

# *Are Ireland's Social Security Payments too Small?*

## *A Comment* \*

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THE purpose of this short article is two-fold. First, to cast some doubt on the way in which Dr. Geary reached his conclusions concerning social security payments in Ireland<sup>1</sup> and, secondly, to extend the study to take account of those aspects of his methodology which have led to these doubts.

### *Social Security Cash Payments*<sup>2</sup>

Rather than use Dr. Geary's table as the starting point for this section, Table 1 below was constructed. This was done for a number of reasons. First, the figures in the table are more up to date and  $X$  and  $Y$  are constructed for the same year. Secondly, the  $Y$  variable chosen here is more satisfactory since it refers to general government and not central government current cash transfers. Lastly, GNP *per capita* is used for  $X$  rather than National Income *per capita*, since theoretically one would expect taxable capacity to be somewhat more closely related to the former. The GNP is also the more commonly used aggregate.

The most striking feature of Table 1 is the lack of correlation between  $Y$  and  $X$  ( $R^2=0.12$  and  $R^2=0.24$  for Dr. Geary's table). However, as will be seen later when one considers both the institutional factors and the fact that social security

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1. R. C. Geary, "Are Ireland's Social Security Payments too small? A Note", Dublin: *Economic and Social Review*, Vol. 4, No. 3, April 1973.

2. These are taken as being represented by general government cash transfers to households and private non-profit institutions.

payments in kind are excluded, the lack of correlation appears much less surprising. Geary, on the other hand, implied that the low  $R^2$  was primarily due to the statistical difficulties encountered when comparing international cross-section data of this type. Therefore, rather than pursue the possibility that theoretically one might, in fact, expect a low  $R^2$ , he turned to time series data for one country.

TABLE I: *General government current transfers to households and private non-profit institutions as a percentage of GNP (Y)<sup>a</sup> and GNP per capita (X) in 1970.*

Country	(1) Y (per cent)	(2) X (\$)
Belgium	13.99	2,671
Denmark	12.29	3,131
France	16.64	2,937
Germany (FDR)	12.65	3,039
Ireland	9.01	1,347
Italy	14.40	1,741
Netherlands	18.40	2,429
UK	8.36	2,173

Sources: X—*International Financial Statistics*, 1972, Supplement.

Y—Derived from data in the UN yearbook of national accounts statistics, 1965 Vol. 1, 1971 Vols. 1 and 2, 1969 Vol 1, and from IFS 1972 supplement.

a Based on the calendar year for the five original EEC countries only; figures for the new EEC countries are for the fiscal year beginning 1 April. Dr. Geary used national income *per capita* in 1969 and central government current transfers (except national debt interest) as a percentage of personal income in 1968.

Using Irish data for the years 1947–1971 he found that there was an approximately direct proportional relationship between personal income per head of population at constant prices ( $X'$ ) and current transfers (except national debt interest) as a percentage of current personal income ( $Y'$ ). (This finding was reached by simply noting from the data that the ratio of  $Y'$  to  $X'$  was almost identical at the beginning, in 1947, and at the end, in 1971, of the period.)<sup>3</sup> Assuming such a direct relationship to continue with further increases in real personal income *per capita*, Geary compares the hypothetical  $Y'$  that would exist for Ireland at the national income *per capita* levels of the other countries (in his Table 1) to the actual  $Y'$  prevailing in these countries.<sup>4</sup> On this criterion Ireland compares favourably with “best EEC standards”. However, serious doubt must be cast on

3. Orthopol analysis was carried out in the study but was not used in reaching the conclusions.

4. The use of personal and national income as being synonymous was surprising, as was Dr. Geary's use of Table 1 despite his earlier rejection of it.

the assumption of a continuing direct relationship between  $Y'$  and real income *per capita*. (Our evidence below for this statement is based on information using the variables  $X$  and  $Y$  as defined in Table 1. The justification for the use of these variables has already been mentioned.)

