ireland																		
1954/5	15.1	n.a.	15.4	n.a.	9.3	n.a.	14.1	n.a.	15.3	n.a.	Not Available				15.3	n.a.	84.5	49.7
1955/6	15.2	n.a.	16.7	n.a.	12.1	n.a.	13.6	n.a.	18.6	n.a.					15.6	n.a.	91.8	41.1
1956/7	12.5	n.a.	15.0	n.a.	12.3	n.a.	17.0	n.a.	20.1	n.a.					14.7	n.a.	91.6	51.7
1957/8	14.0	n.a.	14.1	n.a.	11.1	n.a.	14.6	n.a.	14.5	n.a.					11.9	n.a.	80.2	42.4
1958/9	14.6	41.8	15.7	8.9	5.1	49.0	15.9	55.3	11.9	53.8					16.6	34.9	79.8	39.0
1959/60	15.4	31.2	17.4	15.5	6.5	38.5	14.6	63.0	13.1	51.1					15.8	50.6	82.8	40.9
1960/1	15.1	30.5	19.5	23.6	5.0	56.0	14.9	99.3	15.1	49.0					19.2	36.5	88.8	46.4
1961/2	18.0	31.7	26.0	26.9	5.9	44.1	20.3	61.6	16.7	48.5					21.8	41.7	108.7	41.4
1962/3	19.5	28.7	32.3	25.1	8.0	28.7	21.8	64.2	20.2	47.5					27.1	45.8	128.9	40.3
1963/4	21.9	32.0	37.2	23.7	13.1	19.1	22.8	62.3	24.4	44.4					29.6	45.9	149.5	38.0
1964/5	25.0	43.2	n.a.	—	n.a.	—	n.a.	—	34.0	39.4					n.a.	n.a.	172.0	42.2

SOURCES: Northern Ireland: *Digest of Statistics*, Sept. 1967, Table 132 and corresponding tables in earlier years.
Republic: *Yearbook of National Accounts*, United Nations 1965 and earlier years. *National Income and E..penditure* 1965, Tables A12-18 and corresponding tables in earlier years.

NOTES: Figures may not add due to rounding. There has been some adjustment to the Public Authority Figures to confirm with the Gross Fixed Capital Formation Classification.
PA—Public Authority.

DISCUSSION

Dr. A. A. Tait: We are all indebted to Mr. O'Loghlen for coming to Dublin to read his paper on the patterns of public expenditure in Northern Ireland and the Republic; it is particularly appropriate that we should be reminded of this expenditure only three days before our budget.

Mr. O'Loghlen has not tested any hypothesis; this is a descriptive paper. But he does state an aim. "One of the purposes of this paper is to put the patterns of expenditure into a framework on which more detailed study can be undertaken and, by comparison, to draw attention to those areas where further study can be warrented". Has this been done? Is this the correct way to try to fulfill these intentions?

If we want to look for a "pattern" there are two ways it can be done. First to look at various divisions of expenditure and revenue within a year and compare the overall pattern with the same, or a similar year, in the other country. Secondly, we can take a time series over a long period and compare the two countries' patterns of expenditure through time. Mr. O'Loghlen has opted for the first of these alternatives, but we need to mention both.

The author of the paper has presented the expenditure of each country for a limited number of years, in absolute amounts. These are not related to any base, nor are they corrected for changes in price, or for numbers of population. Therefore, we simply compare £x spent on roads in the North to £y spent in the Republic. Does this tell us much? Are the two countries sufficiently similar in size, population, age structures, social and religious backgrounds, income per capita, political independence etc. to make such a direct comparison meaningful? If we were comparing the growth through time of these absolute amounts this might show interesting trends; but this is not what is done. The number of years given is too short.

As the number of years given is limited, no meaningful "pattern" can be taken from them. Therefore, would it not be better to present only one set of figures for each country and to concentrate on a "pattern" within the year? After all, this is the real purpose of the paper. To guard against the random change of figures in any particular year. the years given in this paper could be chained on some moving average to boil them down to two or three "rows" for each country. The figures given could be improved if they were related to some base such as G.N.P. Unfortunately, this means correcting either the government expenditures to calendar years, or the National income statistics to fiscal years; at least, this must be done for the Republic (I do not know whether the same is true for the North), . . . although Mr. O'Loughlen might be mislead by our National Income figures which do merely transpose the public sector fiscal years into the calendar national income accounts.

