# The Functional Distribution of Income in Ireland's Manufacturing Sector, 1956-1973

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*Précis:* The paper presents a new method for estimating the functional distribution of income for the Irish manufacturing sector. The estimates of distributive shares are based on a series for net value added in manufacturing, which is calculated using data from the Census of Industrial Production, the Census of Population, input-output tables and Vaughan's capital-stock estimates. The use of net value added data as a basis for calculating distributive shares contrasts with earlier research by Hughes, who obtained broadly similar results using net-output data.

## I INTRODUCTION

E conomists have a keen interest in the functional distribution of income. There is a body of theory whose purpose is to explain movements in the wage and profit shares in total income, and in many areas of the world efforts have been made to measure this distribution.

In the Irish case, Hughes (1972) conducted such an empirical investigation. This work covered the distribution of income between the factors at the total economy level and also conducted an empirical analysis of the manufacturing sector. For the manufacturing sector, Hughes found that there was a pattern of shift of the income distribution in favour of profits over the period 1938-70.

This short paper focuses again on the manufacturing sector and uses a

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somewhat different methodology to derive a new functional income distribution series for the period 1956-73. While the analysis of Hughes leans on the Census of Industrial Production (CIP) data, this paper supplements this source, in the development of a methodology, with data taken from inputoutput sources, Censuses of Population and capital stock series based on the perpetual inventory method. Out of this investigation comes new series for the functional distribution of income. While the results are preliminary and experimental, they may provide more appropriate series for factor shares; furthermore, the paper provides a methodology which empirical researchers might adopt in deriving series for the functional distribution of income.

The organisation of the paper is as follows. In the next section, the empirical methodology is laid out. The third section focuses on the presentation of the results and possible explanations for the behaviour of the series are presented. In the process there are discussions of the similarities and differences between these results and those obtained by Hughes. The conclusions are presented in Section IV.

### **II THE METHODOLOGY**

## **II.1** Difficulties with Existing Series

Possible procedures on the derivation of functional distribution of income series depend on the character of the available data. For the manufacturing sector, there is an annual Census of Industrial Production. The data from this source are not ideal for our purposes. Such data provide information for each of 42 manufacturing groupings. In each case, we have series for gross output, cost of materials, etc., net output, wages and salaries and other. It is not possible to observe or derive figures for profits and depreciation directly and, as a result, for value added, either gross or net, in each sector. (Gross value added is composed of compensation of labour and gross profit income (which is made up by rents, profits and capital consumption allowances), while net value added is defined as gross value added minus capital consumption allowances.) Nevertheless, the share of labour compensation in net output from the CIP is often used to get some indication of the behaviour of the returns to labour in the functional distribution of income.

There are unsettling features to the results derived from such a series. A net output series includes more than a gross value added series. The former includes a range of supplemental costs as Hughes (1972) has indicated. But, in addition, using the net output series as a proxy for a gross value added series has its own built-in set of problems. First, the net output series underestimates the share of labour compensation in gross value added. This is because of the inclusion of supplemental costs in the residual of net output. Analyses of the sources of profit income in the manufacturing sector provide

a somewhat distorted picture when the CIP's net output series is used. Secondly, analyses of time trends in the functional distribution of income based on these data are fine only as long as trends of change in supplemental costs behave similarly to overall trends in the functional distribution of income. Hughes found evidence of this up to 1960 but a cursory examination of other data, and particularly cross section data, for the 1960s indicates that this may not be a good assumption over a long period of time. This suggests that it is worth trying to develop an alternative procedure for the measurement of the functional distribution of income over a longer period of time. Thirdly, no account is taken of implicit factor returns. In a period when establishment size is changing and the form of business organisation is being transformed, there is a case to be made for correcting income distribution series for implicit factor returns. For example, unincorporated enterprises' accounting procedures may include labour compensation payments to owners and relatives assisting in the residual of net output. For one year this can cause an underestimation of the share of labour compensation in gross value added. As the percentage of owners and relatives assisting in the total labour force changes over time, the lack of correction of income distribution series for implicit factor payments can cause invalid conclusions to be drawn about trends in the functional distribution of income. Due to the changes in the manufacturing sector between 1956 and 1973, it is desirable that some account be taken of the behaviour of implicit factor returns in the raw data for the functional distribution of income.