$Y$  is unlikely to increase proportionately with real GNP *per capita* indefinitely and time-series data for the other countries from 1956 to 1970 indicate that beyond a certain threshold level, there could be a marked change in the relationship as Ireland's real GNP *per capita* continues to grow (see Table A1). Geary's figures for 1947-1971 show that the percentage increases for  $X'$  and  $Y'$  were nearly equal in Ireland but in the period 1956-1970  $X$  grew twice as fast as  $Y$ , though this was to some extent reversed in the mid and late sixties. Time series data for the other countries reveal such diverse patterns of relationships between  $X$  and  $Y$  that one must conclude that economic factors on their own play only a small part in the determination of the level of  $Y$ . In Germany,  $X$  increased by 112 per cent from 1956 to 1970 but  $Y$  remained virtually constant and actually decreased sharply from 1967 to 1970. A fairly similar picture emerges in France and Italy with  $Y$  increasing very little relative to  $X$ . Only in Denmark and the UK and to a lesser extent in Belgium, are the increases in  $X$  and  $Y$  roughly equivalent. Both Denmark and the UK, however, started from a very low base in  $Y$  relative to the others, and the increases since then probably reflect more the effect of changing political attitudes to social security cash benefits, rather than of increases in real GNP *per capita*. The final indication that more than economic factors determine the level of  $Y$  comes from the Netherlands, where between 1956 and 1970 the percentage increase in  $Y$  was more than double that in  $X$ , and where  $Y$  in 1970 was at a much higher level than in any of the other countries, four of which had considerably higher GNP *per capita* levels.

Table 2 below was constructed to take account, albeit in a crude fashion, of the differing experiences mentioned above. Ideally it is meant to indicate the real GNP *per capita* level at which each country reached a certain level of  $Y$ , in this case 8.2 per cent, the figure Ireland reached in 1969. However, it was highly unlikely that any other country would record a figure of 8.2 per cent exactly for  $Y$  in any year and thus the year in which its level of  $Y$  was closest to 8.2 per cent had to be chosen. In the cases of Italy and Germany, the figures of 9.2 per cent and 10.7 per cent were the lowest recorded. The derivation of the real GNP *per capita* figures (column 1) is best illustrated by an example. Ireland was the base country and its real sterling GNP *per capita* at 1963 prices was £379 in 1969, the year in which it reached the level of  $Y$  in column 2, namely 8.2 per cent. Belgium reached a  $Y$  of 8.6 per cent in 1956 and in that year its current dollar GNP *per capita* was \$1,094, 2.08 times Ireland's current dollar GNP *per capita* in 1956. Ireland's real sterling GNP *per capita* at 1963 prices was £226 in 1956 and multiplying this by 2.08 gives the figure of £470, the roughly "equivalent GNP *per capita*" at which Belgium recorded a  $Y$  of 8.6 per cent.

One could reasonably assert from the information in Table 2 that Ireland's cash transfer payments in 1969 were not up to the level of those in Germany, Italy

TABLE 2: *International comparison of current cash transfers to households and private non-profit institutions adjusted for income differences.<sup>a</sup>*

Country	(1) Real GNP/capita £	(2) Y per cent	(3) (year)
Belgium	470	8.6	(1956)
Denmark	604	8.0	(1963)
France	461	9.4	(1951)
Germany	300	10.7	(1950)
Ireland	379	8.2	(1969)
Italy	232	9.2	(1956)
Netherlands	341	8.9	(1957)
UK	612	8.0	(1967)

Sources: Same as for Table 1 plus UN yearbook of national accounts statistics, 1957, Vol. 1

a An explanation of the contents of the table is included in the text.

and the Netherlands, even after taking differences in income *per capita* into account. Likewise it could be said that, according to this measure, they were well above the level of those in Denmark and the UK.

#### *Social Security Payments in Kind*

It is implied throughout Dr. Geary's article that social security payments are synonymous with social security cash payments. The title of the article, the long introductory paragraph and the concluding comments about Ireland's *transfer income* being up to best EEC standards all bear this out. This is unacceptable, since social security payments in kind are not only substantial in the countries under study but probably vary considerably from country to country.

Social security covers those services "the object of which is (a) to grant curative or preventive medical care; (b) to maintain income in the case of involuntary loss of earnings or of an important part of earnings or (c) to grant supplementary incomes to persons having family responsibilities".<sup>5</sup> As such, social security provisions include public social security programmes (direct services rendered by the public sector for the achievement of the above objectives), fiscal welfare (e.g. tax allowances in respect of children and life assurance), voluntary charitable and occupational welfare and private social insurance. Unfortunately, information on all but the first mentioned is rather sparse and quite inadequate as a basis for international comparison, but they could vary in size and importance in different countries and their existence must be borne in mind as a reservation when using

5. International Labour Office, *The Cost of Social Security 1949-1957*, Geneva 1961. Quoted in P.R. Kaim-Caudle, *Social Security in Ireland and Western Europe*, Paper No. 20, Dublin ERI, 1964.

only public social security as a basis for comparison. To exclude (public) social security payments in kind, however, would put the usefulness of conclusions arising from such an exercise in serious doubt.