An alternative would be to express each part of expenditure as a percentage of the total. This has disadvantages inherent in itself, but in any case would be very misleading if the totals used in the paper were accepted. By leaving out the U.K. government expenditures in the North the total is reduced significantly and this would not provide percentages which could be comparable to those in the Republic. An idea of the size of this difference is obtained by expressing the total public sector as a percentage of G.N.P.; under Mr. O'Loghlen's definition this yields a figure of for 1964 in the North of 46 per cent under a more comprehensive definition it is raised to 53 per cent. Which, incidentally, must rank as one of the highest public sector/G.N.P. ratios in the world; I am uncertain whether that is something where "future study can be warranted"?

If neither percentage or G.N.P. is used as a base, and we must rely only on the absolute figures, can we accept that "by concentrating on broad absolute amounts the pattern of expenditures can more easily be seen and from which one can delve more deeply into particular items". ? I think not. I cannot imagine any case where comparisons of absolute amounts of expenditure mean much. They are obviously irrelevant between countries of very different sizes and wealth e.g. the U.S. and India, The Irish Republic and the U.K. But even where the differences are narrowed, too many continue to exist; especially where no reference is made to a base, and no corrections are made for population or price differentials.

I think most economists would agree that the difficulties surrounding even sophisticated international comparisons are great; and the questions begged by bald comparisons seem too large and too dangerous to draw "patterns" from which we should "delve more deeply into particular items".

This is not to say that international comparisons should not be made, or that they are uninteresting. It is always interesting to look to other countries experiences and it would be parochial not to do so. But I cannot subscribe to a belief that because another country spends more *absolutely* than ourselves that this holds a message for us that we should increase our spending; nor does it say they should reduce their spending. We might as well say that because a composer has written more music he is better (or worse) than someone less prolific.

The form in which international comparisons are interesting and in which they may have some validity is either where they are testing a relationship, or where trends, and changes in trends, can be measured over considerable lengths of time.

This is the sort of analysis undertaken by Peacock and Wiseman in looking for a "displacement effect", or a "conncentration effort". It is possible to undertake a similar exercise for Ireland and to discover displacement effects in 1930-34, and 1947-51. Further, an analysis of revenue shows that these rapid and concentrated increases in the share of G.N.P. by the public sector were not sanctioned by the public accepting higher tax levels, but were mainly financed by debt creation. Now these results may be increasing because they test an hypothesis i.e. that the displacement effect occurs in times of emergency when the public will tolerate higher taxes; and this relates to a pattern of relative growth. The comparison to other countries is also that of relative growth, and the timing of that growth.

The question I ask is whether the time series analysis of relationships is likely to yield more interesting results, and possibilities of further "delving", than cross-section data related to nothing.

This leaves me with only two small points. In tables A8 and A9 expenditures in the Republic are said to be "Not Available". I think it is true to say that they are available but they require a considerable amount of tedious work to get them from the Appropriation Accounts and Estimates.

Finally, one of the basic premises of this paper has been that the North of Ireland has discretion over how it spends its revenue, "Hence it may not be unreasonable to maintain that the patterns of public expenditure in Northern Ireland are her own". Might I suggest that if Mr. O'Loughlen wants to test this theory his next paper to the Society could be entitled "The Patterns of Public Expenditure in Northern Ireland and the United Kingdom". If these patterns were more or less the same the freedom of the North to determine her own expenditure might be questioned?

Mr. O'Loughlen, by coming to Dublin tonight has clearly stimulated me to think about the forms of international comparisons and their validity. I am sure his clear presentation has stimulated many others here tonight as well. We are all in his debt, and I as you to join with me in thanking Mr. O'Loughlen for his paper.

Mr. T. Coffey: I am pleased to second the vote of thanks to Mr. O'Loghlen for a paper which was stimulating and obviously prepared with painstaking care. It will compliment Dr. Lawrences book on the Government of Northern Ireland as an important help to studies of public finance in Ireland.

Mr. O'Loghlen said that one purpose of his paper was to stimulate study of international or inter-regional patterns of public expenditure. He shows clearly the difficulties involved in making such comparisons but he has not been deterred by those difficulties from exploring his subject further. I share his doubts about detailed international comparisons in the field of public finance. The more detailed the comparison the more it requires qualification by reference to the structural, fiscal and other differences between the areas being compared. Even broad comparisons between the major economic aggregates, for instance public expenditure or taxation in relation to G.N.P., cannot be made in an unqualified way.