Furthermore, to draw conclusions about the trends in the functional distribution of income on the basis of gross value added series and their composition leaves one important nagging question. If, for example, we find that the gross profit share has been increasing, is this caused primarily by the behaviour of capital consumption allowances? This is a serious concern because much historical data suggest that in periods of fast economic growth and substantial economic transformation, the share of capital consumption allowances in gross value added increases. For many kinds of economic analysis it is useful to be able to examine the behaviour of the functional distribution of income within a net value added series.

This paper provides an attempt to overcome these problems. Our hope is that the ensuing series are better than the available information, even though there will be an inevitable lack of precision in these new statistics. The limitations are caused by two difficulties in the available data:

(a) use will be made of Census of Population data and these data are compiled on a five or ten year basis (CSO, 1954, 1964, 1968, 1974); input-output data are also raw material in the project and we make use of such data for 1956, 1960, 1964, 1969, and 1974 (Henry, 1980, CSO, 1970 CSO, 1978 and McGilvray, 1964-65);

(b) classifications of data in input-output tables are not uniform and, as a result, we are forced to a high level of aggregation dictated by the input-output table with the most aggregated sectoral classification; the same problem also applies to dovetailing Vaughan's (1980) capital stock series with other data sources.

Two procedural difficulties arose from these problems. Under (a) we have had to make assumptions about the behaviour of data series between dates of publication of data. Under (b) we have had to use a six sector classification of manufacturing industries for the analysis of changing factor shares. Some of the ramifications of these decisions will become clear in the analysis that follows.

# II.2 The New Series

We have decided to use series measured in current prices. This choice is based on the desire to derive the actual distribution of income in each year. This means, however, that price effects will be allowed to wield their influence on the pattern of income distribution. Below, this will be shown to have an important role in determining the figures for capital consumption allowances and, as a result, the functional distribution of income out of net value added. The consequence of this decision, however, is that CIP data, input-output data and capital stock series used in this analysis are all measured in current prices.

The sources of data dictate the use of a six sector classification. (1) Food, drink and tobacco including the slaughtering of cattle and the canning of foods; (2) textiles etc., which includes all textiles, clothing, footwear, fellmongery and leather; (3) wood/furniture and paper printing; (4) chemicals etc., which includes all chemical industries as well as all miscellaneous industries in the 42 sector CIP classification; (5) mineral products; (6) metals, including transportation equipment, and electrical and non-electrical tools and machines. While this classification would not have been chosen on a priori grounds, it has the particular advantage of being a proxy for the division of the Irish manufacturing sector into industries which were slow and fast growing in the period following the introduction of outward-looking policies.

Having made the decision on the sectoral divisions within the manufacturing sector, the next decision is to compile, year-by-year, net output, the share of labour compensation and the share of the residual in net output for each of these six sectors as well as the total manufacturing sector. This was accomplished in a straightforward manner, stopping at 1973 to avoid the reclassifications and redefinitions of CIP data after 1973 and because of the final date for Vaughan's capital stock series. The results are set out in The next step is to compile gross value added series from input-output data for 1956, 1960, 1964, 1969 and 1974. The shares of gross profits and labour compensation in gross value added for these years are then derived. But what about data for the in-between years? The procedure used to estimate these figures is as follows: (a) compile the ratio of the residual to net output from the CIP to the ratio of gross profits to gross value added from the input-output tables for 1956, 1960, 1964, 1969 and 1974; (b) assume a linear interpolation of this ratio between 1956 and 1960, 1960 and 1964 etc.; (c) on this basis compute the gross profits to gross value added series for the intervening years. Using the CIP series as well as the constructed residual/ net output to gross profits to gross value added series, the profit shares for each year are assembled. This first set of results is presented in Table A2.