Strictly comparable data on benefits in kind do not, to our knowledge, exist for all eight countries. However, even the scanty evidence in Table 3 lends support to the argument above concerning social security payments in kind. General government civil consumption expenditure consists mainly of expenditure on (a) general administration, justice and police, (b) education and research and (c) health services. Strictly speaking, only expenditure on (c) is considered to be for social security objectives but many would include expenditure on education and research as well.<sup>6</sup> Given this, the variation in total civil consumption expenditure probably reflects the variation in social security payments in kind in the eight countries. Comparing Table 3 with the Y column of Table 1 it is interesting to note that three of the four countries with the highest current transfers percentages have the lowest civil consumption, and, therefore, probably the lowest social security in kind, percentages. Thus it would seem that the correlation between all social security payments expressed as a percentage of GNP and GNP *per capita* could be considerably higher than that between X and Y on Table 1.

TABLE 3: *General government civil consumption expenditure as a percentage of GNP (1968)*

Country	(1) Total civil consumption	(2) Health <sup>a</sup>	(3) Education & Research <sup>a</sup>
Belgium	11.3	—	—
Denmark	15.5	3.7	4.3
France	8.8	—	—
Germany	12.4	3.9	2.7
Ireland	11.8	—	—
Italy	11.2	0.9	4.1
Netherlands	12.2	—	5.3
UK	12.5	3.8	3.7

Sources: As for Table 1.

a This information was only available for some countries.

It is still likely, however, that social security payments in 1970 in Ireland, the UK and Denmark were significantly below those in most of the original EEC countries, even when income adjustments are made. This could largely be explained by the prevalence of the belief, fortunately disappearing, in these

6. It should be noted that although public expenditure on housing is generally excluded from social security expenditure, a strong case could also be made for its inclusion.

countries that the state should only provide a subsistence level of social insurance, whereas in the others it is accepted, "that the state benefits, far from being minimal are based on the standard of living enjoyed by the beneficiary before the contingency arose which gave rise to the benefit."<sup>7</sup> Most people today would favour the latter approach to social insurance, judging by their acceptance of such a principle *vis-à-vis* house and car insurance.

TABLE 4: Government taxation by source as a percentage of GNP

Country		(1) Indirect Taxation	(2) Direct Taxation <sup>a</sup>	(3) Social Security Contributions
Belgium	1956	10.37	7.26	5.47
	1963	12.13	8.27	7.33
	1970	12.71	11.01	10.15
Denmark	1956	11.36	11.36	1.31
	1963	13.92	12.73	1.36
	1970	17.84	16.50 <sup>b</sup>	1.86
France	1956	16.41	5.23	10.87
	1963	16.65	5.68	13.18
	1970	14.59	6.98	14.50
Germany	1956	14.49	9.41	8.30
	1963	14.06	10.78	9.77
	1970	13.33	10.60	11.47
Ireland	1956	16.69	4.97	1.04
	1963	15.77	5.67	1.61
	1970	19.71	8.28	2.52
Italy	1956	12.56	4.78	7.30
	1963	12.17	5.66	10.26
	1970	12.08	6.25	11.02
Netherlands	1956	10.59	12.91	4.72
	1963	9.91	12.04	9.79
	1970	11.59	13.72	14.73
UK	1956	13.53	11.32	3.07
	1963	13.19	10.81	4.25
	1970	16.14	15.71	5.24

Source: as for Table 1.

a i.e. Direct taxation on corporations, households and private non-profit institutions excluding social security contributions, as a percentage of GNP.

b Estimated figure.

7. Kaim-Caudle, *op. cit.*, p. 15.

*Social Security Payments and Redistribution*

Dr Geary implicitly alluded to the fact that social security payments involve income redistribution. This is probably true, but it must be qualified by the fact that the relationship between social security and redistribution could vary substantially from country to country depending on (a) the type of social security service offered and (b) the method of financing social security. Services are of three types, (i) services where benefits are granted irrespective of contributions or need, (ii) social insurance, where payment of benefits is subject to payment of contributions and (iii) social assistance, where benefits are only paid in case of need and do not depend on contributions. (i) and (iii) are usually financed from general taxation but (ii) is largely financed from contributions, which are in effect a poll tax on wages. Thus depending both on the tax structure and on the different mix of services prevailing in a country, it may be found that a country with a relatively low level of social security payments might have a social security system which involves considerable vertical, as opposed to horizontal redistribution.