Comparisons based on the national income accounts, in spite of their widely based concepts, do not completely guarantee consistency. The difficulty crops up in an important aspect of Mr. O'Loghlen's paper. As he points out, the national income accounts show expenditure in the Republic by the public corporations which is financed from non-exchequer sources as arising in the private sector and not in the public authorities sector. In 1968/69 this expenditure is estimated at £46 million or one-fifth of total investment. Its exclusion from the public authorities sector seriously understates public investment because these authorities, speaking realistically, form an integral part of the public sector in this country. I am sure that the C.S.O. have adverted before now to the usefulness, and the desirability, of providing separate accounts in the national income tables for the public corporations, if it is practicable to do so. Our consideration of matters such as these would be greatly helped if separate accounts were available.

If one table more than any other in Mr. O'Loghlen's paper caught my eye it was Table 2. This shows that in the North 50 per cent more of total public authority expenditure is devoted to social purposes than in the South. But then there are a number of special factors which make this possible. First, if there is a high level of expenditure, there is also a much higher level of contributions in the North. Also, in the South the proportion of employers' and employees' contributions to social services is much lower than that of the State. It is not surprising, therefore, that the benefits should also be lower. The arrangements between the Northern Ireland Insurance Fund and the U.K. Fund and the Social Services Agreement also provide a reason for the relatively higher level of social expenditure in the North. Under these arrangements the North receives a subvention of over £20 million a year. In fairness, however, even if this subvention is deducted, it still remains that in 1964 the North devoted substantially more, say 52 per cent as compared with 40 per cent here, of total public authority expenditure to the social services. Developments in recent years may have altered this relationship but we must remember too that expenditure here is limited strictly to taxable capacity and taxation is not only a matter of economic and social desiderate but also of what the traffic will bear. Other factors contributing to the disparity between the levels of expenditure in the social field in the two areas are the exclusion of the large voluntary hospitals sector and the transactions of the Hospitals Trust Fund, which is not an extra budgetary fund, from the figure for the Republic and the larger base of contributions to national insurance in the North as compared with the South.

Mr. O'Loghlen's comments on capital expenditure are of particular interest in view of its importance in the context of national growth and development. I have already referred to a difficulty in assessing realistically the volume of public investment, including State bodies, using the national income accounts in the South. I should like to draw attention to another important factor in the field of investment, namely, our system of tax relief on export profits. These cannot be ignored whether or not one accepts that the revenue foregone by the reliefs – currently about £4 million a year – could be regarded as developmental "expenditure" for the purpose of comparing industrial developmental efforts in the two areas. The reliefs, in association with the other investment incentives, have been instrumental in the phenomenal rise in exports of the transportable goods industries in the last two years, of 15 per cent between 1965 and 1966 and of 31 per cent between 1966 and 1967.

Mr. O'Loghlen's careful paper will, I feel sure, stimulate and provide areas for further investigation of the reasons for the similarities of, and differences between, North and South.

Dr. Geary: I agree with Dr. Tait that the lecturer would be well-advised to express his figures as percentages of some macro-aggregate like G.N.P., for comparative purposes. Like Mr. Ross, I do not agree with the concluding sentences in the paper: I was more struck by the dissimilarities of the figures for the two areas than by their similarities. Some of the Northern Ireland figures are fantastic, the main distortion being that the social security level in Northern Ireland is far higher than the economy itself could support. In this connection the comparison at the top of page 9 is revealing. Payments per head in U.K. and Northern Ireland are nearly identical, each a little more than twice the Republican level. As between U.K. and the Republic the comparison is about what one would expect on the basis of national income per head, if perhaps a little low here. There seems to be no great difference between national income per head in the two parts of Ireland. Hence Northern Ireland is getting about twice its share, on present-day standards in these islands.

The validity of international comparisons has been raised. Nowadays statisticians regard these as somewhat naive: we are far more interested in what is happening in our respective countries, and the reasons therefor. We are, however, arch-plagiarists as regards methodology: we are all "for" international comparisons in this domain! International comparison of the figures themselves is a kind of expedient of last resort, to have recourse to when, in truth, we do not know. For instance we do not know what is the "right" share of gross fixed capital formation to allocate to (a) economic (b) social (mainly governmental) ends. We set up an international table of percentages and say (if we can) "Ireland is not abnormal compared with other countries at approximately the same level of development". Actually, this is often true.