These series, however, make no allowance for the existence of implicit labour compensation included in the share of income going to gross profits. To take account of such compensation Census of Population data, which are available for 1951, 1961, 1966 and 1971, were used. The data were fitted into our six sector classification scheme and implicit labour income is presumed to arise because of employers, managers, and relatives assisting being present in the labour force. The ratio of total employment (including employers, relatives assisting etc.,) to the total of paid employees in each sector as well as in total manufacturing is computed. It is assumed that the wage rates paid to hired and self employed labour are the same and, as a result, the labour share is recomputed using the labour shares derived from Table A2 and multiplying them by the ratio of total employment to hired labour for Census of Population years. For years between census years, linear interpolations of the ratios from the census years are used as the multiplicand. For 1972 and 1973, the multiplicand used is the Census of Population ratio for 1971. On the basis of these computations, revised profit income shares series are derived and these are presented in Table A3.

The final step is to compute the share of net profits in net value added. For this purpose we have to choose a capital stock series and the statistics which build it up. Vaughan (1980) has provided us with such a series, based on a perpetual inventory approach, which estimated a net capital stock series at current prices. On the basis of the data he provides, it is possible to estimate the capital consumption allowances he used, taking account of his estimates of beginning and end of year capital stock as well as gross investment in the course of the year.

It is to be noted that in a number of cases the resulting capital consumption allowances are negative. The reason for this is linked to the nature of the capital stock series. Measured at current prices, changes in the capital stock are caused by gross investment, capital consumption allowances based on the existing market prices of the capital stock and changes in the value of the capital stock caused by changes in the prices of capital goods. Thus the profit share in the functional distribution of income can contain an element of capital gains based on the changing prices of replacing elements in the existing capital stock.

The point of departure in calculating the net value added series is to go back to the data underlying Table A2, and using CIP labour compensation statistics for non-input-output years as well as the labour shares which can be derived from that table, gross value added figures are derived for non-inputoutput table years. For years with input-output tables, the gross value added figures are compiled directly. It is now a simple matter to adjust the value and profit income series. The resulting net profit shares are then computed and are set out in Table A4.

## **III DESCRIPTION AND INTERPRETATION OF RESULTS**

For the purposes of the description and the analysis, the statistics will be examined over one (1956-1973) period and two (1956-1969, 1969-1973) sub-periods. For simple descriptive purposes we have taken arithmetic means of profits over the years 1956-1958, 1967-1969, 1971-1973. For statistics contained in Table A1, we will refer to Method of estimation 1, for Table A2, Method 2 and so on. The examination of the changes in the profit share is contained in Tables 1 and 2.

As expected, Method 1 measures are larger than those found under the other methods. Looking at Table 1, with one minor exception, the means of the profit share ratio are highest under Method 1, second highest under Method 2 and lowest under Method 4. For total manufacturing, the ratio of the ratios estimated by Methods 1 and 2 is .660 but with variations in that ratio from .825 for minerals to .586 for textiles etc. The result for total manufacturing is of particular interest because, on the basis of data for the 1950s, Hughes (1972) had found supplementary costs to be about 35 per cent of the residual, on the average over the period. These new data appear to confirm that finding although there is variation across industries which the earlier results did not bring out.

The major cause of the differences in the results produced by the different methods is the dropping of costs, other than depreciation, from the residual in moving from Method 1 to Method 2. This step requires a few more comments. The method used takes account of the trend of the residual from the CIP data as well as indications of the differential shifts in "supplementary costs" as between input-output table years. An alternative method of using trends in the residual share alone produces profit share results at variance with input-output results for later years; in the interest of using available