Table 4 throws some interesting light on the financing of social security in the countries under study. Subtracting column 3 in Table 4 from column 1 in Table 1 gives an indication of the extent to which social security cash payments have to be financed from general taxation. The figures for 1970 are:

Denmark	10.33 per cent
Ireland	6.49 per cent
Belgium	3.84 per cent
Netherlands	3.67 per cent
Italy	3.38 per cent
UK	3.12 per cent
France	2.14 per cent
Germany	1.18 per cent

Thus potentially Denmark's and Ireland's systems of financing social security involves the greatest vertical redistribution. However, more than two thirds of Ireland's general taxation revenue comes from indirect taxation which tends to be regressive. Besides, social security, as yet, in Ireland is a flat rate system, unlike the original EEC countries, and as such is regressive.

*Conclusions*

This paper has examined empirically some of the broader issues involved in an international comparison of social security payments,<sup>8</sup> and as such it was intended that it should draw attention to the weaknesses in Dr. Geary's work. Its main

8. A thorough up-dating of Kaim-Caudle's comprehensive paper is, however, required.

TABLE A1: Real GNP per capita at 1963 prices (X) and current transfers to households and private non-profit institutions as a percentage of GNP (Y)

Year	In francs		In Kroner		In francs		In Dmark		In pounds		In thousands of lire		In guilders		In pounds	
	Belgium X percentage	Y	Denmark X percentage	Y	France X percentage	Y	Germany X percentage	Y	Ireland X percentage	Y	Italy X percentage	Y	Netherlands X percentage	Y	United Kingdom X percentage	Y
1956	60,968	8.64	8,668	6.82	6,225	13.07	4,339	11.57	226	6.23	412	9.19	3,603	7.26	484	5.71
1957	62,142	8.63	8,947	7.61	6,907	13.33	4,376	12.99	227	6.60	435	9.29	3,630	8.93	492	5.66
1958	61,340	9.89	9,249	7.70	6,812	13.32	4,733	13.69	227	6.33	451	10.62	3,572	10.04	496	6.44
1959	62,036	10.61	9,995	7.48	7,106	13.06	5,018	13.13	242	6.05	479	10.62	3,734	9.88	516	6.75
1960	65,390	10.77	10,590	7.32	7,477	12.96	5,918	12.37	257	5.97	505	10.67	4,002	10.22	540	6.12
1961	68,406	10.58	11,261	7.49	7,870	13.55	6,268	12.32	271	6.12	547	10.36	4,117	10.43	553	6.25
1962	71,788	10.83	11,728	7.66	8,215	14.54	6,505	12.47	279	6.08	584	10.85	4,270	10.98	552	6.55
1963	74,919	11.36	11,677	8.04	8,616	15.41	6,666	12.53	290	6.40	617	11.52	4,416	12.57	572	6.97
1964	79,599	10.82	12,835	7.62	9,129	15.66	7,051	12.57	308	6.49	631	11.45	4,161	12.65	597	6.79
1965	82,791	12.32	13,560	8.27	9,491	16.09	7,384	12.84	312	6.64	645	13.35	5,145	13.86	609	7.29
1966	84,948	12.59	13,731	8.96	9,967	16.22	7,510	13.10	319	7.16	676	13.50	5,159	15.03	621	7.45
1967	87,854	12.84	13,850	9.85	10,385	16.44	7,317	14.33	334	7.19	713	13.44	5,426	15.31	634	7.99
1968	90,455	13.96	13,938	10.71	10,807	16.70	7,919	13.79	360	7.51	753	14.19	5,637	17.02	647	8.58
1969	96,427	13.62	15,209	10.82	11,773	16.44	8,530	13.31	380	8.15	802	14.32	5,873	17.60	656	8.55
1970	103,144	13.99	15,647	12.19	12,313	16.64	9,206	12.65	388	9.01	846	14.40	6,236	18.40	672	8.36
1971	108,437				12,739		9,743		398		866		6,437		680	
percentage growth 1956-1970 for X and Y	69.2	61.9	80.5	78.7	97.8	27.3	112.2	9.3	71.6	30.8	105.3	56.7	73.1	153.4	38.8	46.4

Sources: Derived from UN yearbook of national accounts statistics, 1965, 1969 and 1971 and from International Financial Statistics, 1972 Supplement.



finding has been to establish that it would be extremely difficult, at this stage, to assert that, given its state of economic development, Ireland compares favourably or otherwise with the other EEC countries in social security consciousness. This is especially true considering the fact that the different demographic characteristics of the countries would also have to be taken into account. However, one would suggest that in comparison with Italy, the country with the most similar background, Ireland has taken a very long time indeed in developing its social security system. The example of the Netherlands over the last fifteen years is, however, an indication that it would be possible for Ireland over the next six or seven years to develop a social security system up to "best EEC standards".

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