If we must have international comparisons in the national expenditure field I think these should be firmly expressed within the national accounting framework. For instance, national expenditure (per head or per £1 national income) on social services, health, housing, transport, education etc. "should be" the same in countries at much the same level of development. I would consider each separately, showing (i) government and (ii) private expenditure. There may be wide differences between countries in the respective proportions even if the total is much the same. I do not suggest that such a classification is easy to come by: for instance, in France social security payments are largely made by employers, not the State. As this procedure has the force of law, such payments, for comparative purposes, are not to be regarded as "private" but as defrayed by taxation of the employers, hence governmental. But isolation of (i) government may be misleading for comparison.

Mr. J. B. Broderick: I have pleasure in supporting the vote of thanks to Mr. O'Loghlen who has come down from Belfast to read his paper to the Society in Dublin. I think it is a good thing for the Society to have papers read in both Dublin and Belfast when the subjects are of interest to our members in both cities.

Mr. O'Loghlen's paper is most interesting and covers the subject comprehensively. If there is one general conclusion to be drawn I think it is that it would be desirable to compare the complete public sectors (Public Authorities + Public Corporations) in order to make a reliable assessment of the effect of State intervention in each economy. At present data to do this are not available but I should hope that at some time in the future we shall produce National Account data for the public corporation sector.

Mr. O'Loghlen indicated that, in interpreting the figures in the table, regard should be had to the different levels of development of the public corporation sector in each economy. This is one reason for differences in the figure between Northern Ireland and the Republic. Dr. Tait also pointed out that the figures would be changed somewhat if expenditure by the British government on behalf of Northern Ireland were included in the figures. He also queried whether comparisons such as that made in the paper were really valuable since policy decisions did not appear to be based on them. I would hesitate to venture an opinion as to whether the higher figure for Public Authority expenditure as a percentage of gross domestic product in Northern Ireland is better than the corresponding level in the Republic. All we know is that this figure is much higher in the advanced countries than it is in the undeveloped countries but I do not think that there is any agreement as to whether the highest figure in the developed countries is a target to be aimed at by other countries.

In interpreting figures such as those in Table 2 I think we should bear in mind that high social expenditure in Northern Ireland is financed to a considerable extent by high national insurance contributions which enables the government to make corresponding higher provisions for health services. It appears to me, therefore, that one cannot ignore the receipts side of the Public Authorities account when considering the expenditure side.

May I again express our sincere thanks to Mr. O'Loghlen for his interesting paper.

Mr. B. A. O'Loughlen: The two main points raised in the discussion concern (a) the nature of the comparisons and (b) their usefulness. Taking the former first ,the basis of the comparison lies in the degree of similarity in the two economies ,both in their general structure and in the main problems they face, and consequently in the similarity of the policy decisions to be made. Now, it is always a moot point as to the extent to which one emphasises the similarities or the differences between countries or regions and the "validity" of international comparisons has long been a contentious subject. However, two points may be made: (a) in the field of public expenditure analysis, apart from cost/benefit techniques, little has been achieved and comparisons have become the common, albeit simple and perhaps controversial, practice and: (b) in this particular case it is a question of judgement as to whether the degree of similarity of the two economies can render comparison useful. Perhaps we can only agree to differ on this point?

Again, with regard to stating the pattern of expenditure in broad absolute amounts and not in terms of ratios to G.N.P. or in per capita terms, as is pointed out in the paper the influence of population and indeed of G.N.P. levels on the pattern of expenditure is not clear. While both these factors clearly affect the size of government expenditures (although they may not be the major determinants) their impact on the pattern of expenditures would be difficult to assess. Thus, irrespective of size of population and level of G.N.P., given two economies with very similar structures and facing broadly similar policy decisions, the choice of governments in dividing their expenditures between different sectors or objectives, i.e., the pattern of expenditures, is not influenced by population and G.N.P. levels in any straightforward way, and hence the value of G.N.P. ratios or per capita figures is not immediately obvious. Perhaps ,however, it would have been better, in order to emphasise this point, to present the pattern as ratios of the total, although as Dr. Tait points out this has its own inherent disadvantages.

With regard to the apparent mixture between time series and cross section or points of time analysis, the prime concern is with the latter, but because of the possibility of the existence of disturbances in any one year, especially in particular sectors (items) and number of years were chosen. However, Dr. Tait's moving average suggestion appears a useful one.

The second question concerns the usefulness of such comparisons. As Dr. Geary points out, the main interest lies in analysing one's own economy and international comparisons certainly do not preclude this. The real question concerns the extent to which such comparisons help in this task. In this case it was felt that the similarities in the two economies might enable some useful judgements to be made through comparative analysis, whether this has been justified or not remains the question on which the value of this paper must be judged.