Period and method	Food, drink, tobacco	Textiles etc.	Wood/ furniture/ paper/ printing	Chemicals	Minerals	Metals	Total
Method 1							
1956-1973	55.2	44.7	41.7	60.5	53.1	40.5	49.7
1956-1958	55.4	39.9	37.6	50.4	48.4	34.0	45.9
1967-1969	54.5	46.6	43.2	67.6	56.2	46.5	52.5
1971-1973	57.0	45.7	45.3	64.7	54.4	41.0	52.0
Method 2							
1956-1973	35.7	26.2	26.3	46.4	43.8	27.9	32.8
1956-1958	37.8	27.8	25.7	33.8	36.0	21.8	30.7
1967-1969	34.0	28.7	25.8	55.3	50.7	33.5	35.4
1971-1973	33.4	24.3	22.4	41.7	39.3	26.7	31.2
Method 3							
1956-1973	34.1	17.9	13.3	45.8	40.9	21.9	28.4
1956-1958	35.9	8.1	8.7	30.6	30.9	10.5	21.6
1967-1969	32.4	21.9	14.0	57.2	48.8	28.9	33.1
1971-1973	30.5	20.7	13.2	42.9	37.1	23.3	27.5
Method 4							
1956-1973	31.7	13.4	9.0	46.0	37.6	20.5	24.4
1956-1958	31.2	4.6	4.7	33.5	25.4	7.6	17.5
1967-1969	30.2	7.5	6.2	59.7	46.8	28.4	31.0
1971-1973	34.2	21.4	16.2	47.8	39.8	25.1	30.8

Table 1: Means of the percentage profit share in the manufacturing sector

Sources: Derived from Tables A1, A2, A3 and A4.

 Table 2: Analysis of profit shares: the ratio of the ratio of the percentage

 of profits derived by different methods

	The ratio of the mean shares (1956-1	n of percentage profit 973) derived by
	Method 2/Method 1	Method 4/Method 1
Food, drink and tobacco	.647	.574
Textiles etc.	.586	.300
Wood/furniture, paper/printing	.630	.216
Chemicals	.767	.760
Minerals	.825	.708
Metals	.689	.506
Total manufacturing	.660	.491

Sources: Statistics derived from Tables A1, A2 and A4.

information, the first method was chosen.

Contrasting the results for Methods 1 and 4, we find that the resulting ratio of the estimates is .491 for total manufacturing with variations in the results as between manufacturing groupings of .216 and .760. We think that the handling of net value added and capital consumption allowances is an improvement over previous methods. Vaughan's capital stock series involves the use of more realistic capital consumption allowances than can be found in national accounts and input-output tables. A key to realistic capital consumption allowances is the avoidance of historical cost based methods of estimating the loss of value of fixed assets.

It should also be noted that the exclusion of implicit wages and salaries from the profit figures in moving from Method 2 to Method 3 does indeed lower the profit share. For total manufacturing it drops the mean profit share from 32.8 to 28.4 and within the manufacturing sector, the range of reduction in the profit share is from 22.3 to .2. The change in each case depends on the form of business organisation of the manufacturing grouping. The greater incidence of single proprietorships and partnerships brings about a greater change in the profit share and, as a result, it is no surprise that the largest change occurred in the wood/furniture, paper/printing category and the smallest change in chemical and miscellaneous industries.

One interesting result of deriving the profit share under Method 3 is that the statistics uncover cases where the profit share becomes very small. This is particularly true of textiles etc., wood/furniture, paper/printing and metals in the early years. We think that this is not surprising, as these groupings contain many of the pre-1956 industries which got into difficulty following the move to outward looking policies, with owners and families struggling to survive in a period of change. When account is taken of capital consumption allowances under Method 4, some of these groupings could be subject to losses; for example, in 1959 this occurred in the wood/furniture, paper/ printing grouping.

Let us now turn to the overall results. In the interest of brevity, we will restrict our discussion to estimates based on Method 4. The largest mean profit share is found in chemicals and lowest in wood/furniture, paper/ printing. There is a strong suggestion that between 1956-1958 and 1971-1973 the profit share increased in the total manufacturing sector. The results for the individual manufacturing groupings indicate that, with the possible exception of food, drink and tobacco, a similar pattern of change applies. All the results suggest that the boom period in the profit share began to weaken after the mid-1960s, and in the years 1969 to 1973 the profit share did not continue its upward movement. These results are similar to those found by Hughes (1972). Looking at the wage and salary share he had concluded: The trend equations which were fitted for the sub-period 1959-68 showed no tendency for the generally negative trend in the wage and salary shares of the industrial groups in the years 1953-68 to be accentuated in the period 1959-68. In fact some weakening of this tendency towards declining wage and salary shares is evident in the period 1959-1968.

We have found that the addition of data using the profit share for later years seems to reinforce this conclusion, which is further supported by the analysis below.

What is the cause of the apparent increase in the profit share in the total manufacturing sector over the 1956-1973 period? Is it caused by changing profit shares in individual manufacturing groupings? Or is it caused by the changing composition of value added over the period? It must be remembered that the result of examining these questions in the framework of a shift-share approach depends on the character of the classification of industries for the

		Cause	d by:	
	Total change in the profit share	Changes in the weight of the sectors in value added	Changes in the profit share with- in the sector	Interaction term
		(Percen	tages)	
<i>Method 3:</i> 1956-1958 to 1971-1973	100.0	6.6	75.4	18.0
1956-1958 to 1967-1969	100.0	3.5	69.6	26.9
1967-1969 to 1971-1973	-100.0	-9.3	-92.6	1.9
<i>Method 4:</i> 1956-1958 to 1971-1973	100.0	10.5	83.5	6.0
1956-1958 to 1967-1969	100.0	15.6	48.9	35.5
1967-1969 to 1971-1973	-100.0	-950.0	200.0	650.0

Table 3: Shift-share approach to the analysis of changes in the profit share

Sources: Data derived from the statistics underlying Tables A3 and A4.

purpose of the analysis. Despite the high level of aggregation within the groupings, the results are strong and suggest the importance of changing profit shares within groupings.

We have undertaken the shift-share analysis for Methods 3 and 4 to cover three periods: (1) 1956-1958 to 1971-1973; (2) 1956-1958 to 1967-1969 and (3) 1967-1969 to 1971-1973. The results which are presented in Table 3 suggest a number of conclusions:

- (a) with the exception of the 1967-1969 to 1971-1973 period for Method
   4, it is clear that intersectoral shifts had a limited role to play in explaining the behaviour of the profit share. The behaviour of the profit share within groupings had prime responsibility for the overall outcome;
- (b) for all periods except for 1967-1969 to 1971-1973 there is a tendency for the profit share to rise in the total manufacturing sector. After 1969 there is a mild tendency for it to decline. This result is consistent with the finding of Hughes;
- (c) with regard to the 1967-1969 to 1971-1973 period, the profit shares in each of the six sectors were still tending to pull up the profit share in total manufacturing but this effect was overwhelmed under Method 3 by intersectoral shifts in favour of food, drink and tobacco, textiles etc., and wood/furniture/paper/printing. This intersectoral shift was the reverse of what had happened in the 1956-1958 to 1967-1969 period.

# IV RESULTS AND CONCLUSIONS

There were few surprises in these results. The profit share in total manufacturing over the period has increased and this met preconceptions. The mean profit share under Method 4 was .244 and this also met preconceptions for the period. In the US, for example, there has been a working assumption of a 75/25 share distribution and these results are fully consistent with that. The impact of taking account of implicit wages and salaries in the profit figures produced profit share results which, on a priori grounds, seemed reasonable. Furthermore these results were not inconsistent with those obtained by Hughes in his pioneering analysis of the functional distribution of income in Ireland. While Hughes was cautious in dealing with the CIP data, we have been more daring and reached for series more finely tuned to the needs of the economist. However, the reader is warned not to lean too heavily on the statistical results obtained. The main aim of the paper is to explore an experimental method of deriving profit shares, and the statistical analysis serves to determine whether or not this new method is worthy of refinement and development. Our judgement is that the method has met the test.

#### REFERENCES

- HENRY, E.W., 1977. "An Input-Output Approach to Cost-Benefit Analysis of Energy Conservation Methods", *The Economic and Social Review*, Vol. 9, No. 1, October and supplemental information provided by E.W. Henry.
- HENRY, E.W., 1980. Irish Input-Output Structures, 1976, Dublin: ESRI Paper No. 99.
- HUGHES, J.G., 1972. The Functional Distribution of Income in Ireland 1938-1970, Dublin: ESRI Paper No. 65.
- IRELAND, CENTRAL STATISTICS OFFICE, 1954. Census of Population of Ireland 1951, Industries and Industrial Status, Vol. IV, No. 11, Dublin: Government Stationery Office.
- IRELAND, CENTRAL STATISTICS OFFICE, 1964. Census of Population of Ireland 1961, Industries, Vol. IV, Dublin: Government Stationery Office.
- IRELAND, CENTRAL STATISTICS OFFICE, 1968. Census of Population of Ireland 1966, Industries, Vol. IV, Dublin: Government Stationery Office.
- IRELAND, CENTRAL STATISTICS OFFICE, 1974. Census of Population of Ireland 1971, Industries, Vol. IV, Dublin: Government Stationery Office.
- IRELAND, CENTRAL STATISTICS OFFICE. Irish Statistical Bulletin, Dublin: Government Stationery Office (various issues).
- IRELAND, CENTRAL STATISTICS OFFICE, 1970. Input-Output Tables for 1964, Dublin: Government Stationery Office.
- IRELAND, CENTRAL STATISTICS OFFICE, 1978. Input-Output Tables for 1969, Dublin: Government Stationery Office.
- IRELAND, CENTRAL STATISTICS OFFICE. Input-Output Table for Ireland 1960, unpublished and unofficial.
- McGILVRAY, J., 1964-65. "The Stability of Coefficients in the Irish Interindustry Model", Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XXI, Part 3.
- VAUGHAN, R.N., 1980. Measures of the Capital Stock in the Irish Manufacturing Sector 1945-1973, Dublin: ESRI Paper No. 103.

				Table	A1: $Th$	ie resid	ual of	net oui	tput/ne	et outp	ut fron	n CIP e	lata					
Sector	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
(1) (2) (3)	55.8 40.6 37.1	55.1 39.4 37.4	55.2 39.7 38.4	55.9 41.9 40.2	55.0 41.0 40.9	56.3 43.8 41.4	56.3 47.5 40.4	54.9 48.9 40.6	52.7 43.4 40.9	53.5 50.4 42.8	55.0 43.7 41.2	53.2 46.2 41.6	54.5 47.6 44.3	55.9 46.1 43.7	53.0 47.8 44.7	56.4 46.3 43.3	56.7 44.3 45.6	58.0 46.4 46.9
(4) (5) (6)	48.4 47.5 32.3	51.1 46.2 32.7	51.7 51.5 37.0	54.6 54.3 40.2	57.7 53.2 37.6	61.4 51.3 38.7	61.7 51.8 38.4	62.3 53.9 38.6	62.0 56.4 40.3	63.4 55.3 42.4	63.0 53.1 43.4	67.0 56.0 44.6	68.2 55.3 47.4	67.7 57.2 47.4	55.0 49.5 44.2	65.3 50.4 38.0	62.7 56.0 37.8	66.0 56.7 47.2
Total manufacturing	46.0	45.1	46.7	48.3	47.9	49.5	48.8	49.0	48.1	50.1	50.1	52.1	52.8	52.7	51.3	51.3	51.2	53.6
Sources: Irish Classification	Statistic scheme:	cal Bull (1) Fo (2) Te: (2) Wc (3) Wc (4) Ch (5) Min (6) Me (6) Me	<i>e tin</i> (v od, dri xtiles e ood/fu emical neral p ro tal pro	arious nk and itc. niture, and ot roducts ducts.	lssues) tobacc paper/ her mis ; fit shan	co printin scellane <i>re in gr</i>	g ous inc oss valı	lustrie ue befo	s sre adju	ustmen	t for in	nplicit	factor	return				
Sector	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
(1) (2) (3) (4) (5) (6) <i>Total</i> <i>manufacturing</i>	37.0 30.0 25.7 31.0 33.3 33.3 30.7 30.7	37.6 27.4 25.5 34.3 34.3 20.7 30.1	38.8 25.9 25.8 36.0 40.3 21.2 31.2	40.4 24.7 26.5 40.2 44.7 27.8 32.4	40.8 23.2 44.3 45.9 32.2 32.2	40.1 25.1 28.2 48.3 44.2 27.5 33.4	38.4 27.6 49.7 44.6 33.0	35.8 28.8 51.4 46.4 33.3 33.3	32.2 25.9 30.6 52.2 48.5 32.8 32.8	32.9 29.7 53.6 49.0 34.1	34.0 25.4 26.9 57.3 48.1 30.6 34.0	33.1 26.5 57.1 58.6 52.2 30.7 35.2 35.2	$\begin{array}{c} 34.2\\ 25.4\\ 58.4\\ 53.0\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\ 35.8\\$	34.7 25.7 24.9 48.9 35.1 35.1	32.6 26.2 46.8 39.0 33.0	33.9 25.0 23.3 42.7 38.1 38.1 31.9 31.9	33.2 23.6 42.6 440.6 30.7 30.7	33.1 24.3 21.1 39.7 39.3 39.3 31.0

122

# THE ECONOMIC AND SOCIAL REVIEW

Sources: Irish Statistical Bulletin (various issues); CSO (1970); CSO (unpublished); Henry (1977 and 1980); McGilvray (1964/65).

Sector	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
(1)	34.6	35.7	37.3	39.3	39.3	39.4	37.7	35.1	31.5	32.2	33.3	31.9	32.6	32.6	30.0	31.0	30.3	30.2
(2)	7.7	7.6	9.0	10.1	12.6	18.4	21.3	22.7	19.7	24.1	19.7	21.3	22.1	22.2	22.3	21.5	20.0	20.7
(3)	7.3	8.6	10.1	12.0	13.0	15.5	15.3	16.1	17.0	16.3	12.4	12.4	13.8	15.8	13.8	13.3	13.4	13.0
(4)	27.4	31.2	33.3	37.9	42.4	50.2	48.2	50.0	50.0	52.4	52.5	56.4	57.7	57.5	47.8	45.7	41.5	41.4
(5)	27.7	29.2	35.9	41.0	42.6	41.1	41.7	43.8	46.1	46.9	46.1	50.4	51.2	44.8	36.7	35.8	38.4	37.1
(6)	7.6	9.1	14.9	19.4	19.8	21.0	20.8	21.1	22.5	25.2	26.9	27.2	27.3	32.1	29.2	22.9	21.3	25.7
Total manufacturing	19.6	22.7	22.6	26.3	27.7	30.1	29.8	29.8	28.8	30.7	30.6	31.7	32.6	35.0	29.4	27.5	27.3	28.2

Table A3: The share of profits in gross value added after adjustment for implicit factor shares

Sources: Same as for Table A2 and Ireland CSO (1954, 1964, 1968 and 1974).

				^		1. 1.00	5110110	<u></u>				<u></u>						
Sector	1956	1957	1958	1959	1960	1961	1962	1963	1964	1 <b>9</b> 65	1966	1967	1968	1969	1970	1971	1972	1973
(1)	33.2	31.8	28.5	27.0	43.0	35.3	33.7	26.6	30.4	25.7	29.1	25.8	30.3	34.5	32.3	34.0	32.8	35.9
(2)	5.9	4.9	3.1	8.7	11.8	10.2	18.1	18.2	15.5	20.7	15.9	20.4	-20.0	22.0	20.9	23.7	24.2	16.2
(3)	5.6	4.8	3.8	-1.0	5.7	11.5	11.3	7.8	15.2	7.7	8.7	-7.2	11.2	14.7	14.1	15.2	18.2	15.1
(4)	26.9	29.1	44.6	23.3	32.1	46.7	47.0	45.3	52.4	53.8	51.8	51.3	69.8	58.1	52.0	47.6	42.3	53.4
(5)	25.0	20.7	30.4	30.3	36.4	38.5	40.6	39.1	45.5	34.1	44.0	47.6	50.9	42.0	32.5	40.0	38.9	40.4
(6)	7.5	6.7	8.7	13.2	15.0	19.5	19.0	17.3	21.9	23.9	24.0	23.1	28.5	33.6	31.5	26.0	19.8	29.4
To tal	18.2	17.3	17.1	16.6	26.4	25.6	26.7	23.3	27.8	26.6	27.5	25.8	31.7	35.6	30.9	30.9	29.1	32.3
manufacturing																		

Table A4: The share of net profits in net value added

Sources: Same as for Table A3 and Vaughan (1980).